Katica JURČEVIĆ Ljiljana KALITERNA LIPOVČAN Rino MEDIĆ Ozana RAMLJAK (Eds.)

MEDITERRANEAN

IMPRESSIONS,
CONCEPTS, STORIES

#### Mediterranean Issues, Book 3

MEDITERRANEAN — IMPRESSIONS, CONCEPTS, STORIES

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Katica Jurčević, Ljiljana Kaliterna Lipovčan, Rino Medić, Ozana Ramljak (Eds.)

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# MEDITERRANEAN IMPRESSIONS, CONCEPTS, STORIES

The Book of Proceedings consists of selected papers presented at the 3rd International Multidisciplinary Scientific Conference MIC — Vis 2020 held from September 16–19, 2020, at the Island of Vis, Croatia

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### Preface

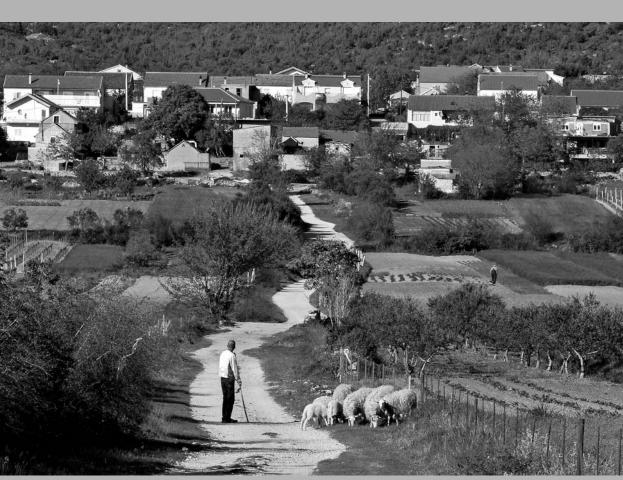
The Mediterranean is a large basin from southern Europe, northern Africa and that part of Asia that we call the Middle East, with a connection to the Atlantic Ocean only existing over the Strait of Gibraltar. The Mediterranean can be viewed as a sea of diversities, as a place characterised by the contemporary coexistence of a number of similarities and differences which give it a specific connotation and make it unique. A rich and complex history, culture, politics, religions, arts, economies, the exchanging of ideas and stories produced also the rich and complex continuous interaction between cultures. The unity of the Mediterranean region is constantly invoked, but at the same time, there is an evident separation and these contradictions intrigued scientists as well as storytellers that kept that spirit in many stories preserved in memory.

This book of proceedings, as the third installment of series *Mediterranean Issues*, brings together papers presented at the 3<sup>rd</sup> International Multidisciplinary Scientific Conference MIC — Vis, 2020, held on the Island of Vis, 16-19 September 2020, with the aim of fostering new approaches to the main challenges that Mediterranean islands are facing and propose new solutions through brainstorming, discussion and scientific research, as well as to explore impressions, concepts and stories of the past and present. The Book is organized into two parts: Mediterranean Issues and Other Issues. Mediterranean Issues contains five chapters: 1) Arts and Literature; Media and Communication; 2) Culture and Tradition; Education 3) History; Geography, Migration; 4) Sustainable Development; Renewable Energy Sources; Agriculture and Fisheries; 5) Tourism; Public Services. Book III presents 54 papers contributed by respectable international authors.

As a part of the cultural program of the conference, the international student exhibition *People and the Mediterranean* was held displaying the results of the international student photography competition. All photographs selected by the three-member jury have demonstrated the richness, inexhaustible expression, shapes and textures of the sea and inland, customs, cultures, history, as well as the very unique state of mind of the people that make the Mediterranean so special and three of the participants were awarded. The exhibition photographs were used as chapter separators in the book.

**Editors** 

# KEYNOTE SPEACH



Fran Horvat: Shepherd from afar

# MEDITERRANEAN VOICES: EXPLORATION AND ETERNALISATION

#### Abstract

The keynote address will discuss the concept of voices within the Mediterranean. It will explore voices from their socio-economic, cultural and anthropological dimensions. The Mediterranean Sea is a geographical reality that brings together so much diversity in terms of nationalities, religions, languages, habits and traditions. This paper explores to what extent Mediterranean countries, especially islands with specific cultural traditions, are encouraging the diversity of voices to be heard. Apart from this, what is being done to make sure that voices are not only explored but preserved for posterity? Are we too much focused on statistics, data and measuring mechanisms to assess the Mediterranean region and its cultures? Is society valuing enough the strongest asset in the form of the people and their voices? These are the voices through which they express their "Mediterranean anima." What is being done to capture such voices and immortalise them as distinctive cultural assets of the region? Keywords: the concept of voices, diversity, "Mediterranean anima"

#### INTRODUCTION

The topic of this paper is Mediterranean Voices: exploration and eternalisation. The paper is structured into four parts. Firstly, I will highlight some of the Mediterranean characteristics; secondly, I will focus on voices of the Mediterranean and what I mean by such a definition; thirdly, I will highlight what I consider as a very challenging terrain, the issue of collaborative initiatives at Mediterranean level. My fourth and final observation will be on what I consider as a moral duty to "eternalise" such voices through projects that are on a more permanent footing than most of what we have up to now.

Thus, I will share with you some perspectives on the concept of Mediterranean voices. The Mediterranean Sea is a geographical reality that brings together so much diversity in terms of nationalities, religions, languages, habits and traditions. I want to raise the question as to what extent Mediterranean countries, and especially islands with specific cultural traditions are encouraging the diversity of voices to be heard, and more importantly remembered. Thus, this begs a number of questions. What is being done to make sure that voices are not only explored but preserved for posterity? How are we measuring changes in our societies? Are we too focused on GDP and other metrics to the extent that we are overlooking the human aspects of the Mediterranean world? Are our institutions, whether the governing or academic ones, doing enough in search of voices to be heard? Is there something like a "Mediterranean anima" that we

need to identify, explore and preserve for posterity? These are the main reflections that will be presented. In many ways, this presentation stimulates questioning rather than presenting only information with the purpose of raising an inquisitive environment at the start of this academic conference.

As all announcements nowadays, my introduction also comes with a disclaimer. I am an archivist by training and profession and this year happens to be my thirtieth working and managing archives. Thus, my perspective is cast in an archival frame of mind. Archivists are not historians. Although as in my case, we are often also trained historians, the daily duties of the archivist require that we distance ourselves for the role of the historian. We do not try to interpret the data but we strive hard to capture and preserve the data. During the last decade or so, archivists are also becoming more proactive on the type of data we capture, and it is basically this dimension of our profession that is strongly represented in this paper.

#### THE MEDITERRANEAN AND ITS ANIMA

The Mediterranean Sea has for centuries characterised the lives of people living in countries that surround it. The means of support of several generations depended on the sea, fishing, travelling and coal heaving. The livelihood of inhabitants of Mediterranean countries was entirely and literally dominated by contact with and dependence on the sea.

The sea has two diametrically opposite attributes — it can isolate, segregate and insulate but it can also bridge. With the advancement in ship construction, travel increased. More people started to perceive the sea, not as a barrier that cuts them off from other territories, but as a passage inviting them to explore new ventures. The cultural multiplicity of the region allows for the meeting of cultures, their interrelations and appreciation of diversity. This enriches the livelihood of the communities around the Mediterranean basin. At times, these intersections lead to growth, sharing and community building. At other times, they lead to conflicts, marginalisation and war. It is purely in the hands of the people towards which direction it goes.

In previous writings, I emphasised the way innovation in travel methods configured the way Mediterranean communities interacted. It all started with the sea voyage which made it possible for expeditions, colonialisation, new warfare methods and the flourishing of trade and commerce. Air travel was the next step which accelerated this interaction and rendered it more far reaching and ambitious. The third big revolutionary step was Web technology. The advent of information technology made it possible for new ways of travelling. One can embark on a voyage without a ship or a port of call. One can endeavour on the most distant voyages through the Internet. Chat rooms, web-cams, social media and video conferencing have made it possible for persons to "travel intellectually" without having the need to displace themselves physically.

It is still too early to assess the effects of the advent of Covid-19 on our lives. We still have to see whether the "new normal" concept is just a temporary pause in our hectic lives or if it is here to stay. A new way of interacting, very antagonistic to the Mediterranean mentality, has been imposed on us. To greet friends and acquaintances by kissing, hugging and shaking hands is considered part of the essence of Mediterranean identity. All these greeting rituals have been put to a halt and replaced by a very cold "elbow bump." In this scenario, the only thing that is clear is that the concept of online communication assumed a new dimension as a result of the pandemic. For example, in schools and at our academic institutions, online teaching has shifted from being a miscellaneous tool to becoming a core pedagogical tool in our daily routine.

#### IL-BRONJA — A MEDITERRANEAN VOICE FOR THE AGES

There are important connections between the sea, the utilisation of the sea for daily living and the voices that it creates. A pertinent starting point is what is referred to in Malta as *Il-Bronja* — a marine shell that is found in a number of other Mediterranean places. Anna Borg-Cardona, who published her comparative study under the name "The Marine Shell in and around the Maltese Islands" (Proust, 1921, p. 89) identifies such a seashell and its uses in places such as Sicily, mainland Italy, Linosa, Mallorca and in the Greek and Aegean Islands.

Borg Cardona explains how marine shells are among the most ancient of sound producers. The player positions his lips firmly against a side or end aperture cut into the shell and blows into it. Experts describe the emerging sound as a loud noise hearable up to two miles away. Borg Cardona explored a number of uses for this shell instrument in nearby Sicily where it is called with the same name *La Brogna*. It was mainly used in fishing to announce the presence of other fishing boats, especially in poor visibility. Similarly, the same use was made in other places like Lampedusa, Mallorca and Greece. Other uses were in agriculture or in postal services. Likewise, *la brogna* was used in connection with other festivities, including the feast of San Francesco di Paola in Scoglitti, Sicily and merry-making during Carnival in Naples.

For at least 300 years, the shell was predominantly used for one very specific purpose intimately connected with windmills in both Malta and Gozo. Millers used to blow the shell to announce that the time and wind were right for grain to be brought in from the surrounding fields to be ground. When the miller blew his *bronja* from the top of his mill, the villagers recognised the familiar sound, and its very specific message was transmitted to them. They immediately made haste to take their produce. The miller would blow on the shell once again when it was time to collect the flour. When there was no favourable wind, the miller would have little or nothing to do but wait and loiter for the next wind to turn the sails of his mill. One of the last mills to remain in use was that of Xaghra, in Gozo. In the first half of the twentieth century, the miller in

Xaghra, Kola Grech, used to blow his *bronja* regularly when he saw that the wind was favourable. In the absence of today's traffic and sound pollution, its sound was clearly heard echoing through the then much smaller village and the surrounding fields.

The use of the *bronja* is an excellent example of how the identification of the right tools is around us, in the same source that makes the Mediterranean so particular — the sea. The sound of the *bronja* conveys a message, whether for fishing, for ritual celebration or for the milling it is a voice discovered. The miller amplifies his voice via the *bronja* to get the message across. In so doing, he is sustaining the everyday life of Mediterranean communities. And this begs the question — are we succeeding in identifying Mediterranean voices, encouraging them to foster, making them heard and capturing them for long term preservation due to their enduring value?

# THE CHALLENGES FOR COLLABORATION ON THE BASIS OF MEDITERRANEAN GROUNDS

The Round Table Conference on Archives (CITRA) that was held in 2009 brought together 251 archivists from 91 different nations, all convening in Malta. Conference attendees were from the various sections, branches and professional bodies of the International Council on Archives. This association, set up in 1948, is the leading international body for archivists and records managers. One of its strengths derives from the fact that it has managed to keep its stewardship of the sector worldwide, notwithstanding the diversity of the organisation and the political turbulence that often affects good will between nations. The National Archivists of France and Egypt took the initiative to convene a business breakfast inviting Mediterranean archivists to discuss the possibility of coming together to set up an organisation for Mediterranean Archives and Archivists. Notwithstanding the good turnout for the meeting and the initial good will, this initiative did not take off the ground. While we do have associations for European Archivists in the form of EURBICA, for Commonwealth Archivists (ACARM) and for EU Archivists, coming together as Mediterranean archivists did not work out so far. Why is it so difficult even for professionals to identify as Mediterranean and search for commonalities and differences that we can exploit to better the repositories of knowledge and their services?

With that observation, it is important to explore the issue of how our institutional memory repositories are exploring voices and ascertaining that those that count are captured. There is a never ending debate about which voices archivists are to capture in their repositories, and which voices historians need to evaluate in their writing of history. In the words of French novelist Valentin Proust "Historians, if they were not wrong to give up explaining the acts of peoples by the will of the kings, must replace it with the psychology of the common individual." This philosophy is taking ground in a number of faculties and institutions, not least in those with a remit to archive the col-

lective memory of communities and countries. On this point, it is beneficial to explore some insights from the project titled "MEMORJA" that is based in Malta.

Memorja — the Maltese word for Memory (Chircop, 2017, pp. 5-6). This project aims to employ innovative research, methodologies and archival approaches to collect, record, transcribe, preserve and make accessible shared and individual memories, oral history and traditions as well as knowledge and experiences of the Maltese people. MEMORJA's oral history-trained staff carry out fieldwork in the community and enrich the archives with memories and recollections, personal photographs, documents, ephemera, audio recordings and film reels generously deposited at the archives. The constant presence of fieldworkers carrying out research in the community has made the national archives ever more visible. The relationship of trust which has been generated between the institution and the public due to continuous fieldwork has extended the archives' reach and has broadened the project's boundaries significantly.

One of the sub-themes of the MEMORJA project is the Malta-Lampedusa connection. Two distinct Mediterranean islands separated by a stretch of the Mediterranean Sea. They share similar economic, trade and socio-cultural aspects but also diverse historical and economic realities. The connection between the two Islands dates back to the 1800s when a number of Maltese settlers took over a number of positions of power in Lampedusa. The project made it possible for field researchers to conduct face-to-face interviews in Lampedusa in 2017. Most themes touched upon during the interviews related to fishing and the issue of migration (whether legal or illegal). Testimonies of Lampedusian fishermen make reference to life at sea, what they remember of life in Malta before the British departure in 1979, entertainment, the products on sale in shops at the time and the sale of fish stocks.

All these stories, interesting as they may be, depict normal daily life accounts often imposed by the realities of an isolated community struggling to make the best living often amidst difficult situations. However, some of the perspectives that emerged from the interviews underline the need of similar projects — capturing the *anima* of the people and the historical sufferings or triumphs, whether real or perceived.

One particular such dimension emerged from an extensive interview with one of the leading activist in Lampedusa, Giovanni Fragapane. His interview clearly shows the perspective of Lampedusians viewing the Maltese who had settled in Lampedusa at the beginning of the nineteenth century as bringing in a sense of colonisation (National Archives of Malta, 2017). He speaks of the Knights of the Order of St John as having had a very detrimental effect on Lampedusa. Their rough handling of vegetation on the Island in order to supply the mercantile trade and invest their money in votive gifts to the Madonna of Lampedusa at the Sanctuary had a long term negative impact on the Island. Without entering into any historical debate about the validity or not of these claims, this is a case in point of the importance of capturing the views of Mediterranean people. If not, they will just fizzle away if not captured in a structured and profes-

sional manner. Interestingly, with its centuries-long history as a colonised country, Malta is perceived almost as a coloniser by analysts from sister Mediterranean islands. It is these Mediterranean voices that are important to identify, encourage and capture for posterity.

#### OUR ETERNALISATION OBLIGATION

The final focus of this paper is on the long-term preservation of Mediterranean voices. Identifying and capturing voices is already a feat. It is even more of a challenge to have this done not for some specific short term funded project, but to have such a process structurally embedded in the functioning of our institutions. How much is being done to preserve such data? This paper's title uses the rather verbose term "eternalise." This is what is done when investment is made in the intellectual and physical preservation of such rich data.

On 31 July 2009, an event was held at the Castello Maniace in Siracusa launching a portal that promised to become a central Mediterranean point of reference for archival holdings. This highly interesting initiative was entitled the *Archivio Storico Multimediale del Mediterraneo* and it was a flagship project of the Italian Ministry for Culture, led by the Archivio di Stato di Catania. The project did contribute to knowledge as a lot of content was digitised. However, the project seems to have died a natural death and even if the content has been preserved, it surely did not develop into the Mediterranean archives portal that was envisioned during the event.

Several studies on this topic are featured in the *Journal of Mediterranean Studies*, published by a number of academics at the Institute of Mediterranean Studies at the University of Malta. A number of these studies originated from the Mediterranean Voices Project which started in 2002. This was a major research project and partnership initiative between the London Metropolitan University and a variety of institutions across the Mediterranean basin, including universities, libraries and other non-governmental organisations. The project comprised a series of neighbourhood-based studies involving the collection and recording of oral histories and memories of residents in a number of cities including Alexandria, Ancona, Beirut, Bethlehem, Granada, Istanbul, Marseille and others. The final scope was to place the outcome in an interactive, multi-media and multi-lingual database accessible via the World Wide Web. This predominantly ethnographic initiative focused mainly on intangible and non-monumental urban heritage normally (though not exclusively) associated with voices and practices often marginalised, silenced and ignored by the attention given to the more monumental and "official" narratives.

What was unfortunate in this project is that the database, which in the words of its originators "mirrors the realities of Mediterranean life," is no longer available. It seems to have hit a glitch with the usual challenge of longevity of digital technology.

These types of pitfalls are what needs to be avoided, and most short term projects do suffer from this downside. A remedy for this is for such projects to ride the cart of established institutions that have a long term manadate sanctioned by law and tradition. These are much better placed to safeguard data for longer spans of time.

#### CONCLUSION

This paper explored to what extent Mediterranean countries, and especially islands with specific cultural traditions, are encouraging the diversity of voices, through which they express their "Mediterranean *anima*," to be heard from their socio-economic, cultural and anthropological perspectives. It posed questions to extend that data on the diversity in terms of nationalities, religions, languages, habits and traditions are being collected and stored. It asks the professional and academic community: What is being done to capture and immortalise these voices? In conclusion, it is asserted that for this issue to be adequately addressed, organisations and academic institutions in other Mediterranean countries need to collaborate, share in the research and test methodologies developed in these works on their territories and regions.

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# ARTS AND LITERATURE MEDIA AND COMMUNICATION



Monika Vodopija: Neobrana maslina

# RIJEKA — THE PUNK AND NEW WAVE CENTER OF THE MEDITERRANEAN

#### Abstract

Rijeka and its punk, new wave, and rock scene hold a special place in the context of the rock music scene of the former Yugoslavia, and of course, Croatia as well. Its significance is similar to that held by the English city of Manchester and its music scene in Britain, Europe and perhaps, the world. The root causes of the development, specificity, and significance of Rijeka as a powerful punk and rock center are not only the influx of information from the west into Rijeka as a port city, good contacts with a strong punk scene of similar sensibility in Ljubljana, and the talent and enthusiasm of young people — the protagonist of the Rijeka scene — and a distinct political and social background, the self-governing socialism of the time in the former Yugoslavia gave rise to one of the most interesting rock scenes in this part of Europe. Not only did the late 1970s see the rise of a strong rock scene in Rijeka, like in Ljubljana and Zagreb, but it is no coincidence that the beginnings of the Croatian and Yugoslav punk and new wave is officially considered the first performance by the Rijeka band PARAF at a New Year's Eve party in a grassy field in the city's suburb of Kozale on December, 31, 1976 (Barić, 2011, p. 10). This paper attempts to answer questions about the causes, consequences, and meaning of Rijeka's punk and new wave, which is one of the most authentic pop culture phenomena's in the Mediterranean in the past 50 years (Đekić, 2009, p. 47-49).

Keywords: Punk, Mediterranean rock, new wave, pop culture, youth, Mediterranean center

Rijeka's rock scene deserves its own publication because of its significance and it is truly difficult to lump such diverse events into a single category. That is why this work has only some bibliographic significance and is a brief reminder on the events of the past years that can serve for further research. Rijeka's rock scene in the 20th century should be divided into time periods: the sixties; the first and second half of the seventies; the eighties; and the late eighties and nineties. Besides that, it is beneficial to identify certain factors in the development of the scene. Besides the performers, there are venues, with the club Palach as the epicenter, the youth publication Val, Radio Rijeka and its shows Sweet Basket, Bora, Discodrome, Ri-rock Club, and others lent media support to the bands, and at the same time, it opened the door to demo-recordings, the unique Sub-committee for Rock under the Commission for Culture within the Youth Organization, memorable performances that left their mark on the scene, the traditional Ri-rock Festival, and similar events like Gitarijada, which attracted participants from Istria, Kvarner, Primorje, Gorski Kotar and the first Croatian band-aid project Sound is Air.

However, the main characteristic of the Rijeka scene were alternative events. They, as legend has it, began on 31 December 1976 on a lawn somewhere in the Belveder neighborhood.

"This was the first gig played by Parafi, who were rejected from the start because they could not play and because of their over the top clownish antics, but this was the cornerstone of the revolution of Croatian popular music expression. Parafi was a slap in the face to all of the bands that were light-years more competent, but who sang about how their mothers cooked well in contrast to lyrics like "the sun is shining, the stone burns, mother, that is Goli Otok..." Parafi definitely made an impression on Rijeka audiences at a concert in Dvorna mladosti on 14 November 1978, when they performed alongside Pankrti, Prljavo kazalište and Azra, when Jura Stublić was part of the band" (Mušćet as cited in Small Encyclopedia of Croatian Pop and Rock Music, 1994, p. 30-31).

Rijeka, the Rijeka punk scene, and the new wave scene definitely, in my opinion, have particular significance in the context of ex-Yugoslavia's and, of course, Croatia's rock scene (Kostelnik, 2011. p. 93). It is something akin to the significance that is carried by Manchester and its rock scene on the British, European, and global scale. The significance of the potent British punk and new wave of the late seventies and the early eighties carried by the excellent novel sounds of bands like the Buzzcocks, Magazine, Fall, Joy Division, later by New Order, after that by the best and most influential British guitar band of the 1980s, The Smiths. In the late eighties and the nineties by the Stone Roses, Happy Mondays, The Charlatans, Inspiral Carpets and others, is what, in the local context and, of course, beyond in the Balkans, or if you will, Central Europe, was Rijeka's rock scene, led by the finest bands of the Yugoslavian and Croatian punk and new wave scene like Parafi, Termiti, later by the excellent pop-rock bands Grad, Fit, Xenia, Cacadou Look, Denis & Denis, and then by angry rockers like Laufer, the artificial Urban, and Let 3 (Kostelnik, 2011, p. 93).

#### PARAF — PUNK PIONEERS

The first punk band in Rijeka, and also in Croatia, was PARAF. The group presented itself to the public for the first time in an article penned by their manager, Goran Lisica Fox, in the youth newspaper Polet in early 1978, shortly after their first live performance in Rijeka. Here is an excerpt from that article titled "Rijeka Punk — Will anyone ever hear of them?", published in Polet on 4 April 1978:

"Dark glasses, padlocks, chains, spiked hair, schizoid movements, an explosion of incomprehensible lyrics and a deafening sound. They left quite a good impression and I can happily report that a group of 18-year-olds who have embraced punk, the most direct way of communicating in domestic rock and roll and that their performance sounded good. The guys only perform their own songs, written mostly

by Valter. The song titles say everything one needs to know about the group — Drama in the Elevator, Punk, I Sing from Desperation, The Problems of Rijeka District, Professors... Parafi already command all of the needed components of a good punk band: aggression, energy, performance, and the look, immediacy, honesty, and we can say, they are very good beginners. However, we must object to the fact that their lyrics are vague, often naiver, and their musical skills far from perfect. However, because they are a nearly an anonymous young band with only a few gigs under their belt, we should give them credit for their courage, honesty, and coming up with the right formula at the right moment..." (Lisica as cited in Barić, 2001, p. 17)

They played their first concert at the Rijeka club Circollo on 23 March 1978, along with a few hippie bands. Sometime in early 1978, they played their first session at Radio Rijeka studios, recording three early songs: Contraception, Paint, and School Reform. These are truly the earliest studio recordings of punk and new wave in what was then Yugoslavia. Soon they would become a mini-sensation on the punk scene and play in Novi Zagreb on May 6 at the first new wave event organized by Polet, along with Prljavo kazalište, Azra, and Pankrti. Legend has it that when Prljavo kazalište saw the rough-looking members of Parafi, with their leather jackets, badges, and safetypins, the immediately rushed home to Dubrava to muss up their own appearance. It is interesting that in images from that event there appears a mysterious fourth member of Parafi, who has remained unidentified. Of course, the band played all of their other gigs as a three-member outfit. Darko Glavan wrote a positive review of the band, a critic who was never too keen on the early domestic punk scene. So now, in addition to Rijeka's Val magazine, the youth media in Zagreb began to cover the band. They became even more popular, most notably in the capital of punk, Ljubljana, where from May of 1978 they often played in the cafeteria of the Student Center along with the Water Pistols, Pankrti, Ljubljana '78, Prljavo kazalište, Buldožer, and fellow Rijeka natives Zadnji (Barić, 2011, p. 17).

The ambitious and provocative young band also drew the attention of Buldožeri, so in January 1979 in Ljubljana, at the studio of Boris Bele, they recorded a solid demo with four songs that were destined to become classics: Narodna pjesma (The People's Song), Živjela Jugoslavia (Long live Yugoslavia), Rijeka, and Moj život je novi val (My Life is New Wave). The tape ended up being aired on Radio Študent in Ljubljana and in just a few days it became the most listened to artifact of domestic rock, making it into the local top hits list, as chosen by the station's audience.

In late January, they sent the demo to Jugoton in Zagreb, but received no response. That was understandable because the lyrics were a provocative text about the police and would have never made it passed the censors at that time. Jugoton was also not too keen on punk and new wave bands and that would have to wait for anoth-

er two years. A text written as a protest letter and titled Jugoton Doesn't Want Us, Paraf drafted and sent to Polet, which published it on 14 February 1979:

"We, the members of the new punk rock band Paraf from Rijeka, are turning to Polet with a request that it inform its readers about the massive fuck-up that would have been no less so if it was any other band other than ours... Our songs were rejected by the music label Jugoton... We do not believe that our songs are literary pearls, we did not intend them to be, we aren't even that literate, but our songs are authentic reflections of our city, people, situations, as we see and experience them... Are we from another planet, did our parents fight so that we would have to remain silent? Who is going to tell us why we cannot speak?" (Barić, 2011, p. 18).

It was an unseen, unremembered and really punk act in Yugoslavia and in this part of Europe ever.

What is the secret of such a good rock and roll laboratory and what are the roots of its uniqueness and quality? First of all, Rijeka's favourable geographic position as a port city, and during "Yugoslav socialism with a human face", being a city that was able to receive information from the West as early as the early 1970s, in the nascent days of the punk movement in the USA and England, and having had good ties with the Ljubljana punk scene due to its proximity and similar sensibilities, and, of course, because of the talent and enthusiasm of its youth, along with the broad social and political backdrop of the day, resulted in one of the most interesting rock scenes in this part of Europe.

In Rijeka, as in Ljubljana and Zagreb, and later in Belgrade and Sarajevo, by the late seventies, there was an urban core of youth, who created a kind of subcultural movement, a youth counterculture, that was, on the one hand, quintessentially in real conflict with the culture of their parents, and on the other hand, constituted a kind of new cultural model of living, a new lifestyle. This was a new way of looking at the world, a way of life in which rebellion, no compromises, and passionate enthusiasm intertwine by way of testing the limits of freedom and creativity. It is similar to what the generations of young people in the West had done in the 1960s. This is what many generations of Rijeka's not only punks but also pop and contemporary artists gathered around the rock and roll core naturally possessed, but also had long understood and consistently applied on the ground, in practice. Moreover, the scene, in the Warholesque tradition, comprised, along with many musicians, artists, designers, photographers, journalists, and poets, some true urban bohemians and losers.

During that time, Rijeka was a true social realist city. People were moving there from all over, bringing with them their folklore and the fear of a new community. The port, the Treći maj shipyard, and the other factories formed the backbone of life in a

city where after 7 p.m. the streets were largely deserted, aside from the drunks and the police officers. Zdrave Čabrijan, a member of the Paraf and bass guitarist said:

"The social life of the youth was limited to the local community centre and the good will of local veteran's associations, for whom the greatest cultural achievement was to celebrate Republic Day and the ceremony inducting new young Pioneers. Yes...At around the same time, there was the formation of other bands, who carved their path in a hard sound and politically engaged lyrics. The city's scene sprung to life and we even managed to put on concerts. An entire generation was involved, in some way, in what we could describe as a "movement". Some were musicians, some published fanzines, some crafted leather jackets, and some wrote music reviews... There was an explosion of creativity. People started to congregate at certain locations (Palach, the cafe at the Hotel Kontinental), exchange ideas, and help each other. A spirit of unity in creativity was born. One of the key participants in the birth of the Rijeka scene was Radio Rijeka and the youth magazine Val, who followed the scene as much as they could" (Čabrijan as cited in Kostelnik, 2004, p. 112-113).

The first Paraf's single Rijeka/Moj život je novi val (Rijeka/My life is New Wave) was released by ZKP RTV Ljubljana and it was a limited release that is very rare to find today. This was the only record label at the time that had any affinity towards orthodox musical expression:

"And one that, at least to some degree, did not interfere in the artistic process except in the case of our song Narodna pjesma (The People's Song), whose text was too much, even for them. That part of the lyrics on the record had to be changed, but the original version was performed in concert. It quickly became the anthem for one segment of the youth population. As far as taxation of the first record is concerned, at the time, there existed the fantastical Pulp Commission, whose task it supposedly was to determine what had value and what did not. However, in the context of the time, it served mostly to prevent the mass spread of a different perception of reality. By pushing up prices of our, and some other similar releases by our colleagues, they tried to limit accessibility to records and the ideas they expressed. As we later saw, of course, they did not succeed" (Čabrijan as cited in Kostelnik, 2004, p. 114-115).

Social and political structures tried to suppress this movement of sorts in various ways. Organized raids were performed. Parents were harassed in the hope that they might stop us from creating music, there were threats:

"Perhaps what bothered us most was that we had to show the lyrics of the songs we planned to perform to the "on-duty police officer" before every concert. That was so humiliating, for both us and the officer, who, poor guy, didn't understand a thing, but gave the order... fuck it" (Čabrijan as cite in Kostelnik, 2004, p. 116).

Pavica Mijatovič, alias Vim Cola, Paraf's singer in the second phase was one of the several woman on the punk and new wave YU scene:

"Because I was one of the rare women on the Yugoslav rock scene at the time, I enjoyed special status, but I was often irritated that gender was too often a topic of discussion. I never had any problem with the audience in that sense because I never emphasized my femininity. That was less important to me than what I was trying to say. Hmm, yes, perhaps there were some minor misunderstandings early on, but this changed quickly thanks to my attitude. Later, some other girls came on the scene like Anja Rupel from Videosex, for example, who were doing wonderful work but in a totally different style" (Mijatović as cited in Kostelnik, 2004, p.121-122).

Therefore, the leaders of this scene were not just Zdravo Čabrijan and Valter Kocijančić from Parafi, the lead vocal of Termiti Kraljević and other stage characters, but also and especially Rijeka's own Malcom McLaren, Goran Lisica Fox, promoter Koraljko Pasarić, and others who were aided by a strong media-conscious cohort from the youth magazine Val, local rock radio shows, the city's well-known guitar festival, which annually yielded a new name, some metaphorical "new Gračan, Ružić, or Hrstić", at the time, a very rare provincial football team, and because of the cult club Palach, located in the center of the city. That is why it is not surprising that Rijeka's rockers have become part of the local cultural heritage, a tourist attraction recognized by the city's elders, who allowed the formation and operations of a slightly controversial body, perhaps also a unique one in the world, such is the Commission for Rock (!), which has done quite a bit for the promotion of urban music and pop-culture and which in today's transitional context, filled with tycoons, *cajke*, *turbofolk* and major and minor Thompson-like characters, has special significance.

That is how Rijeka, in a way, has been at the forefront of the authentic Croatian rock-sensibility, while Split had spent years, especially in the 1970s and 1980s being ruled by bands like Magazin, Mišo Kovač, and Doris Dragović and the other heroes of cheap pop (the exceptions being Metak and Đavoli), up until the arrival of Dino Dvornik, Neno Belan, and Daleka obala in the 1990s and the excellent TBF in the 2000s, Osijek meandered between the traditionally entrenched tamburitza sound, Kićo Slabinac and highly aesthetic-minded but overly hermetic art-rock and dark-rock, while Zagreb, as the center of the pop industry both during Yugoslavia and in independent Croatia very quickly, partly because of tradition, and partly because of artists on the scene, evolved from its early punk impulses to more danceable and commercially attractive pop, the best example of which being the radical transformation of Prljavo kazalište on their second album. That is why frequently the best domestic rock sounds came from small communities like Vinkovci (Majke, Kojoti), Vodnjan (Gustafi), and Pula (KUD Id-

ijoti) and was one of the fundamental achievements of the punk-revolution, leading to the decentralization and democratization of the scene (Kostelnik, 2011).

While many Rijeka new wave bands left behind their demo-recordings, documented performances or even a record release, VIA Viktor Kunst lives on only in legend, eye-witness accounts and (thanks to media connections and a history prone to causing incidents) many newspaper articles. Having played only four concerts, the punk ferocity of this teenage band exploded with surprising fervour, which in the early eighties was also seen as a clear and present danger to the achievements of socialism:

"It was the spring of 1982 and Rijeka's high schools were pulsing with rock energy, bands were forming and getting ready for Ri-rock. Termiti, Parafi, Mrtvi kanal, Istočni ilzaz and Kaos played wherever they could and fans flocked to every gig with a desire to, like them, grab those guitars and spew out all of the rebelliousness that had been brewing in their minds.

That is what gave rise to VIA Viktor Kunst, a project band which wanted the "real rock band" status, iconography, and recognition of audiences despite the fact that none of its members had any knowledge of music. They did master some basics by borrowing some instruments from Father Mijo and trying to play, having a great desire to form a band" (Ušljerbrka, 2008, p. 21-22).

Another related story is the neglect of Rijeka and the city's rock-scene with respect to the city itself. On the one hand, it only confirmed the age-old thesis about the arrogance of the metropolis, regardless of its location, and its peculiar complacency and self-sufficiency. In other words, you will play by my rules, or not at all. On the other hand, it also resulted in the strengthening of local scenes, their consolidation, and the development of autonomy, confirming the old adage "provincialism is all in one's head". Of course, the so-called province paid for its freedom and originality at some price, such as gaining less media presence, but it welcomed its five minutes of complete democratization and decentralization of the media and the scene at a time when the global village truly began to function with the advent of the Internet, video links, MP3s, home studios, computers, CD burners, and the other innovations of modern society and pop culture that were to come, in the full sense. Therefore, it is no wonder that more foreign performances were logged by the authentic eccentrics from the socalled province, Rijeka's flagship band of the nineties and 00s, LET 3 (they did successful European tours) more than any momma's boy rockers who jam in the basements of Kaptol and Grič in capital Zagreb (Kostelnik, 2011, p.96).

# THE SONG LOYAL DOG — HYMN OF A GENERATION AND PARADIGM OF THE RIJEKA PUNK SCENE

The song Loyal Dog definitely and decisively utters what is so clear at almost every step that talking about it practically rendered useless. Everything beyond that, from

spelling out simple words to elite expressions of high culture, is foreign tissue, but still, its presence is necessary for normality when one must set the limits of one's territory and temporary proximity is even welcome because the machinery of language, in the rhythm of everyday motion, must be served by conversational "issues". Therefore, if the refrain "embark on life/ only some of us/ succeed in life/ only a loyal dog does" points in the direction of some broad life experience, unrelated to specific social, historical, or cultural differences, even the fates of individuals, only the sharp truth of this experience cannot be hidden far from the eyes of the public. It is, to the contrary, unavoidable and unimpeded, exposed to observation as a constant reminder of the current state of affairs, and at the same time, no less importantly, a demonstration of power (Molek, 2008, p.17)

Probably, only short-sightedness would tend to place the performance of this song as some kind of manifestation of apathy and resigned defeat or the patterns of hindsight which always reminds us: "a dog does not bark because of the people in the village". Ivan Molek, journalist of Rijeka's magazine VAL, in the 80-ies wrote on the cover of a CD "Riječki novi val": "The early Rijeka punk of bands like Parafi and Termiti is the unclaimed child of the "search for lost arrogance" (P. Sloterdijk), which holds fast even in the face of the firmly set political and aesthetic obstacles set by the polis: "What we want to say" go the lyrics of his programmatic "Policiji/Narodna pjesma" — "is not going to fly". Equally small would be the benefit of seeing only the obvious in punk performances, and these are, often mentioned by critics, its ferocity and radicalism. If I'm not mistaken, all the manifested iconoclastic anger and assault on the authorities did not, in its final expression, aim at mastering the art of governing, which anticipating a crisis, quickly began to work on changing everything (so that everything, the whole structure of relations, remained the same). This search for lost insolence, whose action in the ancient times was by name connected with the figure of a dog (canism, from the Greek word for dog) in Loyal Dog is not satisfied by revealing some dull daily life. The opening words of the song — "all kinds of things are happening to us/they are dulling our minds" — point to another direction, whose words will be final in the conversation? This is underscored by the song "New Art" with its lyrics: "a new style is spreading through the city/who is stronger than whom/let him prove it". Communication, not only public communication, is not the remedy for everything, often it leaves scars. In his Reflections from Damaged Life, the subtitle to his Minima Moralia, Theodore W. Adorno, writes: "He who cannot help, should not give advice; in a movement where all of the mouse holes are plugged, pure advice becomes the immediate judge of damnation". What to make of this aversion to advice and the mention of damnation? Adorono's answer is that advice that costs nothing not only demands redemption because of the lack of help but is also simultaneously seeking power over the one to whom the advice was given. In other words, it is another act affirming the helplessness of others. But not just any act, one that affirms from a position of authority (Molek, 2008. p.18).

It was nice being young in our country during the late seventies and early eighties. Punk gave us freedom of expression. We could play music, sing, write, drink, and dance as we liked, despite the fact that our juvenile rebellion did not sit well with many people, from parents to mustachioed policemen.

Bojan Mušćet, editor of VAL, has remembered:

"For me, listening to the Ramones album Rocket to Russia for the first time drove me to buy my first black leather jacket, to slash my jeans, and to find my spot on the fence in front of Kono. This energetic, euphoric, potent music had so much adrenaline that nothing else was needed to fuel my day. Watching a show at Palach, my friend whispered to me: "Hey, the King is standing behind you..." I looked back and saw for the first time the legend about whom the most incredible stories had been told. Dressed, actually, just like we were, he looked irritable, chin protruding, hands crossed, and a cigarette hanging from his lips, the King was a living monument to Rijeka's punk swagger.

When I first watched Termiti play a live show, I could not believe it: this was the coolest band after the Ramones, faster, more raw, uncompromising, with a collection of songs that were far better than anything else I had heard in may native tongue up until then and with a band that was so wild that every performance was a spectacle in itself. It was December 1980. A northeasterly wind was blowing with particular ferocity on Vojak and I was walking to a concert at a library in Trsat. There were a couple of bands playing, but I was delighted, as usual, by Termiti. First, Mrle appeared. He had put white polka dots on his burgundy-colored bass. He played his song "Ciklama". And then there was a thunderstorm of amps. Kralj was bouncing like a coiled spring, up until "five minutes of stiffness". Kiko was pounding mercilessly, while Žauhar dismantled the keyboard, and the late Tica nearly destroyed his guitar. It was the concert of my life. Never again did I feel so free, unburdened, and happy. Even Ramones shows did not live up to it (Mušćet, 2008, p. 3-4).

Predrag Kraljević Kralj really was a hero. His self-harm razor cutting on stage, his putting a toilet bowl on his head, tossing diving fins into the audience, stripping off his clothes and other stage antics represented a real rock and roll character and at a time when no one else came even close in these parts. "We all wanted to live like the King back then, to be the coolest dudes in the world who didn't give a shit what anybody else thought" (Mušćet, 2008, p. 3-4).

Once, I was horrified by a remark made by a poet of the 1980s generation who, when asked why he writes such hermetic poetry, replied that after releasing his first collection of poems he had already secured for himself a street carrying his name in his small provincial town (Kostelnik, 2011, p. 96-97).

If that is true, and we know that the name of every minor local hero of the written word will, at the recommendation of the local branch of the Croatian Matrix Foundation or something similar, eventually find its way into a sign in some Slavonian or Dalmatian street, then I am sure that some of Rijeka's best bands will receive something similar in Rijeka, just like their "stupid" brethren, the Ramones have in the Big Apple, even if it is just called Rock and Roll Square! This thesis I wrote in my book *Popkalčrl, 2011* (Kostelnik, 2011, p. 97). Seven years after in 2018, the City of Rijeka graffiti "Paraf punk" which was from 1977 in the centre of city on Brajšina Street, was declared protected cultural property. Indicative, in 1977, this graffiti was declared vandalism but today it is testimony to the start of the punk scene in Rijeka, Croatia, Yugoslavia and of course East Europe and it is a relevant monument of popular culture. Times were changed!

#### CONCLUSION

Rijeka and its punk, new wave and rock scene hold a special place in the context of the rock music scene of the former Yugoslavia, and of course, Croatia as well. Its significance is similar to that held by the English city of Manchester and its music scene in Britain, Europe and perhaps, the

world. What excellent original music by bands like The Buzzcocks, Magazine, The Fall, Joy Division, New Order, and later The Smiths, The Stone Roses, Happy Mondays, Charlatans, Inspiral Carpets, and others were to the potent British punk scene in the new wave of the late 1970s and early 1980s, is what Rijeka's punk and rock scene, led by its most outstanding representatives, bands like Paraf, Termiti, Grad, Fit, Xenia, Cacadoo look, Denis&Denis, Laufer, Let 3 and Damir Urban, was to Croatia and of course, the wider Balkans and Central Europe (Kostelnik, 2011). The root causes of the development, specificity, and the significance of Rijeka, as a powerful punk and rock center, are not only in the influx of information from the west into Rijeka as a port city with good contacts with a strong punk scene of similar sensibility in Ljubljana, and the talent and enthusiasm of young people — the protagonist of the Rijeka scene — and a distinct political and social background, the self-governing socialism of the time in the former Yugoslavia, gave rise to one of the most interesting rock scenes in this part of Europe.

Not only did the late 1970s see the rise of a strong rock scene in Rijeka, like in Ljubljana, Zagreb and Belgrade, but there was also an urban nucleus of young people who formed a kind of subcultural movement, that is, a youth counterculture, which on one hand was as quintessential a conflict with the parental culture and on the other hand, created a new model of living in which rebellion, relentlessness, and passion intertwined with enthusiasm, crossing the boundaries of freedom and creativity. This was similar to the effects of the rock scene in the West in the 1960s (Encyclopedia of Cro-

atian Pop and Rock Music, 1994). It is no coincidence that the beginnings of the Croatian and Yugoslav punk and new wave scene is officially considered the first performance by the Rijeka band PARAF at a New Year's Eve party in a grassy field in the city's suburb of Kozale on December, 31, 1976 (Barić, 2011). This paper attempted to answer questions about the causes, consequences, and meaning of Rijeka's punk and new wave, which is one of the most authentic pop culture phenomena in the Mediterranean in the past 50 years (Đekić, 2009).

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# REPRESENTATIONS OF THE ADRIATIC IN CROATIAN CARICATURES, COMIC BOOKS AND GRAPHIC NOVELS

## Abstract

The Adriatic Sea and its importance for Croatian culture, economy, and politics have long been a source of inspiration for Croatian graphic artists. Depictions of the Croatian coastline can be traced to the beginnings of the history of Croatian comic books (e.g. in the work of Andrija Maurović). The aim of this study, however, is to focus on more recent and more experimental representations of the Adriatic Sea and the Croatian coastline in Croatian caricatures, comic books, and graphic novels. It will be shown that both real and imaginary locations along the Adriatic have been depicted as sites of political, cultural, moral, and economic change, especially with regard to the enduring legacy of the war between Croatia and Serbia and its post-war consequences (e.g. in the graphic novels of Branko Ricov and Davor Radoja). In the field of caricature, the Croatian coastline is often depicted in light of its tourist industry, as a place that serves both as a point of attraction for foreign tourists in the summer months and as the promised land for vacationers seeking refuge from overheated Croatian cities (e.g. in the caricatures of Dalibor Mataković). Furthermore, the Croatian coast is also represented in its interaction with the Mediterranean Sea, which has been made all the more complex in recent years due to the immigration crisis and the importance of Croatia as a channel for reaching central Europe (e.g. in the work of Helena Klakočar). Special attention will be paid to the strong comic mode which is present in some of the representations and often combined with intertextuality, parody, and the grotesque.

Keywords: Adriatic, caricatures, comic books, graphic novels, grotesque, humour

The Adriatic Sea and its importance for the Croatian culture, economy, and politics have long been a source of inspiration for Croatian comic book artists, and depictions of the Croatian coastline can be traced to the very beginnings of the history of Croatian comic books. The aim of this study, however, is to focus on more recent and more experimental representations of the Adriatic Sea and the Croatian coastline in Croatian caricatures, comic books, and graphic novels. It will be shown that both real and imaginary locations along the Adriatic have been depicted as sites of political, cultural, moral, and economic change, especially with regard to the enduring legacy of the war between Croatia and Serbia and its post-war consequences. In the field of caricature, the Croatian coastline is often depicted in light of its tourist industry, as a place that serves both as a point of attraction for foreign tourists in the summer months and as the promised land for vacationers seeking refuge from overly hot Croatian cities. Fur-

thermore, the Croatian coast is represented in its interaction with the Mediterranean Sea, which has been made all the more complex in recent years due to the immigration crisis and the importance of Croatia as a channel for reaching central Europe. Special attention will be paid to the strong comic mode which is present in some of the representations and often combined with intertextuality, parody, and the grotesque.

## HISTORICAL REPRESENTATIONS

Representation of the Adriatic begins with the birth of Croatian comics, in the works of writer and artist Andrija Maurović (1901—1981). The plots of some of his graphic novels, such as Beware of the Hand of Senj (Čuvaj se senjske ruke, 1962/63) and The Siege of Zadar (Opsada Zadra, 1991), are set on or along the Croatian coast. Maurović's stories rely in part on history and historical fact, although in a romanticized form, especially in the case of Beware of the Hand of Senj, which is based on a literary source, the novel of the same name by the Croatian author August Šenoa (1838—1881) from 1876. Another major figure in the history of Croatian comics, Ivica Bednjanec (1934— 2011), focused much more closely on historical accuracy in his depiction of military conflicts from Croatian history in his comic books The Battle of Paška Bay (Bitka u paškoj uvali, 2013), The Blood of Uskoci (Uskočka krv, 2013) and The Siege of Klis (Opsada Klisa, 2014), published by Večernji list in a series entitled Croatian History in Comics (Hrvatska povijest u stripu, 2013—2015). The tradition of historical representations of events from Croatian history continues with the more recent generation of comic book authors, as in the case of The Narentine Warrior (Neretljanski ratnik, 2013), which depicts the Croatian defeat of the Venetian fleet in 887, in which the fleet itself was completely destroyed and the Venetian doge Pietro Candino killed, after which the Venetians were obliged to the Croats and Narentines to provide an annual tribute for the right to sail and trade in the Adriatic. As the rest of this study focuses on more recent and more experimental works, there is only enough room for this very cursory look at historical representations of the Adriatic in Croatian comics, although it must be stressed that history is often a crucial element in the plot and characterisation of works that will be discussed in the sections that follow.

## POST-WAR PRESENT, DYSTOPIAN FUTURE

The Croatian War of Independence (1991—1995) has left a seemingly indelible mark on the Croatian culture, and it is unsurprising that it also features prominently in Croatian comics. Authors whose works grapple with the topic usually focus on war-related traumas, both those of veteran soldiers and civilians affected by loss and destruction. One singularly prolific author who frequently chooses to depict both contemporary and potential future ramifications of war is Davor Radoja, who is perhaps most famous among comics readers for his graphic novel *Miracle (Mirakul)* (2011) and *Smurfs* 

(Štrumfovi) (2012), both of which are set in the coastal city of Split at the close of the 90s, following the end of the war. Radoja's rough, almost sketchy drawing style suitably reflects the social, economic, and moral decay taking place in Croatia, where war veterans are jobless or experience a sense of abandonment to their own inner demons, including alcoholism and PTSD. As Vladanović points out, Split and its specific dialect serve only as a stage setting, and the story would not change much were it located elsewhere (Vladanović, 2012). This continues with only slight modifications in Radoja's subsequent works, with the Adriatic setting largely remaining in the background 1. One strand of the complex plot of Radoja's The Colours of My City (Boje moga grada, 2013) does make certain strides towards incorporating the setting into the plot by centring on homophobia, thus reflecting a social and political issue that Split has had to come to grips with, particularly since the violent attacks on the participants of the first Gay Pride held in that city in 2011. In his depiction of the effects of far-right politics, Radoja goes even further in his ongoing The Perfect Future (Savršena budućnost, 2020), a 1984-inspired dystopian view of Croatia in the militaristic grip of a violent government promoting racial purity and homophobic sentiments, but there too the coastal Croatian setting has so far remained in the background. Another of Split's often cited problems is the sale and use of illegal drugs, an issue that Radoja occasionally incorporates into his graphic novels, although it has received more attention from authors such as Branko Ricov in Gray City (Sivi grad, 2009), where Split with its specific dialect and visual identity is inseparable from its story of two addicts eternally on the lookout for the next fix situated at the beginning of the Croatian War of Independence.

The "post-war" from the subheading refers not only to the state of affairs following the war between Croatia and Serbia but also to other wars and their current ramifications as seen from the Croatian and Adriatic perspectives. One example of this is Helena Klakočar's *The Mediterranean Wall (Zid Mediteran*, 2019), which tackles the subject of the European migrant crisis (2015—2019), during which refugees from the Middle East and Africa streamed towards Europe. A particularly distressing element in the crisis was the fact that refugees often chose the sea route across the Mediterranean, frequently in ships of questionable quality and overcrowded with people, which led to numerous shipwrecks and a rapidly mounting death toll.

Klakočar's work is partially structured as a report on a 2015 refugee rescue mission entitled "Triton" undertaken by "Andrija Mohorovičić", a ship of the Croatian navy. Organized by FRONTEX, The European Border and Coast Guard Agency, the mission involved receiving instructions about sighted refugee ships, approaching them,

<sup>1</sup> This approach is not uncommon, and can be found in such works as Ladan Mehic's *The Eighth Round* (2009) or Marko Jačan's *Fire from the Sky* (2013), a story about an apocalyptic meteor shower that strikes the Zadar County, bringing with it many-eyed monsters and transforming humans into zombies.

and conducting rescue operations. The part of Klakočar's book that focused on the particulars of "Triton" contains interviews with crew members of the "Andrija Mohorovičić" and the artist's rendition of rescue operations, with the sunny scenes of the Adriatic coast contrasted against the miserable conditions aboard refugee ships. And whereas this part functions primarily as a documentary, depicting the Adriatic in its interaction with the Mediterranean merely as a backdrop to the detailed accounts of dramatic events unfolding on the Mediterranean route, the Adriatic receives more attention in the second, far more imaginative and utopian part of the book. Here Klakočar veers away from reportage into pure imagination, inventing an alternative to the disturbing situation of refugees detained on borders using razor wire or smuggled in containers in dangerous conditions. Klakočar's vision involves a self-sustainable system of tunnels and stations stretching across the Balkan route and involving the Adriatic by extending underwater, thus eliminating the potential for smuggling and even functioning as a form of tourist attraction following the end of the refugee crisis. This idea of a complex humanitarian network over land and sea is only a brief utopian moment that comes nestled between the chapter on "Triton" and the closing chapters on the difficulties of refugees undergoing a form of re-education in European countries and further dramatic scenes of rescue operations on the sea, thus functioning as a mere visionary gesture that reinforces the reality of the Mediterranean and the Adriatic as almost insurmountable walls for those seeking asylum in Europe.

## ADRIATIC HYBRIDS

Being both a documentary and fiction, Klakočar's book thus already operates as a kind of hybrid, which is a characteristic found elsewhere in representations of the Adriatic and is perhaps a reflection of the fluidity and changeability of the subject matter. An interesting case in point is Ena Jurov's Porto Pomalo (2015), an illustrated tourist guide to an imaginary town on an equally imaginary Mediterranean island. Although the book has all the elements of a brochure aimed at tourists (advice on local delicacies, overview of the town's history, famous sights and museum, etc.), these elements are simultaneously and often comically undermined by their juxtaposition with either contradictory information or content usually not found in a tourist guide. Beginning with the location of the island, the brochure initially claims that it is "located at the centre of the Mediterranean", but then quickly amends this by stating that its exact location is in fact unknown, although the "most likely possibilities are: somewhere around the Strait of Otranto (some say it could be as North as next to the coast of Montenegro or Dubrovnik, or more South, close to the Greek island Corfu — it could be possible that the sea currents are moving it between the Adriatic and Ionian Sea) (Jurov, 2015, p. 5). By going so far as to imply that the island is mobile, being carried by sea currents, the description moves into comical absurdity, finally punctuating this with an ironic statement



Figure 1 — Tourists Suffering from Food Poisoning Queuing for a Toilet in Jurov's "Tourist Brochure" For The Island Of Porto Pomalo.2

of "certainty": "We are definitely sure that it is a part of the European Union, so it's very safe for you to visit" (Jurov 2015, p. 5). This establishment of unreliable narration is reinforced through illustrations and photographs that accompany the mostly straightforward elements of a tourist brochure, an approach that is initiated on the same page containing the description quoted above: in stark contrast to proclamations of "lovely beaches, picturesque coves and various accommodation possibilities" (Jurov 2015, p. 5), the brochure shows a photograph of two imposing garbage containers on a seaside promenade obstructing the view of the sea. Similar juxtapositions make up the structure of the entire piece, with a straight-faced element of a tourist brochure followed by an ironic counterpoint.

Following a section on famous sights and museums, the brochure introduces one of its most striking hybrids: a pizzeria run by nuns who use traditional recipes and grow their own produce in the garden of a monastery. Of course, the background of the story proves to be darkly humorous when it is revealed that "the nuns bullied the old shoemaker into selling them the space for the pizzeria for cheap. He was the last shoemaker in town" (Jurov, 2015, p. 62). The hybridity of appearance and underlying reality is repeated elsewhere but is made more complex by involving a simultaneous os-

<sup>&</sup>lt;sup>2</sup> Source: https://vizkultura.hr/dvadeset-najboljih-na-d-izlozbi-dana-d/ena-jurov-porto-pomalo/Accessed 20 November 2020.

cillation between comedy and poignancy. When two foreign tourists enthusiastically visit a well-reviewed restaurant, their preconceptions about the purity and authenticity of the experience are shattered when the waiter informs them that the delicious seafood they have just consumed was indeed caught locally, only using dynamite.

The sombre realization that the town is a shadow of its lost authenticity and steeped in hypocrisy<sup>3</sup> is again evoked when one of the visitors bemoans the current state of the overcrowded town beach ("I can't stand this stupid beach anymore. It was so nice and peaceful when we were kids..." [Jurov, 2015, p. 67]), but especially in the book's closing scene featuring a seal and a turtle. The two companions are shown silently observing the seabed strewn with trash among seashells, upon which they decide to visit a beach that the seal used to frequent in its childhood. When it turns out that the water there is overcrowded with swimmers and divers, the turtle comments: "This sucks... I think your childhood beach is ruined..." (Jurov, 2015, p. 111). The closing image is that of the silhouettes of the two sea creatures swimming away into the distance, and the seal's words serve as the ironic closing comment to this "tourist guide": "Fuck this! Let's go somewhere else!" (Jurov, 2015, p. 112).

## ADRIATIC HETEROTOPIA

When it comes to hybrids, there is perhaps no better example of a representation of spatial hybridity in contemporary Croatian graphic novels than *The Crimson Lagoon* (*Grimizna laguna*, 2019). Written by Jonathan Bousfield and illustrated by the famous Croatian poster artist Igor Hofbauer, the book depicts the strange, darkly comedic transformations of a seaside resort called *The Crimson Lagoon*. Although its exact location is never specified, it is implied that the resort is situated somewhere on the Croatian Adriatic coast. The indeterminacy of the resort's location is reinforced by the book's indeterminacy of genre, achieved by "mixing elements of a tourist guide, science fiction, and a political thriller in a disturbing vision of the times we are living in" (Ziher.hr, 2019), all of which evokes similar genre experimentations by Jurov examined above.

The story of the resort is told by its "chronicler", a musician who initially arrives in the *Lagoon* to play in its band but gradually turns into the main henchman of the resort's enigmatic animal handler. Originally employed to work in the resort's newly constructed zoo, the animal handler begins to experiment with crossing breeds of wolves and dogs "in order to obtain a new species adapted to the dry conditions of the Mediterranean coast" (Bousfield & Hofbauer, 2019). When the resort's owners decide that the new breed (which establishes an obvious link with similarly grisly attempts at hybridization from *The Island of Dr. Moreau* by H. G. Wells [1896]) is too

<sup>3</sup> For another example of this approach, see *Soulmates (Srodne duše)* by Lampalov and Mihaljević (2003).

dangerous, the animal handler, suspecting that he is about to be replaced, arranges for the killing of the zoo's animals. With the help of the "chronicler", parts of the animals' dismembered bodies are arranged into grisly compositions, and the animal handler persuades the managers that only his heavily armed employees can introduce order into the resort. After he successfully eliminates his competition and persuades the resort's committee to name him the head manager, the animal handler burns down the zoo and replaces it with a large archaeological dig. Despite the definite inauthenticity of a gold funeral mask of an "Illyrian princess" supposedly discovered on the site, the former zoo is transformed into an archaeological sensation and the cave that once served as a bear den is reimagined as a museum built around the princess' burial place. Obsessed by the idea of the invented "Illyrian princess", the animal handler/manager orders the henchman to kill the band's female singer (and, tragically, the henchman's own love interest) in order to re-enact the princess' burial for the resort's visitors. Following this bloody turning point in the resort's history, its transformations become even more surreal: one part of the beach is designated as a burial ground for the ashes of deceased visitors; the resort is divided into sectors named after animals, whose inhabitants engage in "animal battles", clashes between opposing sides; and the former wellness centre's pools are turned into "embalming pools" for the battles' victims.

Even from this brief and incomplete summary of the plot, it is obvious that the book is brimming with unusual and disturbing hybrids. In fact, even from the cover of The Crimson Lagoon and its first double-page spread, it becomes evident that both the book's visual design and the spaces of the titular resort will serve as a nightmarish playground for its many spatial and temporal juxtapositions. The front and back covers of The Crimson Lagoon reproduce one of its most striking double-page spreads (fig. 2), located near the middle of the book, depicting the musician/henchman's idea of transforming the resort into "one large musical instrument. Air conditioners would hum like Aeolian harps, bells would jingle from flags, ship horns would bellow from roofs, and the bell tower of the floating church on a distant barge would ring with the rhythm of the waves" (Bousfield & Hofbauer, 2019). The accompanying illustration shows both real and imaginary instruments (some of them hybrids of strange mechanisms and real musical instruments, as in the example of a wind-powered machine that plays drums and another that plays a percussion instrument) overlapping or blending with human bodies, hills, and trees, a confusion of animate and inanimate that presages all the unnatural and darkly satiric fusions that will follow after it. And these are certainly varied: from physical (wolf/dog hybrids and animal parts assembled into grisly configurations mentioned above) and spatial hybrids (tourist beaches/burial sites; wellness and embalming pools) to moral (a musician/henchman turned into a murderer; resort visitors turned into Roman slave-owners) and even temporal ones (staged sea battles between Roman and Illyrian galleys).

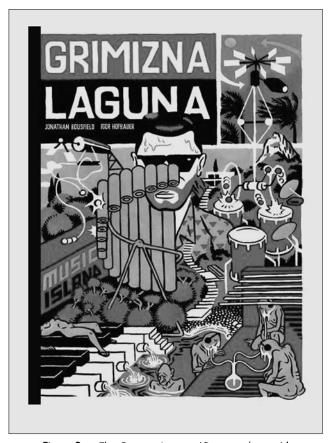


Figure 2 — The Crimson Lagoon (Grimizna laguna)4

By thus functioning as a nightmarish threshold between the living and artificial, human and animal, the past and the present, the cheerfully bland and the grotesquely satirical, and, essentially, satire and horror, *The Crimson Lagoon* embodies elements that align it with Michel Foucault's concept of heterotopia. Heterotopias are places that "are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted" (Foucault 1986, p. 24). The wildly fluid heterotopic identity of *The Crimson Lagoon* changes almost from page to page, involving both different spaces and various time periods, with the exact timeframe of the story remaining vague. Perhaps the most salient heterotopic characteristic of the *Lagoon* is

<sup>4</sup> Source: https://www.rockmark.hr/trgovina/grimizna-laguna-strip-igora-hofbauera-i-jonathana-bousfielda/ Accessed 20 November 2020.

<sup>5</sup> Interestingly, Foucault specifically mentions the zoo as a heterotopia that juxtaposes several (simulated) regions and climates within a single space (1986, p. 26).

its continually re-established illusion of order (of sacred rituals, burials, concerts, etc.), but one that is grounded in masked violence: from the killing of the female singer perpetrated in secret to the openly violent boat-to-boat clashes between "animals" orchestrated by the resort's own management. As it turns out, the heterotopic illusion of order based on moral corruption and murder is impossible to maintain. After one of the bonfire burials that habitually follow the "animal battles" gets out of hand, the fire spreads across the resort, utterly destroying it. As firefighters put out the conflagration, the animal handler sits surrounded by the charred remains of his resort, a dispassionate expression fixed on his disturbingly bland face. His henchman, now out of work, sits down at his keyboard in the animal habitat repurposed for concerts for one final performance. As rain begins to fall, the snarling dog/wolf hybrids from the beginning of the story suddenly appear from the back of the cave, having apparently survived the carnage, and begin to approach the henchman, their teeth bared menacingly.

If understood as a heterotopia of crisis, which is one type mentioned by Foucault, The Crimson Lagoon can be read as a dark allegory of the Croatian post-communist, post-war society, its neglected places and spaces ravaged by newly-enriched profitseeking opportunists, its people enslaved by their phone screens and too blinded by (self-)idolization to notice the horrors taking place around (and within) them, or even eager to accept and normalize them, as suggested by the denouement of the story. We are shown that, even after the illusion of order has collapsed, the guests continue coming to the ruined resort: in fact, as the narrator points out, "perhaps this was the kind of vacation they had always been dreaming about". This line is positioned at the top of a large double spread showing the charred and smouldering remains of the resort: despite the breakdown of the illusion, the breakdown itself becomes assimilated by the illusion of pleasure established by the guests themselves, and is even doubled through the use of their phones' cameras. Reprocessed as yet another commodity, it now loses its potential for poignancy and revelation of the underlying corruption and manipulation, and is refactored into another commodity, another heterotopic pleasure centre. In fact, the dark figure of the animal handler is no longer even necessary for the manipulation to continue: we observe him as he appears to walk out into the ocean, casting one final dispassionate look at the carnage behind his back, but this image is squeezed into the far upper left corner of the double spread, the former overlord of the island relegated to a tiny box engulfed by the enormity of the ruined resort. The epilogue that follows this scene drives the point home: people living in a city overseen by an enormous hybrid of an evil-looking face and a TV screen are lobotomized until they worship a corrupt Buddha-like figure. The last panel in the book shows a man and a woman holding onto the legs of the figure, his penis and testicles hanging above their heads in a final image of servitude and denigration.

# TOURISM, STEREOTYPES, AND THE GROTESQUE

With the publication of the first issue of Lavanderman by Toni Faver (text) and Vančo Rebac (art) in 2008, the Croatian comics scene received one of its first superheroes<sup>6</sup>, and one that is quintessentially Adriatic. The eponymous hero of the comic book is a parody of both a superhero and a stereotypical macho man who resides in Jelsa, on the island of Hvar, and derives his supernatural powers from lavender, a plant grown along the Adriatic coast. Unlike those of his more popular colleagues from the American comics scene, Lavanderman's powers are quite limited: like the plant for which he is named, Lavanderman can repel moths and mosquitos, as well as prevent headaches and vertigo. However, his most potent advantage is his skill in the art of seduction, or "seagulling", as it is known in Croatian, and Lavanderman prides himself on his "seagull's" ability of attracting female tourists. Despite the humorously unimpressive range of Lavanderman's powers, they are further curtailed by the nature of the curse he bears, as it appears that Lavanderman is prevented from ever leaving Hvar by some greater power. Perennially dressed in a purple leotard with a yellow cape, riding into action on his Vespa, occasionally spouting his less than admirable saying "Fuck the goat!" ("Jebenti kozu!") in the dialect specific to Hvar, and always sporting large aviator sunglasses and an imposing moustache, Lavanderman's entire depiction serves to further casts him in a parodic mould when contrasted against his more conservative American superhero equivalents.

A wide range of issues typical for the Croatian Adriatic coast<sup>7</sup>, but also for Croatia at large, are reimagined in a parodic and satirical key, often within ludicrous or grotesque scenes. The tourist industry, which is of crucial importance for the functioning of the Adriatic coast and the entire Croatian economy, receives ample attention. In a story entitled "Preseason" ("Predsezona") from the seventh issue, Lavanderman witnesses various moneymaking schemes (often with deleterious consequences on nature) of his fellow islanders which would be considered typical for the Croatian coast, but the authors of *Lavanderman* take such schemes to outrageously funny extremes. For instance, one local is seen adapting a totally dilapidated house to function as a hotel (even killing a tourist in the process), while another is engaged in maniacally cutting down trees in order to make way for his planned food venue (of course, tourists suffer again: one is cut in half as the local swings his chainsaw around), and even the mayor of Jelsa is seen coordinating an aggressive and megalomaniacal expansion of the coastline, with plans for a geostationary satellite, hydroplanes, cruisers and so forth. The love/hate attitude towards tourists apparent from the above examples reaches gro-

<sup>6</sup> But not the first. That title belongs to Super Hrvoje, a Croatian version of Captain America from 1992.

<sup>7</sup> For an author tackling the issue of the urban vs. the rural areas along the Adriatic, see Biuk (2019).

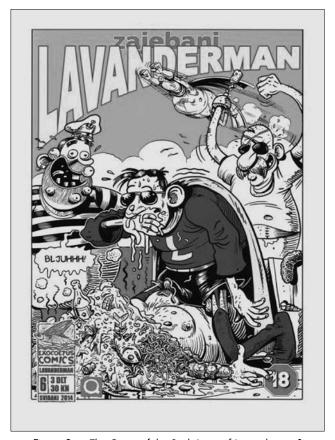


Figure 3 — The Cover of the Sixth Issue of Lavanderman8

tesque heights in the eighth issue, where Lavanderman and one of his friends daydream about tourist schemes that would attract paedophiles and thus drive away tourists with small, loud children. Interestingly, tourism is such a widespread industry that the script for the mocumentary on Lavanderman from the seventh issue mentions that even Lavanderman himself engages in it, although he caters only to his superhero colleagues (Faver et al., 2015, p. 40).

Other Croatian issues and topics also receive appropriately satirical reworkings. From local elections (Lavanderman himself runs for mayor with the slogan "Boris — always the same!" [Faver et al., 2013, p. 2-14]) to historical events (the plague that struck Hvar in 1572 is driven away by a lavender-based concoction used by one of Lavanderman's ancestors [Faver et al., 2013, p. 33-43]), from tales about the Yugoslav dictator Tito (Lavanderman distracts Tito's wife Jovanka with his sexual prowess so that Tito

<sup>8</sup> Source: http://skab612.com/index.php?site=bsp\_info&oznaka=LVMN&broj=6/ Accessed 28 November 2020.

can enjoy one of his trysts [Faver et al., 2018, p. 24-35]) to the Croatian War of Independence and anti-Serbian sentiments (Lavanderman claims he will always remember where he was when the battle of "Oluja" began — in a disco, accompanied by a large-breasted woman driven from her home by Serbian forces [Faver et al., 2014, p. 20-34]).

Sexual topics are frequently addressed, including occasional mentions of homophobic paranoia, which serves as a central parodic element in the opening of a guest story by the Croatian artist Dubravko Mataković in the sixth issue. Whereas other superheroes experience difficult moral conflicts or dilemmas that might hinder them in their work (such as Batman's avoidance of killing), the story's opening finds Lavanderman hesitating over giving an unconscious Russian tourist mouth-to-mouth resuscitation for fear of being branded a homosexual. Lavanderman is saved from embarrassment by the overpowering stench of the tourist's breath, which causes him to vomit profusely and suffocate the man under an enormous pile of the contents of his stomach. The cries of "He's not a fag!" and "Long live Lavanderman!" (Faver et al., 2014, p. 30) ring out as the hero hurriedly rides away on his Vespa to avoid the police. Following the "rescue" of the Russian tourist, the rest of Matakovic's contribution to Lavanderman transforms into a meandering story full of humorous hybrids that never cease to transform, constantly veering off into unpredictable avenues and conflating different timelines, storylines, and even several identities. Such a comically unstable story illustrated in a grotesque style is characteristic of Matakovic's many other creations, including his weekly web comic Overkloking. Usually tackling current topics, Mataković's comic often grapples with issues related to tourism and tourists' experiences during the summer months. And whereas his comics from the summer of 2019 showed his characters involved in a series of plans for reaching the coast from the north of Croatia (for instance, by driving a dilapidated bus reminiscent of the one from the movie Ko to tamo peva [1980], restoring a comically ruined car that is then mistaken for scrap metal and hauled away, using the route taken by illegal immigrants, and even by flying a rocket), the summer of 2020, marked by the pandemic caused by COVID-19, sees Mataković's characters sealed in their home, enjoying their view of the sea via their TV screen (Mataković, 2020).

## CONCLUSION

As this study attempted to show, the representation of the Adriatic in Croatian comic books has a long and varied history, reaching back to Maurović and the very beginnings of Croatian comics. The more recent contributions to this tradition, which were the main focus of this paper, have grappled with a broad range of topics, from a continuation of historical representations to the recent immigrant crisis, from the Croatian post-war situation to its potential for a dystopian future, from grotesquely humorous caricatures of tourism to dark heterotopic allegories of the Croatian society. Important-

ly, their authors are doing so in a range of styles, often experimenting with form, text, and image, and thus continually evolving how the Adriatic is depicted and its problems and issues processed on the comic book page.

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# THE MEDITERRANEAN AS A CONSTITUENT ELEMENT IN BUILDING LITERARY AND FILM SPACE IN SLOBODAN NOVAK AND ANTE BABAJA'S OPUS

## Abstract

Slobodan Novak (1924-2016), a Croatian prose writer, novelist and essayist, in his works he created one of the most important oeuvres of recent Croatian literature. Recognizable writing, exceptional style, polished sentences, rhythmic syntax, devastating irony, pungent humour, modernist orientation, existential pondering, reflections on identity, memorable characters, wondrous imagination, Mediterranean symbolism has been meticulously built over almost 70 years of creation. Ante Babaja (1927—2010) is one of the most respected Croatian film directors, and like Novak, the author of a small but anthological artistic biography. With Novak, among other things, he shares an adherence to the modernist approach, fragmentation of exposure, structure of the work that is carefully thought out, a masterful performance, a unique combination of poetics, psychology, irony and philosophy, and his oeuvre gives the impression of coherence and thoughtfulness rare in Croatian film history. This paper will examine the Mediterranean component of some works of these two great Croatian artists, and with the focus on Novak's novels Gold, Frankincense and Myrrh and Lost Homeland as well as Babaja's film adaptations of these novels, it will explore the way in which the Mediterranean spirit merges into their literary and cinematic work as its constituent element, and participates in the shaping of man, space and time at all levels, from structural, symbolic, ideological, existential, identity, linguistic to poetic, narrative and the level of film language. Keywords: literature, film, Mediterranean, Slobodan Novak, Ante Babaja

Mediterranean culture grew out of the very concept that is semantically determined by the etymological Latin positioning in *medio terrae* (lat. medius — middle and terra — ground, earth) and is deeply rooted in the experience of beauty, tenderness and cruelty, intertwining, thoughtfulness, irony, sun, sea and eternal voyages, a specific spirit that believes that there is something greater of which man is only a part. Igor Šipić (2007, p.60) believes that from a psychoanalytic point of view, man's natural behavior is deeply determined by the type of landscape. And the landscape of scattered pieces

of land surrounded by the sea is a landscape whose influence on man is specific and strong in shaping the state of isolation. In the Mediterranean breviary, Matvejević recognizes islands as special places: "They are classified in many ways: how far one is from the first shore, what kind of channel seperates it from it, kakav je kanal što ga od nje dijeli, whether one can switch to oars: this is where one can best see how much the sea really connects and how much it separates. They also differ in appearance or the impression they give: some seem to float or sink, others seem to be anchored or petrified; these are only remains of the mainland, torn off and unfinished, they separated in time and became independent, more or less self-sufficient. Some are in complete disorder and disarray. For some, everything is in its place again so it seems that it is possible to establish an ideal order there. Islands are given human characteristics and moods: they too are lonely, quiet, thirsty, naked, desolate, unknown, haunted, sometimes happy or blissful... Islands often become places of concentration or calm, remorse or suffering, expulsion or confinement: hence there are so many monasteries, prisons and asylums on them, institutions that sometimes take to an extreme the island's position and destiny. Even the happiest ones, like the Atlantis, sank into the sea along with the cities and ports on them. Most islands' common feature is the anticipation of what will happen. Even the smallest among them are waiting at least for aship to dock, the news it brings, a scene or an event. Islanders have more time to wait than the others: waiting is a feature of their time." (Matvejević, 1990, pp. 18-19) The creative cooperation and the synergy of two Croatian authors is strongly determined by the spirit of such a place. Slobodan Novak (1924—2016), a Croatian prose writer, a novelist and an essayist — in his works he created one of the most important oeuvres of recent Croatian literature. Recognizable writing, exceptional style, polished sentences, rhythmic syntax, devastating irony, pungent humour, modernist orientation, existential pondering, reflections on identity, memorable characters, wondrous imagination, Mediterranean symbolism has been meticulously built over almost 70 years of creation. Ante Babaja (1927-2010) is one of the most respected Croatian film directors, and like Novak, the author of a small but anthological artistic biography. With Novak, among other things, he shares an adherence to the modernist approach, fragmentation of exposure, structure of the work that is carefully thought out, a masterful performance, a unique combination of poetics, psychology, irony and philosophy, and his oeuvre gives the impression of coherence and thoughtfulness rare in Croatian film history. The Mediterranean component of Novak's novels, Gold, Frankincense and Myrrh and Lost Homeland, as well as Babaja's film adaptations of these novels, merged the Mediterranean spirit into their literary and cinematic work as its constituent element, and participate in the shaping of man, space and time at all levels, from structural, symbolic, ide-

<sup>1</sup> All translations of citations from Croatian sources are working translation by the authors.

ological, existential, identity, linguistic to poetic, narrative and the level of film language.

# RETURN TO THE ISLAND — GOLD, FRANKINCENSE AND MYRRH AND THE LOST HOMELAND

Lost homeland (1955) is an existentialist prose by Slobodan Novak<sup>2</sup>, which not only showed his writing skills and all his talent, but also introduced many topics that will occupy this author in his later works. The narrator of the Lost Homeland is an islander who, as a grown man, returns to his childhood island, in order to establish his own identity in the island's Arcadian space-time coordinates, one torn by traces of disappointment of a tired warrior, and to find, under the form of a pastoral idyll, only class, ideological and human cracks, to end up not only with a lost homeland, but also with lost illusions, lost time, lost youth and lost integrity. Therefore, the return cannot result in anything other than a new parting.

Lost Homeland is precisely composed through five pictures, of which the first four cyclically depict the four seasons, the wholeness of the former life, while the fifth is a cognitive and indifferent retrospective present. At the level of identity, what began as a small aporia eventually becomes a disturbed paradigm, unstable and with clear "elements of the disintegration of the constant identity stability of the then ideological framework." (Škvorc, 2008, p. 12).

The pastoral circularity of the *Lost Homeland* in the novel *Gold, Frankincense and Myrrh* is replaced by the circularity of emptying the bowels of the elderly former mistress Madonna, which determines the rhythm of the narrative and life rhythm of the narrator, a forty-five-year-old intellectual and retired war invalid, Mali and his wife Dra-

<sup>2</sup> Novak, Slobodan, Croatian writer (Split, November 3, 1924 — Zagreb, July 25, 2016). He attended high school in Split, graduated in Sušak in 1943. During the World War II, he joined the anti-fascist movement. In 1953, he graduated from the Faculty of Philosophy in Zagreb with a degree in Yugoslav studies. He worked as a lector, journalist and editor in newspapers, magazines and publishing houses, and as the director of Drama at the Split HNK. He started and edited the magazines Izvor and Krugovi. In 1989, he received the »Vladimir Nazor« Award for lifetime achievement. He has been a regular member of the Croatian Academy of Sciences and Arts since 1991. Works: collection of poems Vocal Cords in a Storm (1950, lyrical cycle Iza lukobrana in the group collection Pjesme (1953, with N. Milićević and V. Pavletić), a short novel or a longer short story, Lost Homeland (1955), prose collection Fortified Town (1961) which contains some of Novak's anthological short stories such as Southern Thoughts, Treba umrijeti logično or Badessa madre Antonia, novel Gold, Frankincense and Myrrh (1968), novel Three Journeys (1977), radio dramas Strašno je znati, 1961; Trophy, 1963; Majstore, kako vam je ime?, 1966; Zakrivljeni prostor, 1969, short story Hlap (1986); a book of polemically intoned interviews Digressions (2001), printed in a revised and supplemented form as Dissents (2003); novel Docking (2005), a kind of sequel to Gold, Frankincense and Myrrh, in which the protagonist presents in a monologue the events related to the disintegration of Yugoslavia and the beginning of the war on his island. At: Novak, Slobodan. Hrvatska enciklopedija, mrežno izdanje. Leksikografski zavod Miroslav Krleža, 2020. At http://www.enciklopedija.hr/Natuknica.aspx?ID=44218 (Visited on 11th November 2020)

ga. The island of Arcadia has been replaced with the island of atonement. Namely, in this novel, the island became "a place of shelter, voluntary confinement, but also a place of concentration, calm, remorse and suffering punishment" (Nemec, 2006, p. 20). Then again, insularity is a state and a condition, and, existentialistically, a hero thrown into the world is voluntarily displaced from that world into that insularity in order to atone "for sins and misconceptions of the past and in a symbolic, almost ritualistic way" cleanse himself of "ideological stupidity, atheism and the left dogmatism" (Nemec, 2006, p. 20). His position is bounded by anxiety, nausea and disillusioned, admittedly, waiting for a different life. The light of the Mediterranean space has been replaced by the darkness of the room from which the voice of a violently dispossessed past is heard and the stench of a body rotting irrevocably is scented. And at the same time, that is the whole external plot of the novel, which consistently implements "a fable reductivity: a relatively small number of characters and the absence of "great events" worthy of great prose form" (Visković, 2006, p. 397) — a scanty plot takes place during eighteen days at the transition from 1965 to 1966, during the great Christian holidays, from emptying the hose to emptying the bowel of, a once powerful owner of almost half of the island, and today a disabled old woman who is betrayed not only by her own body but also her own mind, and is nurtured by Mali and Draga. But the inner content is immeasurably greater, and in it the main character summarizes "the experience of a whole generation that accepted the utopian project, tried to overthrow tradition, the Church and History, and then, in a created socialist society, experienced painful sobriety and disappointment." (Nemec, 2006, p. 20). Irony as a stylistic figure in whose key the novel should be read and the biblical reference consistently carried out from the title, the semantic deception in which the name Madonna appears, as an Italianized form of Our Lady's name in Dalmatia, point to two levels of writing and reading the novel. Therefore, many situations that take place in the novel have their own symbolic layer, and it is also similar with the characters (Nemec, 2003, p. 123). The prose world, leaning and framed by the Mediterranean breath, people, history, influences the island as a purgatory and shelter, but the isolation of the island is not enough to protect from others because others are in us, so the Mediterranean sky, sun and light are reflected and move in Novak's prose as a mise-en-scène that reveals diverse and decisive existential layers (Muhoberac, 1995, p. 129).

The modernist imposition of Novak's prose, which brought to the reader a psychological, worldly view and ambiental narrative fabric in meticulous language, without insisting on a plot, does not seem to be overly stimulating for a transfer to film language. However, the films made by Ante Babaja based on Novak's works are masterpieces of film art, and like Novak's novels, "they do not rely on a bare plot, but their narration is actually an introverted confrontation between the protagonist and his own past..." (Škrabalo, 1998, p. 340).

"It seems to me that the only wisdom in art is not to go anywhere, but to stay" (Turković, 2002, p. 37). Those are the words of Ante Babaja<sup>3</sup>, an undisputed classic of Croatian film. His film *The Birch Tree* was regularly chosen (in all polls) among the best Croatian films of all time. His documentary opus, with flagships such as *The Body* and *Do you hear me?* Is analysed at film academies and universities and represents the very pinnacle of domestic documentary. His short feature-length oeuvre was also praised, while always being on the verge of an official ban, with a stylized visual approach and wiggly scenarios, commented on the social and political reality of the time with fingers crossed in his pocket. Praised and challenged, always himself, "against gales and storms", contemplative, intelligent, deliberate, an individual and an intellectual, persistent defender of Art and its higher ideals, sarcastic and self-ironic, tenacious and vulnerable, with his life and the wider reception of his opus, marked by silence, sometimes even harassment, Babaja confirmed the old saying that "no one is a prophet in his own village". But for a narrower circle of film art connoisseurs, he became an institution while still alive.

In his numerically small opus of five feature films, he shot even two based on Novak's equally small, highly esteemed literary opus. *U svom brojčano malom opusu od pet dugometražnih igranih filmova, čak je dva snimio po Novakovom isto tako nevelikom, izuzetno cijenjenom književnom opusu.* These are the films *Gold, Frankincense and Myrrh* and *Lost Homeland*. Babaja and Novak recognized each other, humanly and creatively, and Croatian culture undoubtedly benefited from that symbiosis.

<sup>&</sup>lt;sup>3</sup> Babaja, Ante, Croatian film director and screenwriter (Imotski, October 6, 1927 — Zagreb, January 14, 2010). Born into the family of a civil servant who moved frequently, he lived in Belgrade as a child, and attended high school and Law and Economics studies in Zagreb. In Zagreb in 1949, in Jadran film, he assisted Krešo Golik in the feature film Blue 9 (1950); in 1951 he volunteered for the production of films in Paris (Jacques Becker), in 1954 in Jadran film in Zagreb he assisted Branko Belan in the classic Concert, and in 1955 he made his debut with the documentary film One Day in Rijeka, written by Drago Gervais. During that early phase, he made several special-purpose and documentary films (eg Brod, 1957, written by Jure Kaštelan and Vesna Parun), and with the film The Mirror (1955, screenplay by Vjekoslav Kaleb) he begins a series of short film allegories and satires, achieving, mostly in collaboration with screenwriter Božidar Violić, a complete opus of modernist, ludic short films at the crossroads with experimental film (A Misunderstanding, 1958; Elbow (as such), 1959; Justice, 1962; Jury, 1962; Ljubav, 1963; Putokazi stoje na mjestu, 1964), culminating in his debute feature film The Emperor's New Clothes (1961). The second cycle in his documentary oeuvre consists of modernist, abstract film-essays, starting with The Body (1965), then Do You Hear Me? (1965), Cabin (1966), Plaža (1966), Waiting Room (1975) and Starice (1976) and the final film of his entire career, the self-portrait film-essay Good Morning (2007). He achieved his greatest success with the film The Birch Tree (1967). In the films Gold, Frankincense and Myrrh (1971) and Lost Homeland (1980), based on the prose works of Slobodan Novak, he deals with, in modernistic representation forms, the characters' search for their own identity, the problem of memory and the confrontation of different ideologies of the 20th century. Hi slast feature film is Stone Gate (1992). At Babaja, Ante. Hrvatska enciklopedija, mrežno izdanje. Leksikografski zavod Miroslav Krleža, 2020 Visited 13th November 2020. http://www.enciklopedija.hr/Natuknica.aspx?ID=4978

Where did so much recognition between these two men come from, so much affection for the author's expression of the other? What are the ties that bind them? The answer being the Island and the Mediterranean. In 1927, due to his father's civil service placement, by sheer chance, Babaja was born in Dalmatian Zagora, in Imotski. In his own words: "He/grandfather/ settled in Vis as a young man, my father was born there, my mother was born there, my father married there, my brother was born there..." (Radić, Sever, 2000, p.7). He promoted the concept that genetics determined his nature, his penchant for meditative, poetic, philosophical, but also naturalistic, voyeuristic penetration into the core of things, often with a dose of sarcasm, irony and self-irony.

"And there was always a quiet tenderness and warmth (...) flowing under the serious mask of frequent cynicism and irony, sting and satire, and even black humor." (Fiamengo, 2020), are the words with which the poet Jakša Fiamengo described another great man from Vis — Ranko Marinković, words that could well describe Babaja's character, but also the character of Novak from Rab.

Both artists were defined by their insularity, existentially and creatively — that originality, the conscious choice of excommunication from the mainstream, the need to flood the mind with waves of contemplation of the world, questioning one's place in it again and again, the constant sensitive observation of the environment, interwoven with caustic and sharp criticism of human and social flaws, stupidity and cruelty. They shared the need for an in-depth analysis of oneself and the world, over and over again, sometimes masochistically painful. Both displayed the need to ironize oneself and others, that treasure trove joke much-needed for mental health, that psychotherapeutic cure for reality because without that distance, everything would be too serious and too depressing.

They were never first-timers, they never created loud noise. They didn't want to be liked at first sight, with some superficial film or writer sensation, trick. Their strength lies in the often almost cold, anatomical, revealing voyeurism, which alternates with the already mentioned, not at all easy island humour, but also with impressive lyrical and reflective passages. The presented themselves always with a dose of intellectual distance, but creatively exciting and craftily perfect. They did this so well that their best works can be easily compared with the best works of their European colleagues.

"The film is still spoken of as a work dependent on literature, and it is forgotten that it is a creation of a completely new work where the literary template, instead from life, is simply taken from literature. And that it doesn't matter how true it is to the literature, but how valuable it is in itself. It does not harm the literature from which it is taken. Literature still lives its life, and that is another mode in which that literature can survive" (Grenac, 1983., p. 10-12).

Babaja spent less time in private with his film colleagues. He conversed and made friends more with writers, painters, sculptors, architects, with creatives in the arts of a

longer tradition than that of film. He could obviously have more spiritual and intellectual conversations there than with his film colleagues, among whom were, as he once said "the loudest non-talents and fakes" (Grenac, 1983., p. 10-12).

The compatibility of feelings and worldviews is a profound reason for the mutual intimate recognition of the two great authors. Novak speaks in selected words about his relationship with Babaja: "it is difficult to find an interlocutor and collaborator who knows how to listen so sincerely and with so much attention, and who respects another's word, never setting his beliefs, his criteria and taste above arguments" (Novak, 2002, p.137).

In Gold, Frankincense and Myrrh Babaja (signed as a screenwriter together with Božidar Violić) firmly adhered to the literary template and had only one intervention, which on the one hand can be characterized as a small one, because it is an inversion of the last two scenes, or as a bigger one, precisely because it is about the very end of the film. When he was accused in one conversation that he had made a pre-illustrative end, /Mali (Sven Lasta) and Draga (Milka Podrug Kokotović) whipped by waves and wind carry a sewer pipe across the beach, and Lasta summarizes in a monologue "that they need Madonna more than she needs them/, Babaja answered laconically "... listen, ask those in Pula if it can be seen." (Radić, Sever, 2000, p.27). This is the manner how and if the film was understood. Although initially well received in cinemas, at the Pula Film Festival, the audience, made up mostly of soldiers and sailors from the barracks there, booed the film so much that Babaja escaped from the Arena during the screening.

With its visually stylized, abstract atmosphere, its reduction of sound sensations /there is no music in the film/, with the motif of violent nationalization of old Madonna's estate, and the motif of hopelessness and loss of ideals of the main character Mali, whom the old lady calls "Bolshevik", and with a difficult, suffocating and depressing general impression, the film hardly corresponded with a wider audience, much less with politics. *Gold, Frankincense and Myrrh* was not to the liking of the then establishment. It is no wonder that the then influential politician Vladimir Bakarić called the film a "Croatian black wave", and Babaja had to wait a full nine years for the next one. "Babaja never got the films easily, but he remained consistent with his own aesthetic and artistic ideals, not agreeing to compromises and preferring to remain inactive and silent in the shadows, rather than busy but obedient" (Somen, 1989.).

The screenplay for the *Lost Homeland* was written by Slobodan Novak and Ante Babaja. This time the motifs were taken from two of Novak's stories. The frame of the film is a story in which the main character N, /Zvonimir Črnko/, is invited to urgently return to his native island for a funeral. Just to bury a dead man, who is not his family, in his family tomb, because the tourist future of the island is at stake. Archaeologists found an Illyrian necropolis in the cemetery, so digging was forbidden, and burial was allowed only exceptionally, in existing stone tombs. It is about the *Necropolis* 

from the collection of short stories *Three Journeys*. Babaja had another major intervention. The script did not include a chapter on roasting schnapps from the short novel *Lost Homeland*. It is a large scene in the novel that follows the seasons through traditional island doings and works: fishing, sheep shearing, grape harvesting and the aforementioned schnapps roasting, which Babaja thought of as a dramaturgical screenwriting surplus.

Apparently, Babaja's great involvement in writing both screenplays illustrates well his belief that "the work of a director in almost all stages of work, up to the making of a sound copy, is related to making a screenplay, which is always in the making. It seems to me that every director is in some way an unrealized writer" (Tomić, 1981., p. 74-76). It is a film of "pronounced contemplation of space, with an emphasis on exteriors, and imagery that characterizes each narrative segment. The work manifests both ethnographic and historical values, with the necessary musical influence and occasional hints of a mythical context" (Čegir, 2010, p. 31).

And the spatial determinant of both *Gold, Frankincense and Myrrh* and *Lost Homeland* is the Mediterranean Island but in a fundamentally different visual context. In *Gold, Frankincense and Myrrh*, Mali and Draga take care of old Madonna in a dilapidated stone house leaning against the walls of the old town. Black-and-white photography by Janez Kališnik contributes to the stylized atmosphere of the whole. Rab's stone streets and stone steps, the island's town church, attics full of dust, discarded things and holes in the floor, interiors with thick walls, heavy wooden doors and old furniture, pieces of porcelain from some other times. Wind and winter, foam "sheep" on the stormy sea, people in coats and trench coats with hats on their heads. It is cold and isolated on that island. People are locked in their homes and only go out when they have to, to evening Mass at church or to see who is coming by ferry at the city cemetery, cypresses bend in the wind.

In the scenes of washing Madonna's body, with a combination of anatomy and modernism, "unpleasant" details of Mali's fingers lined with cotton wool that clean her nostrils, of the gauze that soaks her tongue and wrinkled face with liquid, cleaning the scabs on her back, in her feeding and drinking, in her feces and urination, in a visual insistence on physical decay, in this stoic view of every pore of an aging body, Babaja continues with a style and approach very close to the one he started with in his documentary film *The Body*, which will continue with *Cabin* and *Starice*. And that approach and that worldview went hand in hand with Slobodan Novak's prose template.

In the *Lost Homeland*, the island is bathed in the sun. But it is not just a simple and unambiguous ode to nature. The central part of the film is a realistic depiction of a difficult, stingy and harsh peasant life. Babaja adored Olmi's realistic film *The Tree of Wooden Clogs* told through the prism of the growing up and maturing of a boy N., whose father, working as the overseer of the estate, takes him everywhere with him.

The most memorable scene of the film, however, is distinctly lyrical: a boat on calm sea, a naked girl sleeping wrapped in a canvas sail, and a boy sitting next to her and watching her. Music by Claudio Monteverdi adapted by Anđelko Klobučar. The strong impression of that scene is also due to the cameraman Goran Trbuljak, who masterfully played with the existing sunlight, its reflections at sea, woodwork and boat mast, on the main protagonists, connecting this light imaginary with light camera movements that contribute to the fluidity, dreaminess and eroticism of the whole scene. The camera in this film, unlike in *Gold, Frankincense and Myrrh*, is often in motion.

Great attention in the film is also given to the noises of digging and sifting the soil, the clatter of scissors cutting sheep's wool, tuna pounding on a stone pier in mortal agony, the quiet thumping of wooden oars in the sea, trampling grapes in a vat. This soundscape, sometimes very stylized, underscores the universal dimension of the depicted actions. The sun burns and glows through the cinematic Cres landscape almost the entire film, its rocky areas, bays, olive groves and vineyards, playing an important dramaturgical and atmospheric role not only in the meticulous description of the archetypal island activities, it also relentlessly burns on both the ferry and the cobbled city streets, in the frame story of N's brief return to his home island. In this frame, the details of his father's murder are being revealed /the excellent Nereo Scaglia/, in his uncle's novel, killed by partisans in his sleep just because he was a zealous supervisor of property in the "former system", and himself the owner of some lots. There is no darkness and fog, this crime is a public secret, and it sparkles like the sun at its zenith in the consciousness of the protagonist. This autobiographical motif of murder and nationalization is the life burden of the writer Slobodan Novak, such that it returns to him towards the end of his life, in 2014, in his Triptih o moru: "... (I'm floating) like in a thick syrup, in dead silence and on the edge of a dark reflection of our great forest...which is... ah, yes, no, no... it was just ours, but isn't for a long time, my old man was disempowered as soon as they killed him...or was killed to disempower him... well, whatever... I still call it our forest... just like that...". (Novak, 2014., p.15)

The sun also scorches in the grotesque final scene of the funeral and burial of a foreign body in N's family tomb. In the novel, N. does not allow this burial and thus, at least a little bit, expresses his attitude, spite and resistance. In the film, he resignedly allows it. Babaja gives him neither a ray of light nor this symbolic gesture of resistance. The sun is scorching, but darkness is spreading around the main character. The sunny landscape and funeral, hand in hand, give the final impression to the film.

Babaja was satisfied with the Lost Homeland:

"You know, sometimes that *The Birch Tree* just gets on my nerves. That one and only *The Birch Tree* and nothing more. I also think that *Homeland* is no weaker than *The Birch Tree*. In fact, there are parts that I prefer. Especially that part in the vineyard and N's return from the war have one tense and dense experience and I

think that that in the vineyard is the best thing I've done in my career" (Stojanović, 1987, pp. 10-11).

Nonetheless this did not help. Critics mostly greeted the film coldly and sullenly, in Pula he did not receive a single award at the festival. /Trbuljak received only a Kodak's diploma/, the audience had a too demanding role of a discreet spectator of scenes that they had to interpret on their own, politics has silenced (but had not forgotten) another of Babaja's film creations which, with its impression and message, is an obvious subversive muted social critique.

"The premiere screening of Ante Babaja's film *Lost Homeland* took place in Zagreb without the usual premiere talambas, moreover, the stepmotherly attitude towards the author and his realization came to the fore. Babaji is left with only the author's satisfaction that his latest film is one of the most beautiful and most intelligent in our post-war cinematography" (Tomić, 1981,pp. 74-76).

We could argue that there is a great similarity in character between the authors themselves and their main characters. Babaja and Novak, Mali and N., these are intelligent individuals, deeply frustrated with life. They look at the world around them resignedly and karmically passively, they understand all the tragedy of the present that they no longer have the strength or will to practically change. They can only fool around here and there, make sarcastic, lucid comments, make some, even for them, sudden moves. But, they can also very quickly give up any action, deeply regretting that they even tried something. All the way to the next inner urge, artistic, instinctive, human and natural, to the next feeling in the stomach that defends silence, that seeks a reaction. They flee to their 'ivory towers', to their spiritual spheres, to a physical routine in which they never find complete peace, because their intellect is too strong and their senses are painfully too sharp.

In *Gold, Frankincense and Myrrh*, Sven Lasta escapes from the unbearable atmosphere of Madonna's house down the steep stone city street, and that run is repeated a dozen times, filmed from various angles. He runs, collapses, stops only at sea, tries to come to his senses in a storm, with the sounds of Mass from a nearby church. In *Lost Homeland*, at the end of the scene in which the maid Mada shows him his father's bloody shirt, which she kept as evidence of a crime, N., a returnee from the partisans, says: "I'm going to the coast to ventilate, not to think of blood." The sea heals. The sea provides shelter in the agony of life.

Time works for Babaja's films. With the same precision, perseverance and concentration with which he conducts in them a creative dialogue with the greatest secret, that of human transience.

"Many have spoken, and even some colleagues say: come on, you're a show-off, recording for eternity! The film is a matter of a day, a moment, it is a consumable! Do you see all that they have invented? And I happen to think that film is an art

for eternity. If it is art at all! If there is no possibility of it lasting, it isn't art. And I always said that time should be given time too! We know from history that some things simply took time. Until recently, it was funny to say that about film, because it was considered an ephemeral commodity, something that happens and is forgotten. But by still lasting, it proves the most that it is art. And maybe I sensed some small consolation that what I do will be liked once, some time, by someone" (Grenac D, 1983, p. 10-12).

## CONCLUSION

As well as the common artistic sensibility, the space and spirit of the Mediterranean strongly determined the collaboration of Slobodan Novak and Ante Babaja. The Mediterranean as a crossroads of geographical and historical forces proved to be ideal for identity, ideological and religious scattering. Strictness and tenderness, reality and symbolism, isolation and connection, always existential questioning. It is narrated using the first-person storytelling technique, where the main character is also the narrator. The plot located on an island is not a coincidence. Islands are the mainland surrounded by the sea, which binds or separates it, but islands are also "ideas, inhabited metaphors with natural symbols of boundedness" (Robb, 2001, p. 192). An 'island' is a space and a metaphor, an island is a state, an island is man's destiny and man's choice, an island is a dungeon and a space of freedom. The isolation inherent in him forces a man to shrink from the position that is now melting into the past and the future, to draw the line, to settle the accounts. An island is an idyllic Arcadian substrate of childhood and a cathartic place of maturity, at the same time, a place of return and a place of departure. Slobodan Novak's characters both in Lost Homeland and in Gold, Frankincense and Myrrh return to the island to establish (re)define their own existence, to protect themselves, to visit, to purify themselves.

The sea, like a great-grandmother, heals the wounds of life, as well as art does as a creation that ennobles and gives a higher meaning to our existence. One could say that it is faith in the Arts that fundamentally unites these two ascetic and sensitive personalities. Faith in the very act of creation, but also faith in the artist's personal honesty and morality as its precondition. Both of them managed to express themselves and their attitudes with their lives and deeds, by not agreeing to mediocrity and compromise, with their "thunderous silence", in our time and in our space, reluctant to this kind of sophisticated cultural usurpation.

Both the same age, in spirit /Holy/, Babaja and Novak were and stayed Mediterraneans, their dramatic, modernist, existentialist nerve is often immersed in their innate lyrical nature, in the weightless feeling of floating in the limbo of the warm sea, eternal primordial, as in the watercolours of Vatroslav Kuliš, with which he illustrated No-

vak's *Triptih o moru*, whose subtitle is *O radosti, zaboravu i strahu*<sup>4</sup>. Babaja's trinity could be *On Music, Love and Death*. All his life he passionately explored all three.

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<sup>4</sup> On Joy, Forgetfulness and Fear (working translation by the authors)

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# THE DARK HEART OF *THE ODYSSEY*: AN INTERPRETATION OF *THE ODYSSEY* 20, 345-362

## Abstract

The first part of the article interprets the Odyssey 20, 345-362 analysing its key motifs of darkness, blood, knowledge and personality. The development of the motifs is particularly examined from the point of view of their movement, spreading, changes and mutual relations. The island setting of the scene and its impact on the characters' position is also discussed. The second part compares the passage with similar scenes from the epic, those featuring the Lotus eaters and Cyclops (Book 9), the souls of the dead (Book 11), other Theoclymenus' prophecies and Odysseus' plundering of Ismarus (Book 9). The article applies the method of comparison and analysis to explain interconnected motifs, for according to Tomashevsky's theory, the motifs of a work of art should be interrelated. Discussion of personality draws on Aristotel's and Paul Ricoeur's ethical postulations; and on Derek Parfit's claims on continuity and connectedness. The article aims at demonstrating that interrelatedness of the motifs is particularly perceptible in the interpreted passage, while there are strong similarities and dissimilarities among motifs in the deferent scenes of the epic as a whole.

Keywords: the solar eclipse, motifs, personality, similar scenes

## THE INNER STRUCTURE OF THE PASSAGE

## Darkness

The prophet Theoclymenus introduces the dark motifs describing the suitors while talking to them. The chain of dark motifs first comes down with the night which shrouds the suitors' heads, faces and knees (20,352). Then the realm of darkness is mentioned, and the gloom of Erebus is present in the word zófon (20,356). In the second stage, the narrator's gaze goes upwards, towards the Sun, which has been completely blotted out of the sky (20,357); while eventually the motif of a lethal mist over the earth appears. Although the mist is not dark, it nevertheless cuts visibility right down. According to Liddel and Smith, the word ahlýs denotes a mist over the eyes of one dying; or of a person deprived of the power of knowing others (Liddel & Smith, 1882, p.142: cfr. Senc, 1988, p. 146).

Eurymachus says of the prophet Theoclymenus: "Everything here he thinks is as dark as night!" The dark motifs follow a sinusoidal movement: they go down and up and down, which could also be regarded as spreading over and encompassing an ever larger area. From the parts of the suitors' bodies, darkness is spreading to Erebus,

then to the sky. Eurymachus uses at the end the pronoun táde, which is close to "this", but could denote everything around the persons, as Robert Fagles renders the expression.

The aforementioned adjective *lethal* is not present in the Homeric text, where we could read a less strong word kakè, which means simply bad. Yet, the darkness recalls the metaphor denoting death also. The expression saying *darkness veiled his eyes*, tòn dè skótos ósse kálypse, is often present in *The Iliad* (4,461; 4,526; 4,503; 6,11; 13,575...), and there is a variation of it, that uses the idea of night (5,310; 11,356). In *The Odyssey*, the hero's mother asks her son in Hades: "Oh, my son — what brings you down to the world of death and darkness". In Homer we have zófon ēeróenta, which is murky darkness.

#### Blood

The first stream, of motifs of darkness, is intertwined with the second one marked by blood. The beginning of the chain is in the sequence in which the suitors eat raw and bloody meat: — haimofórykta dè dé kréa èstin (20,348). Then the blood also spreads: the walls and the handsome crossbeams dripped dank with blood (20,354). There is a subtle difference between the blood on the meat the suitors are eating and the blood on the crossbeams. The first blood could be really present on the food, although there is a possibility it is also introduced by Athena's command. The second blood is visible through the vision of Theoclymenus, but to make things more allusive, the reader is also compelled to see it as a picture of unavoidable future, making its presence strong and telling.

The text offers a play on words connecting tears and blood, while tears appear twice in close proximity to blood. In the verse 20,348 there is meat spattered with blood and, in the same line, eyes are present; in 20,349 the reader learns they are filled with tears. Then again in 20,353 tears are running down cheeks, while 20,354 introduces the walls and the handsome crossbeams dripping dank with blood.

Tears are related to blood through pain, through belonging to the liquid state of matter, and by drops, the form in which blood and tears are commonly manifested. In the interpreted passage motifs are related by proximity. Describing darkness, it was important to stress its relation to death. The same thing happens with the blood motifs, while blood also alludes to death, because the dead from Homer's underworld drink blood in Book 11. So, the suitors eating bloody meat are a living picture of their own future, that is of their beings, that will lust for blood when in Hades.

# Knowledge and Ignorance: Person and Identity

The third chain of motifs, related to knowledge and ignorance, and to the problems of personality, is of crucial importance. Eliot and Remy de Gourmont claim that comparison and analysis are the chief tools of the critic (Eliot, 1975, p. 75). With an obvious

relationship of knowledge, the problems of a person and identity and blood and darkness could bear out Eliot's position.

I have already stressed that the word ahlýs, the mist from 20,357, could also denote the mist of a person deprived of the power of knowing others. Athena really set off incontrollable laughter in the suitors eating blood and led their thoughts astray. Mad, hysterical laughter seemed to break from the jaws of strangers, not their own. Homer says allotríosin, meaning belonging to another. So, the suitors are losing the power of perception of reality. Then, they are losing their minds, which means at least a part of their personality also, before they lose their lives. If the suitors are not themselves anymore, who are they then? It is obvious that the pack of suitors is related to the throng of ghosts, seen by the seer Theoclymenus. They, the suitors in the form of the ghosts, are thronging the entrance, thronging the court, and they go trooping down to the realm of death and darkness as Robert Fagles has it in his translation (20,356).

The suitors' hearts are possessed by fear, but in the original it is tymós, which is the soul or the centre of personality. The throng of ghosts is descending to Hades, thus following the way of darkness, as mentioned above. These motifs are similar in the scope of their movement also. In sharp contrast to the suitors, who do not possess their own beings anymore, the seer Theoclymenus claims he has his body parts complete and under control, his eyes and his ears, his head and his feet belong to him (20,365). It is important to realize that he mentions the organs of perception, the eyes and ears and his head, while he sees the present and the future, which is precisely what the suitors are not able to do. And, what is more important, Theoclymenus has nothing to be ashamed of — oudèn eikés (20,366). Honour is related to knowledge and is embodied in the seer, while ignorance is close to sin, and is present in the suitors. Theoclymenus is not somebody else, he possesses his own body and his mind, and I will dare say, his personality.

There are two more contrasts between Thoclymenus and the suitors. Eurymachus calls him a stranger, afraínei, newly come from elsewhere, állothen (20,360), while he himself is a part of the group of the suitors smiling with jaws not their own — allotríosin (20,347). Theoclymenus was sent out of the scene by the suitor, soon also to be taken away. So, the suitors are able to see in an another person what they should observe in themselves. Dramatic irony is present in the text, while Homer seems to hide it, letting the reader to conclude what position the suitors are in. Strangers are those who are immoral. The interpreted passage opens up questions of identity, of person and of the subject, which are dear to the modern and the postmodern mind. Have the suitors really lost their personalities? If they have why did it happen?

Before correlating the passage with modern theories, let us consider Aristotle, writing his *Nicomachean Ethics* some 400 years after Homer wrote *The Odyssey*. Aristotle thinks eudaimonía, or happiness, "is an exercise of the vital faculties [of the soul] in accordance with perfect virtue or excellence" (Aristotle 1906, p. 30; 1102a 13). Aristotel

has psyhés in the place of the vital faculties. So, without perfect virtue there is no happiness in the soul. Instead of happiness, the suitors are filled with mad laughter. Depicting the suitors, Homer might have said something more: without virtue there is no real soul, which is transformed into a phantom, for which Homer has a telling word: eidólōn. According to Liddel, the word denotes any unsubstantial form (Liddel & Smith, 1882, p. 227). Later on, it was to be an image of a god and an idol. An idol is only an image, it is a representation of reality, and not reality itself. Homer said something similar to the later description of Aristotle, claiming that a soul loses his power and its real life without virtue. In the vision of the prophet Theoclymenus, the suitors are the souls of the dead already. Still, the situation is not as simple as it might appear at first sight. The living suitors thinking well of themselves, eating and drinking are not the truthful pictures of reality. Yet in the vision of the prophet Theoclymenus — probably having blood on their mouths and flying to the Erebus already — the suitors are close to reality because their present state is a real presentation of their future.

Some modern theories support the unity of the person regardless of the changes it might undergo; here, Paul Ricoeur comes to mind. Human lives are clearer if we observe them within the purview of the narratives humans tell of themselves. There are two kinds of narratives: the first is historical and the second is fictional, the one told by the person itself. It is the chiasmus of the two mentioned narratives that constitutes the person (Ricoeur, 1999, p. 20). The Homeric text presents the first narrative, told by the prophet, which is historical, and supported by the narrative of the leading narrator. The second one is the narrative presented by Eurymachus. The two stories are in sharp contrast, so the personalities of the suitors seem to be split. Later events, representing their deaths, confirm the prophet's narration. On the other hand, Ricoeur also stresses ethical qualities — faithfulness and loyalty — which support the unity of a person (Ricoeur, 1999, p. 28). Homer's suitors are faithful to their lust, but disloyal to their true king Odysseus.

Still, one could not say that the shadows inhabiting Hades in Book 11 are not persons known from the realm of the living. The Agamemnon relating his death is not identical to the Agamemnon from *The Iliad*, but the two beings are similar enough to be called a person.

Derek Parfit's theory is also interesting in the context of Homer's texts: "One reason is that the personal identity is not what matters." (Parfit, 1984, p. 240). What is important, according to Parfit, is continuity (Parfit, 1984, p. 219) and connectedness (Parfit, 1984, p. 206). Parfit resists the concept of person being too narrowly based on an identity that is close to sameness. His insistence on continuity and connectedness opens up a much broader scope for the definition of the structure of the person.

The blood-stained suitor Eurymachus is connected to the flying phantom, or to the idol flying to Hades. There is a possible further continuity between the flying phantom and the soul of the dead in Hades, which he will become. We might conclude these

appearances, or these beings, are not exactly identical persons, but they are one unity of a person.

One might observe that Parfit's conditions, at least for some type of unity, of a person are vague; and connectedness is particularly challenging. Many diverse persons could be objects of connectedness. Odysseus is connected to the suitors, even when fighting them, although in a very different sense from Parfit's. Again, connectedness and continuity of a person could be a good ground for unity. As for identity, if we agree it is not exact sameness, then connectedness and continuity also contribute.

As I said before, the two lines of the described motifs, darkness and blood, are related to the phantoms hastening to the gloom of the underworld. The bloody meat that the suitors are eating is a symbol of Odysseus wealth, which they are destroying; and also, of the murder they want to commit, but they themselves will soon be killed, in a bloody massacre. Blood is also the drink they will want to consume in Hades. Eurymachus, one of the suitors, claimed Theoclymenus was insane, which is highly ironic, because he himself was blind and already confused by Athena (20,346). The prophet Theoclymenus is aware of the described motifs and their relations, or at least he is aware of most of the situation. The suitors are unaware of the real meaning of it, and of the motifs around them. Since the solar eclipse is not a bad omen to them, they must have a lack of a real knowledge, which is related to something lacking in their personalities. But the lack is not total: that the suitors' hearts are set on weeping in 20,349 depicts some kind of a possible awareness.

## RELATED SCENES

The scene of the eclipse of sun is the dark heart of *The Odyssey* and is well connected through the narrative veins and arteries, and, bearing similar motifs, with the rest of the epic, constitutes an important part of the works interrelatedness. Researches in patterns of *The Odyssey* are a fruitful part on Homeric studies in the recent times. Matthew Clark discusses type scenes in the scope of metre and formulas, stressing the repetitiveness of the work (Clark, 2004, pp. 117-138). Bruce Louden depicts the possibilities of patterns in terms of analysing similarities and dissimilarities: "The pattern can also help reveal significant differences between characters too often seen as virtually interchangeable, such as Kalypso and Kirke (...) In this capacity the narrative pattern is a useful means by which to separate generic similarities from functional differences." (Louden, 1999, p. 132).

The present examination will show both similarities and dissimilarities between motifs and characters in the chosen scenes. "Each real motif should be somehow embedded in narrative construction and enlightened from a specific side." (Tomashevsky, 1998, p 32.)¹ Motifs in different scenes in the Homer text are related and their connect-

<sup>&</sup>lt;sup>1</sup> Translation from Croatian to English D.S.

edness contributes to the unity of the work. Their separate meanings are also enriched by their presence in different scenes. Due to the limits of space, analysis and comparison must be brief.

## Lotus Eaters

The Lotus eaters, who forget themselves while eating pleasant food, are similar to the suitors, who are unaware of their position and their own personalities while eating the bloody meat. The Lotus eaters did not violently attack Odysseus' friends but gave them the lotus fruit to eat to. Those who ate the lotus wanted to stay there among the Lotus eaters. They wanted to feed on the lotus and forget returning home. While they were brought back by force, men were crying, klaíontas. It is obvious that the wish to eat the lotus was prompted by the Lotus-eaters and was not an original desire of Odysseus' comrades. Girard's concept of triangular desire could be of use in the examined case: "It includes the triangular structure of desire: self, other as mediator (...) and the object that the self or subject desires because he or she knows, imagines, or suspect the mediator desires it" (Girard, 2000, p. 30). Odysseus' mariners eat lotus because Lotus-eaters instigates the desire in them. Of course, the food itself possesses a poisonous character, developing the addiction and stupidity, typical of narcotics.

The suitors also laugh because Palace Athena raises uncontrollable laughter among them (20,345). Laughter is not their own idea or wish. Odysseus' friends are crying, and the suitors will cry also. The motif of unawareness is the strongest link between the two scenes, but its function is different. Odysseus' crew should return home and the suitors should leave Odysseus' palace soon. Odysseus' mariners are not guilty, if the naïve lust is not a sin in itself. On the other hand, the suitors are harassing Ithaca and they are sinners, but they are also not that aware of their sin.

# Polyphemus

The suitors eating raw meat allude to the Cyclops from Book 9, who are man eaters. Both the suitors and Polyphemus are enemies of the hero Odysseus. While Polyphemus threatens the return home in the initial part of his journey, the suitors are the last obstacle to the hero's happiness. The suitors are not able to see the real danger they are living in, and Polyphemus is literally blinded by Odysseus. Polyphemus is unable to discern the pun on Odysseus' assumed name, just as the suitors are not aware of the hero who is about to kill them, and who is in the palace already.

#### The Dead

The souls of the dead are also drinking blood in Book 11, so the suitors are close to them because they eat blood spattered meat. Achilles said the dead are numbed and the adjective afradées (11,476) could mean insensate, reckless. Athena also led the thoughts of the suitors astray, after which they consume the bloody meal. A reader should keep in mind the fact that the dead in Hades become aware of the persons sur-

rounding them only after drinking blood. The scene with Odysseus' mother who drinks blood and recognizes her son afterwards is especially well constructed. There is a sort of bitter but yet kind juxtaposition in the motifs of mother, who gave life, and the dead soul who having blood on her lips worries for her living son. In the case of the suitors, blood is a sign of unawareness, while on the other hand the dead, just the opposite, become aware only after consuming blood.

The dead, as described in Book 11, are only phantoms of exhausted mortals, eidola kamóntôn. The very word eidólon is used to denote the pack of ghosts flying to Erebus in the suitors' scene. The dead resembles the living because Odysseus recognize them, and they are talking in ordinary human language. Still, they are not exactly the same persons who they were while living. Achilles claims "I would rather be a hired farmhand, slaving for another, a landless man who hasn't much substance, than rule all the dead who have perished." (11,489-491).

The suitors are also not entirely themselves, because when they laugh their jaws seem to belong to somebody else.

There are many differences between the suitors from Ithaca, who are close to their death, and the dead from Hades, who would like to live. The souls of the dead are amicably disposed towards Odyssey, while the suitors are his enemies. The dead obey the rules, while the suitors break them. Only one evil person talks in the suitors' scene, while a row of the dead talk to Odysseus. Yet, both groups are drinking or eating blood.

It is worthwhile observing that Ithaca is an island, offering slim possibilities of escape to the persecuted ones. The sinful suitors have only one place to go, which is just the opposite of what they are hoping for: they can go only to Hades. Just as Ithaca is an island surrounded by the dangerous sea, Hades is a realm from which its denizens cannot hope to escape by merely wishing it. It is a sort of an island also, and Odysseus' mother says: "It is hard for those alive to see those things / for in between are great rivers and dread streams, / Ocean first, which is no way possible for one on foot / to cross, unless one has a well-built ship." (11,156-159).

# Theoclymenus

The godlike prophet Theoclymenus is by his very name announcing the godlike Odysseus; the hero is already on the island. Theoclymenus' final prophecy is now by far stronger and much less naïve then some similar prophetic motifs in the epic (cfr. 1,164; 2,83; 15,530). Many prophecies cut the suspense, and the final victory of Odysseus is rarely questioned. Jack Mitchell says Theoclymenus appears out of nowhere in 15,223 and receives some thirty lines of biographical introduction and genealogy (Mitchell, 2010, para. 2). After being taken on board ship, his first prophecy is addressed to Tel-

<sup>2</sup> Retrieved from https://chs.harvard.edu/CHS/article/display/6288.2-theoclymenus-and-the-poetics-of-disbelief-prophecy-and-its-audience-in-the-odyssey-jack-mitchell.; 20th November 2020.

emachus: a falcon, Appolo's swift messenger, passed by. It was plucking a dove / it held in its feet and was shedding feathers on the ground / between the ship and Telemachus himself (15,527-528).

Theoclymenus called him away from his comrades and said: "Telemachus, surely not against god's will the bird flew on the right." (15,531). "There is no other race more kingly than your race/in the kingdom of Ithaca, no, you'll always be mighty." (15,533-534). The second prophecy is to Penelope, it appears in Book 17, and repeats the first one, but with some changes, commented on by Mitchell. Odysseus is already in his fatherland (17, p. 157) and he plants evil for all the suitors (17, p. 159). Theoclymenus says also: "I observed such a bird of omen as I was sitting / on the well-benched ship and made it known to Telemachus" (17, p. 161). It is important the prophet adds nothing more to the reality he had seen while on the ship, he only adds new interpretation to the scene which has previously been observed.

The third prophecy, interpreted in the present paper, differs from the first two by several motifs. The prophecy is addressed to the enemies directly, while the interlocutors in the first two cases were friends, Odysseus' son and his wife respectively. The third scene therefore bears dramatic tension, so the sentences exchanged by the participants are ominous. The tension is produced by the fact that the opponent forces and persons are present at the same time and in the same place — claiming to see a totally different picture of the present state of affairs and of the future. Good and evil, knowledge and ignorance, present and future are represented in the characters of Theoclymenus and Eurymachus. Some of the differences among them have already been mentioned. The prophet owns the part of his body, while the leading suitor belongs to the group smiling with the jaws belonging to a stranger. The prophet is able to see darkness, while the suitor claims there is no darkness; the prophet sees blood on the crossbeams, while the suitor does not mention it in his replay. Eurymachus chases the prophet away, and he himself soon will be driven to death.

Parfit says in a rather Socratic and also in a tricky, postmodern way: "I shall thus be arguing that most of us have a false view about ourselves and about our actual lives." (Parfit, 1984, p. 217). Eurymachus would therefore be an example showing by his own situation the position of most humans. Parfit might as well be in the right, yet the level of falsity varies significantly from person to person. The seer and the suitor, as contrasted in the scene, are on the opposite poles of awareness.

In the interpreted scene Homer is the precursor of the great clashes in later Greek tragedy involving the prophet Tiresias and Oedipus in Sophocles' *Rex Oedipus*; and the prophet Tiresias and king Creon in *Antigone*. Each time false consciousness and real insight are contrasted. Though Girard's theory of scapegoat mechanism strongly challenges Oedipus' real guilt (Girard 1986, p. 25) and therefore Tiresias' true explanations, the very fact of opposite forces bringing tensions are present anyway.

According to Staiger, the two great sources of tension are pathos and problem (Staiger, 1946, p.144). Pathos is present in the prophetic scene in its primal meaning of suffering, trouble and bad faith (Senc, 1988, p. 144). The explained motifs — the solar eclipse and the flying phantoms, the blood on the meat and on the crossbeams, the darkness rising all around and impending death — contribute to the tension.

We have to stress that Theoclymenus' name means 'the one who listens to the god', while Eurymachus name is related to 'fighting'. Theoclymenus could hear the god's voice, while his telling will soon be reality. The fight which is about to begin, the slaughter of the suitors by Odysseus, will have a fatal outcome for Eurymachus. The scene is great for its ominous, precise and realistic staging, and for its opposite participants. It is in line with the notable introductory quarrel involving Achilles and Agamemnon in *The Illiad*, but now some murky fate hovers over the participants rising a sense of dread and mortality. This sense is not forced, it grows steadily but convincingly until the mention of the vengeful and godlike Odysseus.

Theoclymenus' development in the epic is also notable. His first appearance is marked by his begging Telemachus to take him, who is a refugee, on the ship. In his first prophetic scene he just interprets the falcon tearing apart a dove, relating the victorious bird to the high position of Telemachus' family (15,534). His second prophecy is more precise regarding the interpretation of the falcon and the dove, connecting the motifs to Odysseus and the suitors. The third prophecy is ominous, with motifs observed by the prophet alone, the blood and the phantoms, and of course by the fact he is able to stand against the enemy.

# Odysseus in Ismarus: The Suitors on Ithaca

The suitors eating meat which does not belong to them, and desiring Penelope, a woman they have no right to, are calling attention to the protagonist Odysseus, who destroyed Ismarus, city of the Cicones, and took their wives as a plunder (9,39-66). A reader trained in literary techniques knows the ironist can say anything but he is being ironic. Could such a reader cast an ironic eye on the glorious hero's return also? It is not an obligation, but it is at least a possibility. The Odysseus, who destroyed Ismarus, killed the men and seized the women from the town, is painfully similar to the suitors on Ithaca. This is the reason why we could call the scene of the eclipse of the sun the dark heart of The Odyssev: the protagonist comes within the scope of the motifs of destruction, lust, robbery and plundering, being obviously similar to his antagonists. Somebody could of course claim the leading narrator, or the central intelligence of the work, is on Odysseus' side, showering him with compliments. He is a handsome man, and is a divine sufferer, he never forgets his wife, his family and his homeland. He is fighting bravely in the war, he enjoys women, yet is somehow faithful to his Penelope also. His enemy is the strong god Poseidon, but the intelligent goddess Athena is on his side, so he plays successfully with huge forces. Odysseus is the winner at the end

of the long romance. The brave, troubled and smart hero is the model of many warriors, lovers, husbands and fathers in the West. Yet, his admirers should not forget his similarity to his antagonists. The smart hero would then probably be on their side also, telling them that he was more intelligent and stronger than his adversaries. And he possesses mighty allies on his side — the narrator and the goddess Athene both love him.

## CONCIUSION

The solar eclipse scene is a powerful hub that sets forth its notable motifs in their development and interrelatedness. Symbols for blood, darkness, knowledge and personality are arranged in a natural way. On the other hand, the scene is related to other important parts of the epic that also include the temptations of the flesh or the encounter with mortal danger. The fact that Odysseus the plunderer of Ismarus is similar to his adversaries on Ithaca, when plundering, shows the possible ironic code of the text.

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# THE BLENDING OF POLITICAL PROPAGANDA AND TOURISM IN "PLAVE TIŠINE" (BLUE SILENCES): A SHORT CROATIAN DOCUMENTARY FROM THE SOCIALIST FIFTIES

## Abstract

With a history tied to all the political and social changes it went through, Croatian cinema often reflected those changes on different levels. The socialist part of Croatian cinema history was no different, regardless of the type or genre of film. It often selected themes that would represent current paths of government political activity, leaving the film professionals not only to adjust, but to find in these universal — local themes an artistic base for them to develop their skills. or even find personal stories. It was a position comparable to film professionals working in the studio systems of historically advanced production centres, regardless of the ideologies they sometimes had to follow. In such conditions, even the smaller productions could not escape their role in representing major themes. Filmed and directed in 1953, by distinguished Croatian cinematographer and sometimes director, Frano Vodopivec's short documentary film 'Blue silences' (Plave tišine) about an international group of divers and scientists, exploring the Kornati archipelago, manifested themes that were important to the still young political order, such as international acceptance and visual presentation through tourism. The significance of Mediterranean legacy was also examined in films such as Vodopivec's, redefining that legacy beyond war history or industry, but as a possible place of interest for the masses. Mainly as a place for leisure and adventure. This paper addresses all those instances, examining a short promotional documentary film from the early fifties.

Keywords: Croatian cinema, documentary, Frano Vodopivec, ideology, fifties

The history of Croatian cinema had many symbolic beginnings in the first fifty years of its existence. It is a history shaped by political changes, by financial possibilities of those who were intrigued to invest in cinema, by those examining the purpose of media in society and finally by the small group of men and women trying to professionally establish a continuity of film production. A more recent observer has many difficulties in establishing the shape of that continuity. Most of the films produced in the formative period of the late 19th century to a more advanced period of the late twenties of the 20th century have been lost. Fragments of heritage are valuable, but we cannot study the full range of that period with so many missing links.

One segment of film production that survived in archives belonged to educational films, mostly produced under the School of Public Health, situated in the capital city of Zagreb, which established its film production unit in 1927. The purpose of that production was mainly educational, for example teaching people about hygiene or diseases. However, it provided a body of work that included public health films, documentaries and educational short features that we can consider as a systematic production (Majcen, 2001), and a new context for Croatian cinema. The significance of those films cannot be highlighted enough, for it encouraged other productions and braver exploration of the media up to the second world war.

But what those films acknowledge is a productional pattern that will follow Croatian cinema through most of its history, shaping it as a history of mainly short films, and that feature films, although gaining most attention, form a much smaller part of existing and non-existing heritage. It is the heritage of short films that will sometimes provide a more focused and clearer perspective on the period in which the films were produced.

This was especially evident during the period of the second world war and the early years after the war when two opposite ideological systems found the media of cinema as a valuable propaganda tool (Majcen, 2001), and as such established very early film production and state film companies. Although providing standard full-length feature films, was always an important ideological goal of the political entities during that period — "the essence of film production" (Golik, 1951, p.101) — it is the production of short films that was needed for faster and direct communication with the public, and as such, tried to provide the symbolic presence of "new", and "change", and "stability", in a time of global political transitions. More importantly, "film ceased to be a trading good and became an important part of national culture" (Majcen, 2001, p. 158).

Films were not the only media used for propaganda and cultural objective, but in a period with many of its inhabitants with rudimentary or no education, audio-visual media made an important impact, as history and daily life still show us. Depending on the ideology of the political state, right wing totalitarian during the second world war or socialist in early years after the war, Croatian cinema and available distribution of foreign films, reflected the needs of those in power, and their political allies. From the beginning, the distribution of foreign films, which was steadily available to cinemagoers, made up most of the program, with domestic production of full-length feature films forming only a small segment. During the wartime Croatian independent state, only one was produced (but historically the first), and the new socialist government knew it must embrace that legacy and film professionals without the fascist ideology their worked previously served. The production possibilities of the new socialist state were limited in many ways, mostly technical and financial, so it was a job of inventing a "new" cinema while trying to make it work as a future industry. As the new socialist

state used all media for its purposes, so the production of short films, especially news series, gained momentum and presence mostly through distribution in cinemas before main features.

In time before television, the cinemagoers around the world got their visual conformation of news through such programs. Croatian cinema, now a part of socialist Yugoslavia, was no different, and as the state made film industry a priority with other industries in development, so the film production, and film professionals working in the industry, had a fresh feeling of continuity. That feeling brought new impulse to film professionals, who knew that the state film production cannot only serve ideology and disregard the wishes of cinemagoers, so they tried to adapt their personal interest and style to the expectations of politicians and the general public.

As Turković (2005., p 26) points out the "socialist doctrine clearly dictated that it is not allowed to follow capitalist or western themes", but the style of the movies clearly followed the dominant styles of western or eastern models, depending on what it wanted to convey to viewers and what influences it absorbed. Sometimes it worked, sometimes not, but the scrutiny was more on full length features, they served as a cultural product with high status, then on the short films, although they all had to be reviewed from state offices to be given permission for distribution. So short films, such as news series, documentaries, educational films to youth films, provided a training ground for future professionals and sometimes a place to try other ambitions.

The years following the ending of the second world war up to 1954 or 1955, saw slow but significant changes in society and in models of film production as well. Although this text addresses the history of Croatian film as a process with some degree of independence, the socialist period of that history was part of socialist Yugoslavia in which the "conditions of production and consumption of cultural products... were equal" (Šakić, 2016, p. 34), throughout the whole country. We can point the difference in culture, wealth and languages, between the republics that constituted socialist Yugoslavia, but a kind of similar experience was present, and watching movies could be seen as that experience.

The production of short films in the first ten years after the second world war, slowly began to diversify, trying to include many topics that the socialist society viewed as important. If full length movies remained an important product of identity, cultural or ideological, to domestic and possibly foreign viewers, short films in all variety could be quicker to show changes that were present in society, or indication of future changes. We can arguably define the period as a time of governments constant ideological questioning of the nature of its inhabitants, and their needs. If everyone was defined as a worker in their own field, what was the other, besides work, that could fulfil their lives and make them satisfied living in a socialist society? So emerged, the perception of workers as consumers, who not only have their needs, but are counting on a system and industry it proudly declares as the future, to deliver their needs. Their needs

exceeded the industrial products that made their lives easier, cleaner and healthier or having better housing conditions (one of many similarities with western societies) and directed attention to the time the workers spend when not working. With a growing interest in workers' leisure time, the film production, including short films, reflected that interest in a form that can be described as cinematic revalorization of natural beauty, showing that natural wealth isn't only valuable to industry.

## **BLUE SILENCES**

We can consider the short documentary film "Plave tišine" (Blue silences), produced in 1953 by Jadran Film, a major film production company in socialist Croatia, and directed by Frano Vodopivec, until then mainly known as a cinematographer, part of the new interest in travelogue or nature films. In the period before the second world war, domestic and foreign production companies made travelogue films or feature films that highlighted the natural beauty of Croatia. Emphasis on nature was mostly in the form of documentaries or picturesque landscape becoming a scenery for feature films, a trend present from the silent era, as we can see in The Grand Duke's Finances from 1924, directed by F. W. Murnau.

If documentary films are considered as a form which was traditionally used for "interpreting, explaining..." (Turković, 2005, p. 126), that function was suitable for all societies or political systems that used film for ideological purpose, so it can manifest their goals and accomplishments, or point out their weaknesses and enemies. The goal of 'Blue silences' as a film product, is evident not only in the movie, but in the formal documents that accompanied it. As films had to pass the federal committee for film review in order to obtain a license for the public showing of films, on 9. 12. 1953, that committee gave its permission. On the permission documentation, the type of film is stated as "promotional — documentary," although in original language form it uses the term propaganda, which can be interpreted as promotional on the basis of the film.

The promotional part of the film shows that its primary objective is to demonstrate the natural beauty of Kornati archipelago. Demonstrating the islands not only as a place of beauty, but a place for leisure, adventure and for a contrast, scientific research. It presented the islands as a place for consumers, suggesting a way for workers or anybody else, to spend their free time, but never forgetting to emphasize the political importance of that presentation, even without open ideological discourse.

Vodopivec's film, which was his first as a film director was not the only one. Films, such as "One day in Crikvenica" from 1954, directed by Branko Majer or "One day in Rijeka" from 1955, directed by Ante Babaja, although different in their artistry and purpose, suggest that the Croatian society of the fifties, and the political powers in charge, were trying to redefine the relationship to Mediterranean legacy, and the value of its coastline.

What those films acknowledged is that coastal and insular parts of the country, now an integral part of the new socialist republic and freed from its many historical conquerors, were not only a symbol of war victory, but a place which has a new value for society, and that they can be used as a vehicle for giving a socialist society a more open and friendly face.

The narrative of this short documentary is an invitation sent to Germany, to a sport fisherman from Hamburg called Jens Peter Paulsen, who organises a joint expedition with professionals from Norway, bringing together a group of divers, biologists and journalists to the Kornati archipelago. All the facts in the film are provided through the use of narration, which was written by Krešo Golik, then still a young film professional, who although a film director worked on other film projects, not only his own.

As Turković (2005. p. 127) points out writing about the period: "Every documentary film was accompanied by spoken commentary, which was often a political statement projected on film", an element that this film is lacking, at least in a direct way. As the film was probably intended for showing outside of Yugoslavia, the written narration mostly outlines the story, beckons travellers to the (unknown) islands and underlines some dramatic moments. We cannot tell from the visual or sound elements the type of society the film is inviting possible adventurers to.

It seems, that the main intention of this expedition was to give formal state permission to a group of international professionals for some time of leisure, a form of promotion similar to organized promotions still present today in tourism. The main focus of this film's invitation to foreigners is clearly stated at the beginning of the film, where the narrators voice proclaims that "we have a beautiful coastline, but the world doesn't know it enough... thousand tourists wander the seas, looking for beauty", relying on "aggressive pathetic" (Gilić, 2010) commonly used as a tool for attraction.

On behalf of a socialist or communist society in 1953, film invites anyone with good intentions, and points that the need for recognition by the west, is a valuable objective for a socialist government. This objective that can be interpreted as political action and as a way to attract foreigners to spend their money in a society with growing demands. But what kind of socialist society is shown in the film? And what does it offer to foreign tourists? The film shows very little of life in the fifties. Apart from a short introduction, explaining that the incentive came from a tourist agency from Rijeka, the film mainly shows a group of men enjoying themselves, mostly by fishing, and visually stunning shots of Kornati archipelago.

It seems that the men are isolated, spending most of their time on the boat or in the sea, satisfied with their underwater adventures. There is no sense of history in the film. The islands are presented as a visually beautiful background or scenery for adventurers, and apart from the captain of the ship and a shot of and old man fishing, we cannot tell if any of the people shown are islanders or even locals. The film is centred on foreign professionals and not on presenting local tradition or a way of life as if two worlds are kept apart.

Compared with two other films mentioned earlier, 'Blue silences' is very scarce on information, as if it was cleared of any reference that could be interpreted with a double meaning or assume an ideological background. The film does not reflect a society that is still openly influenced by ideology. Basic facts are stated. The task is to present and possibly sell an idea of a holiday and adventure, not to educate. As the narrator concludes: "Images that beckon returning..." From existing documents, we cannot tell the distribution path of the film. Was it distributed outside the former country or shown only in domestic theatres? The effect of films such as this on tourism, domestic or international, we can only speculate.

The new socialist society, from the beginning, saw movies as a practical media for ideological and educational purposes. Through movies it could speak to a wide segment of its population, and as such was practical to use and needed control. The history of Croatian film is a good reflection of changes in society as any. As the number of produced short films is much larger than feature films, the legacy of that production, was a practical channel for addressing themes that were not present in feature films, including early tourist promotion. Society that wanted to present itself and its culture could used feature films as products of special meaning, instead they used the production of short films as a way to inform and educate, and possibly change public opinion. Sometimes the films were elaborate, showing "high visual standards" (Turković, 2005, p. 127), but some showed they were quickly produced to meet an agenda or document an occasion. Vodopivec's promotional documentary conveys such an impression of a quickly assembled product.

In the long and distinguished career of Frano Vodopivec, one of the foremost directors of photography in the history of Croatian cinema, his directorial debut, 'Blue silences', is a somewhat underwhelming viewing experience. It is a short film whose cinematic qualities don't always reflect the talent which made it. It would be unfair to compare it to more recent standards of promotional documentaries, for it displays a degree of structural clumsiness, but we have to bear in mind the productional possibilities available to Croatian film professionals in fifties. For example, the underwater photography is rudimentary, although probably of interest to director Vodopivec, who also shot the film, and the usage of fish tanks as a substitute for open sea shots was probably necessary in such production.

With a time gap of over sixty years, "Blue Silences" doesn't reflect on a modern viewer as a forgotten cinema classic, but nevertheless an important audio-visual document of changes which were starting to show in society, in which the workers are also perceived as consumers who have their need for leisure, and whose free time could be directed in a certain way, and as such were no different from their peers in western countries, although in opposite ideological societies. No matter on which side of

the ideological divide, everyday people saw the beautiful coastal towns or islands, not yet touched by mass tourism (that would come decades later), as a place to rest and dream, or as a place with economical value. And that value had to be validated, not only by the citizens, the society or politicians, but by foreigners, whose presence is wanted and needed on many levels, but in a way that can still be observed as controlled or supervised. Using film as a document that visually confirms this practice, was in a way expected, or at least understandable for a society that controlled the information that it wanted to distribute. The nature of that information, guided the form in which it was distributed, as shown in this film, in a time when film production was still learning what form suited their goals the best.

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# DISCOURSE ANALYSIS OF YOUTUBE VLOGS RELATED TO THE CROATIAN ISLANDS

## Abstract.

YouTube is one of the most popular social media platforms associated with user-generated content, and vlogs are a typical form of YouTube content. They are essentially blogs made in a video form and uploaded to the Internet. Their themes vary from fashion and makeup to mukbangs and gaming. Travelling vlogs are quite popular and have the potential to influence users' travel decisions. This paper aims to analyse the (verbal) discourse content of the most-watched YouTube vlogs related to ten Croatian islands (Cres, Krk, Brač, Hvar, Pag, Korčula, Dugi otok, Mljet, Vis, and Rab), in order to discover how the islands are presented and described by the vloggers. The analysis included extraction of verbs that signify vlogger activities on the islands (e.g., "walk"/"walking", "eat"/"eating", "explore"/"exploring"), nouns that signify themes and topics related to the islands (e.g., "beach"/"beaches", "boat"/boats", "ferry"/ferries"), and adjectives that relate to the verbs and nouns and are used to describe the islands (e.g., "beautiful", "good", "big"/"bigger"/"biggest"). The analysis discovered that vloggers perceive Croatian islands in a very positive and light way.

Keywords: YouTube, vlog, tourism, influencer, Croatian islands

## THE IMPORTANCE OF VIOGS IN TOURISM

Travel writing or sharing travel experiences has a rich tradition and history, especially in print media. Today, the Internet has allowed the writers to reach a wider public and become more independent from the publishers. Contemporary travel writers are no longer dependent on the press because they can reach their desired audience in a simple, fast, and attractive way. Also, people preparing for travel can search the Internet for useful information — quickly, easily, and for free. The information that is shared online can be professional or amateur. Social media has greatly changed travel writing, so today it has become available online in a variety of formats. The main difference compared to 19th-century travel writing is the writer's ability to connect and interact with their readers. Travelling and travel location information has become accessible, and the trends made by social media greatly influence travel writers and their work.

For example, in the late 1990s, *Lonely Planet* launched on its website a forum so the readers could connect, share information and tips, and create a virtual community gathered around travelling. Over time, the first travel blogs appeared and have grown in popularity.

However, there is little empirical research on this topic so far (e.g., Lee & Gretzel, 2014; Rosenkranz, 2016; Blaer, Frosti, & Laing, 2020). For a deeper understanding of the way the Internet changes and contributes to contemporary sharing and searching for travel information, two relatively new terms need to be defined: (travel) vlog and influencer. The term vlog is an abbreviation of the word web-blog, free and publicly available content written in a diary format. The vlogs can be categorized into different themes, such as: haul videos featuring products that the vlogger has just acquired; Question and answer (Q&A) videos where the vlogger answers questions from fans; product reviews where the vlogger reviews recently released products; Do It Yourself (DIY) videos that feature recipes or tips on how to use or fix a common item (Zhang, 2018). Travel vlogs are personal and often informal experiences of travel, made for the Internet audience (fans and followers). Vlogs can be amateur or professional, and they also differ according to content formats (Sigala, Christou, & Gretzel, 2012; Blaer, Frost, & Laing, 2020). Travel vlogs show travel stories and personalized travel-related information (Griffith & Papacharissi, 2010). Travellers looking for information about the places they want to visit, instead of printed guides, can use the Internet (Picard, 2003), and vlogs are an interesting and inspirational source of information. Bloggers and video bloggers can be both amateurs and professionals, depending on their experience, the technology they possess, and the audience they address. Travel or tourism blogs are a type of online diary that collects individual experiences (Sigala, Christou, & Gretzel, 2012). Due to their large audiences and their motivation to influence it, vloggers can be considered as influencers. An influencer is a person who creates information and other content from her or his own experiences, and her or his opinions have a potentially high influential power. Their recommendations of products and experiences often go viral. Fashion and travel are the most important topics. Influencers are an important part of the commercial communication strategy because they can reach specific user profiles according to their preferences and interests (Valderrama-Santomé, Fernández-Souto, & Vázquez-Gestal, 2019).

Because people's travelling decisions are affected by what they see on social media, a new term was made: tourism 2.0. This new kind of tourism is based on the use of digital media to influence tourists, and on the use of digital media by tourists to influence destinations (Valderrama-Santomé, Fernández-Souto, & Vázquez-Gestal, 2019). Social media and blogs are especially important for youth (Arndt & Woore, 2018). The use of technology or networking has proven to be an integral part of (contemporary) travel. In the context of travel, networking refers to the ability to access a variety of information and content on the Internet and social media, that may be relevant to the

travel experiences. For example, the Internet allows travellers to quickly access the latest information related to their exact location, thanks to many location-based applications and their algorithms. Travellers using this technology become travellers 2.0. They also create their content and share it on social media, since smartphones and tablets have become an integral part of their travelling equipment. They record their own travel experience and post it on different social media platforms. The narrative of such content is usually very informal and relaxed (Parra-López et al., 2012; Van Dijck, 2013; Magasic & Gretzel, 2020).

When it comes to sharing travel experiences through mentioned vlogs, travellers usually post it on YouTube to access a large audience. YouTube is a widely used video hosting website where people can experience varying degrees of engagement with videos, from casual viewing to sharing videos to maintain social relationships (Lange, 2007; Saffi et al., 2020). The YouTube videos have noticeably different statistics compared to traditional streaming videos, ranging from their length and access pattern to their growth trend and active life span (Cheng, Dale, & Liu, 2008). YouTube is based on Google's expertise in content discovery or the recommendation algorithm (Conway, 2017), so we can never entirely be sure whether content affects viewership through viewer interest or whether it is mediated through algorithms (Munger & Philips, 2020). People naturally communicate audio-visually, and YouTube more than any other social networking site uses audio-visual communication. Therefore, it is a very popular and useful source of information (Munger & Philips, 2020).

Although the research of YouTube vlogs is scarce, a few interesting analyses have been conducted and deserve to be mentioned. Binti Jamaluddin (2018) investigated the use of adjectives by vloggers when describing food while they eat, to show which semantic groups of adjectives are most frequently used. The research showed that the most common adjective is "good", but as a semantic category the most common are value-related adjectives. Proleta (2020) researched the most common grammar constructions in popular YouTube vlogs and showed that vloggers use simple language which does not differ from the language used in everyday life. Further, researchers usually investigate the role of YouTube vlogs in brand formation and its influence on users. Cheng, Wei and Zhang (2020) showed that watching travel vlogs impacts engagement behaviours and travel intention. Therefore, travel vloggers should present with passion and enthusiasm to create an emotional connection with their audience. Lee and Watkins (2016) have examined how vlogs influence consumer perceptions of luxury brands, especially the influence of the physical and social attractiveness of the video blogger. They concluded that luxury brand perceptions were significantly increased after watching the vlog. YouTube can be an important tool for brand managers and can be useful for establishing relationships with consumers. Folkvord et al. (2019) showed that children frequently watch vlogs, and their degree of bonding with the vlogger predicted the time spent watching vlogs. Also, children recalled products and brands that

were shown in vlogs, which were mostly food and beverages. Munnukka et al. (2019) examined the effectiveness of brand endorsements in vlogs by assessing the role of audience participation. Their results show that audience participation in the vlogs enhances para-social relationships with the vlogger, further fostering the vlogger's perceived credibility as an endorser. Lange (2007) showed that video sharing can support social networks by facilitating socialization among friends. Also, youth and young adults use YouTube's video sharing and commenting features to project identities that affiliate with particular social groups. Nelson (2015) analysed vlogs about the school, and showed that vloggers are mostly young people, who record in multiple settings (including classrooms), show and describe their school experiences and share a vocabulary for interacting with an audience. They share vlogs for a variety of reasons, including the desire to alleviate boredom, for fun, because their friends were doing it, to build confidence or improve their speaking skills, document their experiences, share information or to connect with others.

Perceived enjoyment is the most important motive for travellers to share their travel experiences on online networks and travel web sites. Sharing travel content is perceived to be fun and entertaining. Also, social media users committed to travel experience sharing use social media for personally meaningful and rewarding goals, such as internalization and identification (Oliveira, Araujo, & Tam, 2020). According to Liu and Li (2020), "travel bragging rights" have become an important factor influencing travel decision making in the social media era. The term refers to showcasing and boasting about travel experiences. The authors present seven dimensions of travel experiences that help earn travel bragging rights: difference, similarity, scarcity, functionality, symbolism, hedonism, and consequentiality. People want to share travel experiences that communicate a desirable image, personal interests, social status, achievement, meaningful experiences, and positive emotions. Also, people wish to share travel experiences that the audience will appreciate and find interesting, impressive, or relevant.

## RESEARCH OBJECTIVES AND METHODOLOGY

With the potential importance of vlogs in tourism, we aimed to explore how vloggers present Croatian islands. Specifically, the aim was to find out which are the most frequently used verbs that signify vlogger activities on the islands, nouns that signify themes and topics related to the islands, and adjectives that relate to the verbs and nouns which are used to describe the islands. We conducted a discursive analysis of 30 vlogs from YouTube. The sample was acquired by selecting the first three vlogs offered by the YouTube search engine (with the keywords — name of the island and vlog, e.g. Brač island vlog) for the ten largest Croatian islands: Cres, Krk, Brač, Hvar, Pag, Korčula, Dugi otok, Mljet, Vis, and Rab. We only considered vlogs in the English language, that have voice or audio material. Firstly, we collected publicly available da-

ta offered by YouTube for all of the vlogs, such as the year of posting, the number of views, and the duration of the vlog. Secondly, we made the transcripts of the voice and audio material of the vlogs and conducted a discourse analysis that included the frequency of used adjectives, nouns, action nouns and verbs. We conducted the analysis in the period from March 2 to April 12, 2020.

## RESULTS AND DISCUSSION

Certain objective information about vlogs is collected directly from YouTube: number of views, year of posting, number of tags "thumbs up", number of tags "thumbs down", duration of the vlog, and the name of the vlogger. As it can be seen from Table 1, all analysed vlogs were posted from the year 2011 to 2020 (more than a half of them in 2018 and 2019), which means that the material is relatively new, so is this research topic. The average duration of a single vlog is almost nine minutes, with the longest being Antoinette Victoria's vlog about Hvar island (18:53 minutes), and the shortest Peter Gwilliam's vlog about Cres island (01:57 minutes). The average number of vlog views by YouTube users is about 14246, with the most views being of Warner Nickerson's vlog about Mljet island (N=110835), and the least views of LiaStewy's vlog about Korčula island (N=92). Generally, the most viewed vlogs are about Hvar, Pag, Vis, and Mljet, while vlogs about Cres and Dugi otok have the least amount of views. The reaction of YouTube users to the vlogs can be seen through the number of tags "thumbs up" and "thumbs down", while the first one refers to a positive and the second one to a negative reaction. The average number of tags "thumbs up" is 174, with the biggest number on the Delightful Travellers's vlog about Brač island (N=813), and the smallest on Sonia VerardoStyle's vlog about Pag island (N=2). On the other side, the average number of tags "thumbs down" is 6, with the biggest number on Laura Reid's vlog about Hvar island (N=25) and Warner Nickerson's vlog about Mljet island (N=25), and no "thumbs down" on vlogs posted by Peter Gwilliam, Healthy Vegan Adventures, Viking On The Road (about Cres island); Carl Hewlett, LiaStewy (about Korčula island); Croatia Off the Beaten Path, Mostly Nadia (about Dugi otok island), and Sonia VerardoStyle (about Rab island).

A discursive analysis of YouTube vlogs about the ten largest Croatian islands was focused on after a detection of a number of adjectives, nouns, action nouns and verbs used by the vloggers. As can be seen from Table 2, some of the most used adjectives are: "beautiful" (N=72), "good" (N=49), "big"/"bigger"/"biggest" (N=48), "nice" (N=39) and "pretty" (N=34). Some of the most used nouns are: "beach"/"beaches" (N=130), "island"/"islands" (N=80), "time" (N=65), "day/"days" (N=63), and "place"/"places" (N=59). Finally, some of the most used action nouns and verbs are: "walk"/"walking" (N=62), "gonna" (N=59), and "eat"/"eating" (N=24).

Table 1 - Analysed YouTube Vlogs Data Information

			Thumbs	Thumbs		
Island	Views	Year	up	down	Duration	Vlogger
Cres	597	2011	4	0	01:57	Peter Gwilliam
Cres	281	2019	8	0	16:07	Healthy Vegan Adventures
Cres	231	2017	12	0	05:43	Viking On The Road
Krk	5949	2018	54	1	04:39	Sam & Dan
Krk	1462	2019	67	1	10:24	Croatian Experience with Sanda
Krk	1062	2019	102	1	07:05	Thumb Life
Brač	1366	2019	40	1	08:08	Lana Tiare
Brač	65624	2018	813	21	11:32	Delightful Travellers
Brač	4599	2019	54	10	05:59	Tim Stewart
Hvar	8494	2019	129	4	18:53	Antoinette Victoria
Hvar	23873	2019	432	25	07:10	Laura Reid
Hvar	25098	2017	217	21	05:21	Shu
Pag	20561	2016	301	4	13:36	TheTashGrey
Pag	3554	2019	84	4	09:24	Angelic Francis
Pag	25635	2017	162	15	17:55	CheekyChikeTV
Korčula	519	2017	9	0	02:57	Carl Hewlett
Korčula	92	2020	3	0	04:25	LiaStewy
Korčula	29757	2017	139	12	07:18	AlmostLanding
Dugi Otok	616	2019	10	0	08:52	Croatia Off the Beaten Path
Dugi Otok	149	2019	27	0	03:50	Mostly Nadia
Dugi Otok	761	2018	7	2	07:51	Prepare For Landing
Mljet	110835	2016	676	25	08:07	Warner Nickerson
Mljet	1060	2017	15	1	06:50	Carl Hewlett
Mljet	20329	2018	442	7	09:17	Daneger and Stacey
Vis	37385	2018	386	17	12:24	Delightful Travellers
Vis	9683	2018	320	3	06:05	Martin Solhaugen
Vis	25616	2018	675	5	09:15	Warner Nickerson
Rab	507	2017	10	1	13:33	SoniaVerardo BeautyBlog
Rab	1572	2017	12	2	07:42	Alex Ulici
Rab	98	2013	2	0	14:22	Sonia VerardoStyle
-	Avg: 14246	-	Avg: 1 <i>7</i> 4	Avg:	Avg: 08:53	-

Table 2 — 30 Most Used Adjectives, Nouns, Action Nouns & Verbs in Analysed YouTube Vlogs

Adjectives	Ν	Nouns	N	Action nouns &verbs	N
beautiful	72	beach/beaches	130	walk/walking	62
good	49	island/islands	80	gonna	59
big/biggest/bigger	48	Time	65	eat/eating	24
nice	39	day/days	63	explore/exploring	21
pretty	34	place/places	59	make/making	21
amazing	29	guys/guy	56	call/called	21
Adriatic	22	boat/boats	51	ride	21
long	20	today	48	coming	19
super	20	Croatia	43	start/started	19
close/closer	19	ferry/ferries	41	watch	18
great	18	Bus	39	love	17
Croatian	16	water	32	coming	17
small	15	Town	29	wanted	14
clear	14	Sea	29	drink	14
incredible	12	people	24	chill/chilling	13
white	12	Bol	23	show	13
crazy	12	night	22	drive/driving	13
lovely	11	Car	22	enjoy/enjoying	12
dark	10	minute/minutes	21	stay	11
cool/coolest	9	thing/things	20	swim/swimming	11
happy	9	Food	19	rest	10
short	9	Area	17	arrive/arrived	9
huge	8	hour/hours	16	subscribe	9
popular	8	Split	15	change	9
awsome	8	pizza	15	sailing	7
delightful	7	morning	14	guess/guessing	7
full	7	video	13	post	5
fantastic	7	Wine	13	buy/bought	5
crystal	7	View	12	catch	5 5 5 5
high/highest	6	stone	12	give/gave	5

There are very few differences in most used words for specific islands. As an example, Image 1 illustrates the most used nouns and adjectives in vlogs about Vis island: (adjectives) "beautiful", "kind", "big, "Croatian", and (nouns): "boats", "Croatia", "people", "beaches".

The discursive analysis revealed that the most used adjective by vloggers who are describing Croatian islands is "beautiful", followed by other positive portrayals described by the 30 most used adjectives. However, this does not mean that vloggers do





Image 1 — Vis Island According to Most Used Adjectives and Nouns

not take notice of anything that can be described by negative adjectives, but these kinds of adjectives are not nearly as frequent as positive. The overall way of describing the things they see and experience on Croatian islands is positive. The adjective "beautiful" is used to describe the island in general, but especially the beaches; the adjective "amazing" is used to describe the views, the towns, the beaches; adjectives "clear" and "crystal" are used to describe the sea. For example, in their vlog about Vis island Delightful Travellers described the scenery as follows: "(...) Adriatic Sea with its aqua and deep blue colours. The beaches are all pebble beaches here, and then with the green, and the trees are just beautiful here (...)". Also, on Korčula island Almost Landing vlog described the Adriatic Sea: "(...) look at the water, it's so clear (...)".

Further, some of the most used nouns by vloggers who are describing Croatian islands are: "time", "day"/"days", "place"/"places", and "guy"/"guys" (vloggers usually use it when addressing their viewers). A majority of the nouns used in vlogs are good indicators of the most common themes and topics of the island vlogs. For instance, the most common topic is "beaches". All vloggers are describing the beaches of the island, as well as the "sea" and the "water". It is not surprising since all the vlogs are filmed in the summer. Transportation is another very common theme, whether the vloggers are just taking notice of the "boat"/"boats", or giving useful information on how to get from one place to another by "ferry"/"ferries", "bus", and "car". For example, on Vis island Delightful Travellers stated: "(...) We are now in a small village of Komiža. It is about 10 to 15 min by boat from the Blue Caves and the Green Caves, and it is only accessible by a speed boat or a little boat. You cannot get here by a ferry, which makes this place an extra little bit special. It is absolutely tiny and it has only a few restaurants, a cafe, a church, a supermarket and that is about it (...)". Another frequent topic is "food", with the most frequently mentioned dishes "pizza". This could be because the vloggers are young people, and fast food is usually a bit cheaper, but the reason could also be that this kind of food is most common on the islands. For example, on Korčula vlogger Almost Landing stated: "And then, we also got this huge pizza, it's only fifty kuna, which is ten dollars". Food-themed vlogs are generally popular on You-Tube. Briliana, Ruswidiono and Deitiana (2020) researched the determinants of intention to use food vlogger reviews in purchase decisions by millennials and found a strong positive effect of the perceived benefit of online food vlogger reviews towards purchase intentions. Plenković and Varga (2017) researched the impressions that Croatian islands visitors shared on Trip Advisor (through photos they post) and found that the most common motives taken by the visitors on Croatian island are food and drinks, architecture, and beaches. The dominance of food and drink motives is explained by the popularity of the topic in tourism, and in social media in general. Plenković (2015) calls this a trend of sublimated communication in tourism, that is used in a targeted manner with the intention of changing a person's style, behaviour and communicative habits in the choice of desirable tourist destinations. According to the author, wine and food offerings in tourism are becoming a new culture of behaviour under the influence of a sublimated communicative message presented in a joyful, stimulating, and persuasive way, especially in social media. Further, some other common themes in vlogs are "people", and "wine". When it comes to specific locations, the most frequently mentioned are Bol and Split (which is an important transportation location for the islands). Even though certain cultural sites are not often mentioned in the vlogs, it does not mean they are not present. Vloggers do take notice of and describe the island's architecture, churches, and certain sights, but those are not as frequent as beaches, sea, food, and transportation.

The most frequently mentioned verbs and action nouns are also good indicators of some of the activities on the island that vloggers do, or are taking notice of. Thus, the most common activities are "walk"/"walking", "eat/"eating", and "explore"/"exploring". For example, on Mljet island vlogger Carl Hewlett stated: "(...) maybe do some walking and get the drone up and go and explore what this area is, because apparently the national parks in Croatia are like top-notch (...)".

When it comes to travel, vlogs offer some relevant information to people who might have an interest in visiting Croatian islands (e.g., about the quality of the sea, beaches to visit, food to eat). In general, vlogs offer more appraised meaning, and more prescriptive images of the destination. Therefore, they can be very important for tourism and brand management. Basically, blogs give valuable advice about accommodations, tickets, schedules, routes, maps and locations, travel-related obstacles, and others (Lojo, Li, & Xu, 2020). The information provided by vloggers has great value for tourism because ?electronic word of mouth" is widely used by the majority of consumers on different digital platforms, and has a strong influence (Manes & Tchetchik, 2018; Reyes-Menendez et al., 2020). For this reason, blog analyses can contribute to a deeper understanding of how certain destinations are portrayed and perceived.

## CONCLUSION

Vloggers who made YouTube content about Croatian islands perceive them in a very positive and light way. According to this research, the most used adjective is "beautiful", followed by "good", "nice" and so forth. Most mentioned themes and topics are the island's beaches, transportation, sea, and food. Most mentioned activities are walking, eating, and exploring. However, for a better understanding of how Croatian islands are presented in YouTube vlogs, further research should take into consideration the entire discourse of the vlogs, analyse vlogs in other languages, and include user comments in the research.

The Internet has transformed traditional word-of-mouth to electronic word-of-mouth, where users influence other users in making decisions, such as travel decisions. The way certain destinations are presented in vlogs can have a great influence on people choosing to visit destinations. Therefore, destination brand experts need to take notice of social media content, and the way the destination is presented on it.

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# CULTURE AND TRADITION EDUCATION



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# SOCIAL COHESION IN THE CROATIAN ADRIATIC: A COMPARATIVE ANALYSIS OF THE DIMENSIONS OF SOCIAL COHESION IN ISTRIA AND DALMATIA

## Abstract

There are multiple definitions of social cohesion, both scientific and political. Thus, the concept of social cohesion lacks a succinct and coherent definition and remains subject to different interpretations: such as political, which defines it as a term aimed at tackling social inequality, but primarily in economic terms (tackling poverty, unemployment ...). From a sociological point of view, social cohesion can be reduced to three basic dimensions: solidarity of society members, trust in the institutions of the society, and the general sociability of its members. The main objective of the paper is to comparatively analyze the degree of social cohesion in the counties of the Croatian Adriatic. The analysis will be carried out through the use of secondary data collected in the European Value Study 2018 project. For the purposes of this paper, questions directly related to the theoretical determinants of social cohesion are used. Special emphasis is placed on analyzing and interpreting the differences between the counties of the Croatian Adriatic in terms of solidarity/trust/sociability with respect to some socio-demographic characteristics (salaries, employment, age, traditional/modern attitude) of the respondents, and the data obtained are critically interpreted and contextualized.

Keywords: social cohesion, Croatian Adriatic, European values study, solidarity, trust, sociability

This paper deals with the concept of social cohesion in counties on the Croatian Adriatic coast. The main goal of the paper was to investigate the plurality of the dimensions of social cohesion and to comparatively analyze Adriatic counties in terms of the degree of social cohesion. The Croatian part of the Adriatic is historically and culturally rich and belongs to the Mediterranean cultural circle. Culture and society have been developing in this area since ancient times. In this area, the influences of different cultures changed, they were adopted by the Austro-Hungarian and Ottoman Empires and Napoleon's France, to name a few. Different areas of the Croatian Adriatic were part of

different countries and empires during certain phases of history. This cultural and historical diversity prompted us to explore whether there are differences in the levels of social cohesion in these areas that are conditioned by this diversity.

Social cohesion is a dynamic phenomenon which is not universal for all societies. Social cohesion is constantly in a state of formation. There are political and other definitions of social cohesion, but in this paper it is perceived as a primarily sociological concept. Sociologically, social cohesion consists of three basic categories: social solidarity; trust; and sociability. Each of these categories is operationalized in this study.

The data analyzed in this study comes from the survey European Values Study 2018 — the largest study of this sort in Europe. For the purpose of this paper, the following counties were analyzed: Dubrovnik County; Istria County; Primorje-Gorski Kotar County; Split-Dalmatia County; Šibenik-Knin County; and Zadar County. The total number of respondents from the selected counties was 504. The three previously described operationalized variables are considered quantitative variables and, accordingly, appropriate statistical tests were used to answer the research aim.

This paper consists of three parts (1) a theoretical framework in which the key concepts are defined, (2) a methodological part that explains the complexity of the study and (3) the findings and interpretations of the statistics that indicate certain differences in the level of social cohesion in the observed counties. The observed differences are the result of statistical analyzes that are presented graphically in the paper and are interpreted in the discussion and the concluding part of the paper.

## THEORETICAL BACKGROUND OF THE STUDY

The Mediterranean itself is a culturally diverse and heterogeneous region. The basic theoretical presumption of our paper is that the conditions of social cohesion have also been plural and dependent on the social context and figurations developed over time. It was Elias (1996) who introduced the term of figuration in Sociology. In this term, Elias pointed out that society in not only a structured meta concept but also a complex set of interrelations between individuals who (each by and for themselves) organize their lives. But these interrelations are making these individuals highly dependent on each other and with it, this interdependence forms the processes and dynamic of society. Thus, figuration as a term incorporates the social context and is not produced by the higher power of society itself. It is not only structurally intentional (being able to observe and interpret history as a set of causal and planned actions) but it is also a process that is dependent on interaction which is highly unpredictable, which holds some sort of meaning (collective and individual). Figuration, interdependence and interrelations of individuals (inside the configured social values and norms) shapes the basic dimensions of social experience.

Nevertheless, the basic precondition to have social experiences is that a social dimension exists. The social dimension of actions can be described as a field in which actions hold meaning not only for the individual but to others who are part of the interaction. Thus, the basic condition for cohesive social interaction is the degree by which individuals can enter it "peacefully", the degree in which they can suppress their selfish wants and needs in favor of compromise, in that sense, being part of a society with social cohesion. To conclude, it is important to point out the argument that the Mediterranean with its diverse figuration processes has a different setting in relation to social cohesion.

The term social cohesion itself has often been debated in the field of Sociology and it is a polemical term. Some authors have gone as far as calling it a meta concept (Bernard, 1999) without actual empirical use. The pluralism of meaning did not help in the quest of detecting the actual scope of the term but it is helpful to consider the term of social cohesion with reference to its two etiological roots. The first one is connected to the political connotation and use of the concept of social cohesion in formation of policy, either of the European union or the United Nations. In that sense, the European Commission defined social cohesion as: An expression of solidarity between EU member states and regions. The main goal of social cohesion is balanced socio-economic development in the EU (EU Commission, 1996). From a political perspective, when constructing a term, it is not important to construct the precise terminology as the concept itself is (debatably) ideological in its basis. The only category mentioned in the document which could have implication in the empirical sense is solidarity but in policy format it is also vaguely defined. With the already proposed problem, there is also a close relation with the economic basis of society. In the political sense, the roots of social cohesion are grounded in the economical predispositions of development which can be, but does not have to be, a dominant factor of the formation of a cohesive society (case in favor of this argumentation are Mediterranean communities which had their share of poverty and economic regression throughout history but managed to preserve the social cohesion of their community).

Although the political definition and policy aspect of social cohesion have popularized the term itself, it had little or even no use in the scientific sense. That would be especially problematic for Sociology, as social cohesion and the question as to why people interact and integrate into society are key concepts in understanding and explaining society. Because of that, more precise terminology regarding social cohesion had to be developed over time (to give this meta concept some empirical and scientific value). But as there has been an increase in scientific interest regarding social cohesion, pluralism of definitions has become one of the major challenges (Beauvais & Jenson, 2002). As the plurality of the term did make things more confusing, it also opened a chance to find (within all the definitions) similarities and connections.

Putting the term of social cohesion together (in the sense of connecting all theoretical, paradigmatic viewpoints) it is possible to assert that social cohesion is a degree of individual participation in social life (Muntaner & Lynch, 1999). There are two main concepts that should be marked by this definition: (1) that social cohesion can be expressed only as a degree, not as a concept that is evident or not in some societies and (2) that social cohesion is something that is happening inside the society — inside the interaction of everyday life itself. The macro structural factors such as economy can have an influence on it but it does not determine social cohesion itself. To conclude, it is important to add that social cohesion cannot be explained fully with a degree of poverty, degree of unemployment or even political instability. Social cohesion needs to be investigated throughout social dimensions, by using sociological terminology and tools. But which dimensions of social life should be addressed by that term? This question can be answered with the help of the study by Dragolov and his team (2016). They did a mapping and factor analysis of the commonly used dimensions regarding the meta-concept of social cohesion.

The first dimension they extracted was social relations. In the network of society, social relations are often empirically expressed by the degree of trust. It is trust that makes social relations and social networks "cohesional" (Dragolov et al., 2016). But to conceptualize trust in the empirical sense, it is important to consider the macro and micro expression of trust itself. The macro expression of trust can be understood as having trust in social institutions (like church, military, parliament...). It is, in some way, an expression of individual legitimization of the structures that are present in an individual's everyday life. Micro expression of trust, on the other side, is trust toward participants of social interaction. This type of trust is focused more on the people in close contact with the individual. Who can they trust in their everyday life and to which degree (for example; friends, people who are known, people who are unknown to the individual, neighbors). Within this paper, the discussion of the structural figuration of the Mediterranean, is restricted to analyses of the macro expression of trust.

The next dimension of social cohesion is social interconnectedness. In other words, it is the dimension which shows how much some individuals are connected with society itself. What is the individual's degree of sociability: How much and how often is he or she taking part in social interaction (exchange of meaning)? (Dragolov et al., 2016). The last dimension which could be extracted from the numerous research studies regarding social cohesion is "focus on the general good". It is a dimension which expresses the degree by which an individual internalizes his or her social life (Dragolov et al., 2016). In other words, it measures how much an individual values his or her participation in society in general. How much can they internalize the values of their social world? This dimension can reflect the concept of solidarity as is asserted in Sociology<sup>1</sup>. Thus, in the conceptualization of the research regarding social cohesion,

three dimensions can be discussed that can express its degree. These are dimensions which have been already conceptualized each by themselves, which are standardized in the sociological research: solidarity, sociability and trust (Brezovec, 2021).

This theoretical background of social cohesion provides a clearer picture of the epistemological but also conceptual usefulness of the term. It was evident from the discussion presented thus far that social cohesion is a degree of three dimensions of social life and interaction of an individual. These concepts have been reflected in the aims of this study. The main research aim has been to investigate the plurality of social cohesion in the Mediterranean. The main hypothesis is presumed throughout the theoretical viewpoint of social cohesion as a dynamic phenomenon which is not universal for all of societies. Social cohesion is constantly in a state of formation. Figuration processes are forming a different ratio between the mentioned dimensions. It is important to add that, within this paper, causalities of this ratio differentiation are not included. This study has been guided by the goal — to investigate whether societies that are located relatively close to each other form different degrees and aspects of social cohesion as different contexts have made the figuration process possible. It is noted that the main historical background processes which were responsible for the development of social cohesion in Mediterranean are mapped. The goal has been to empirically show that social cohesion (three dimensions of it) is unique for each and every micro community (because of the process of figuration) and with it to get the background for more precise research. In other words, our study focuses on the specific dimensions of social cohesion that differentiate across the Mediterranean and by doing so, provide a clearer starting point for research that is using alternative approaches (for example; historical analysis, qualitative methodology...).

## METHODOLOGY AND RESEARCH AIM

For this paper, an analysis was made with the main aim to examine the differences between the six Mediterranean counties in the Republic of Croatia in terms of the degree of social cohesion in these counties. The used data came from a survey called the European Values Study 2018 (EVS)2. It is a survey that has been conducted continuously in Europe since 1981, and in which the Republic of Croatia has been participating since year 1999. Year 2018 was the fifth wave of this research (the third wave for the Republic of Croatia). The observed population in the study was composed of all people re-

<sup>&</sup>lt;sup>1</sup> In the sociological sense, social solidarity is a key concept for the self preserving capacity of the social world (Durkheim, 1972). In other words, to acknowledge our own place in society, to hold meaning toward the meta concept of society is to give the legitimization for that same society — to know that I am part of some society means that I acknowledge that this society truly is a 'society' in the full meaning of the word.

<sup>&</sup>lt;sup>2</sup> Evswebpage. (2019). Croatia. Retrieved November 30, 2020, from https://europeanvaluesstudy.eu/category/dissemination/croatia/

siding in the Republic of Croatia that were over the age of 18. Based on the application of a multi-stage sample, a total of 1488 respondents were surveyed. A question-naire that contained 111 questions was used, among which were the questions used for the purposes of this article. By selecting 6 Mediterranean counties out of 21 Croatian counties, the number of respondents in this analysis dropped from 1488 to 504. For the purposes of this paper, the following counties were analyzed: Dubrovnik County; Istria County; Primorje-Gorski Kotar County; Split-Dalmatia County; Šibenik-Knin County; and Zadar County.

The concept of social cohesion studied in this paper is operationalized through three sub-concepts: social solidarity; trust; and sociability. Data for all three sub-concepts was obtained using selected variables from the EVS survey. On the concept of social solidarity, the data was obtained using two questions that examined the respondent's level of concern about two groups of people. The first question was related to the respondent's concerns for people in relation to their place of living (concern about neighbors; people in own region; fellow countrymen; Europeans; and humankind).

The second question was related to respondent's concerns about various vulnerable social groups: elderly people; unemployed people; immigrants; sick; and the disabled. Respondent's concerns were examined using a 5-point Likert scale. The answers were summed to give a new variable representing the concept of social solidarity. For example, if one respondent answered the first statement with a grade of 5 and the second with a grade of 3, he received 8 points based on those answers. The higher the number of points scored by the respondents, the higher the level of their social solidarity.

As with the concept of social solidarity, the same procedure of variable operationalization was done for the concept of trust. Namely, for the operationalization of this term, the authors used the results obtained from the question about the level of trust that someone has towards certain institutions in the Republic of Croatia. Respondents were able to present their attitudes towards a total of 18 institutions (e.g., armed forces, education system, media, environmental organizations, etc.). Attitudes were examined using a 4-point Likert scale. As with the previous term, for this term, the respondent's answers were also summed up to get a single variable that represents the concept of trust. The higher the level of trust that the respondent had in one of the institutions, the more points he received. It is important to note here that the level of trust in the institutions can also be connected with the level of civic engagement and thus with the level of cohesion. Perkov (2019) states that "in order to participate in decision-making processes, citizens need to be informed and educated about specific problems. Most importantly, citizens need to be motivated to engage in these processes, and they can only be motivated if they think their role can make any difference."

Finally, the third concept that needed to be operationalized for the purposes of this article can be described as the 'level of sociability' of the respondents. To achieve this, the authors used an EVS survey question in which the affiliation of the respondents to one of the 11 organizations or institutions was examined (e.g., religious institutions, political parties, humanitarian organizations, consumer organizations, etc.). The variables used in the mentioned question were of the dichotomous type (yes/no), so for the operationalization of the new variable, the number of affirmative answers each respondent had were summed up. An individual respondent could achieve a maximum of 11 points, and the higher the number, the more sociable the respondent was considered.

The three previously described operationalized variables are considered quantitative variables and, accordingly, appropriate statistical tests were used to answer the research aim. Namely, to find out whether there is a statistically significant difference between the observed counties in terms of social solidarity, trust, and sociability among their residents, it was originally planned to use analysis of variance (ANOVA). However, the Shapiro-Wilk test showed that the distribution of data in all three variables was not normal (sig. <0.05) (Marques de Sá, 2007: 187-189). Based on the presented findings, the authors decided to use the non-parametric Kruskal-Wallis test (Corder & Foreman, 2009. pp. 99-118). Also, in terms of the graphical representations of the results, the graph from the Kruskal-Wallis test and the box-plot graph were used. All analyzes were made in SPSS (V25), and all conclusions in the results were made at a significance level of 5 %.

## THE RESULTS

## Level of Social Solidarity

The first results are related to the issue of social solidarity as one of the indicators for describing social cohesion. Using the Kruskal-Wallis test, it was shown that there is a statistically significant difference between individual counties (H (5) = 203.7; p = 0.000). To find out exactly between which counties there is a difference, the Dunn-Bonferroni post-hoc method was used and a pairwise comparison of counties was made. In Figure 1, it can be seen that differences were found between the following seven pairs of counties (continuous lines): Primorje-Gorski Kotar County vs. Dubrovnik County, Zadar County, Istria County, Šibenik-Knin County, and Split-Dalmatia County; also Istria County vs. Zadar County and Split-Dalmatia County. The values in parentheses in the figure indicate the mean rank of each county.

Although it was found that there is a statistically significant difference between the seven pairs of counties in terms of the level of social solidarity in these counties, in the box-plot graph (chart 1) it can be seen that these differences are not large. In the middle of each box-plot graph is a horizontal line representing the median values of individual counties. Dubrovnik County has the highest median value (Me = 30), which means that compared to other counties, the residents of that county have the relatively highest level of social solidarity, but as mentioned above, these differences are rel-

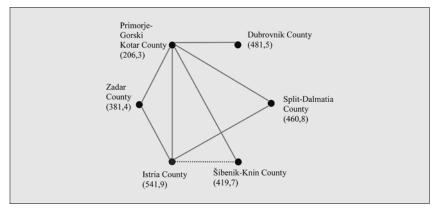
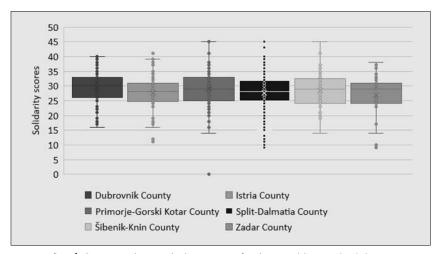


Figure 1 — Counties Between Which Statistically Significant Differences Were Found in Terms of The Level of Social Solidarity Among Their Inhabitants.



**Graph 1** — Box-plot graphs by counties for the variable social solidarity.

atively small in practical terms. Also, visible in the third box-plot (Primorje-Gorski Kotar County) is that for this county there is an outlier in the data about the social solidarity of its inhabitants, and that outlier deviates greatly compared to all other results. This observation is important because it influenced the fact that this county has the lowest mean rank value (MR = 206.3) compared to other counties.

## Trust Level

In the previous section, the level of social solidarity among the inhabitants of individual counties was observed and it was compared whether there is a difference between these counties. This chapter will present the results for the following indicator that can be used to describe social cohesion and that is the level of trust in people. Using the

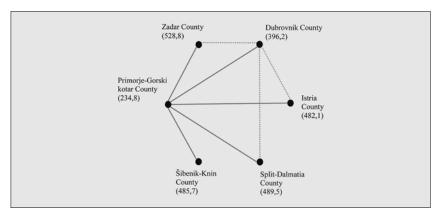
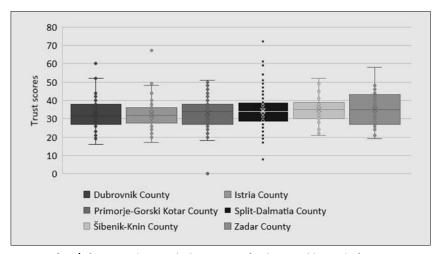
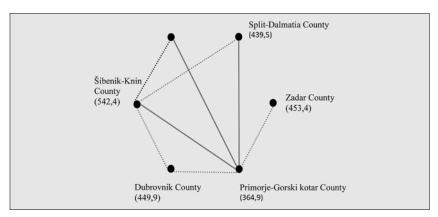


Figure 2 — Counties Between Which Statistically Significant Differences Were Found in Terms of The Level of Trust Among Their Inhabitants.

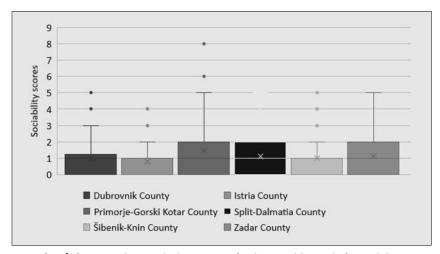


**Graph 2** — Box-Plot Graphs by Counties for the Variable Level of Trust.

Kruskal-Wallis test, it was shown that there is a statistically significant difference between individual counties (H (5) = 145.0; p = 0.000). As in the previous section, the Dunn-Bonferroni post-hoc method was further used to make a pairwise comparison of counties with the aim of discovering exactly between which counties there is a difference. In Figure 2, it can be seen that differences were found between the following five pairs of counties (continuous lines): Primorje-Gorski Kotar County vs. Zadar County, Dubrovnik County, Istria County, Split-Dalmatia County and Šibenik-Knin County. The values in parentheses in Figure 2 indicate the mean rank of each county. As with social solidarity, the lowest mean rank value for trust was found in Primorje-Gorski Kotar County (MR = 234.8) compared with other counties.



**Figure 3** — Counties Between Which Statistically Significant Differences Were Found in Terms of The Level of Sociability Among Their Inhabitants.



**Graph 3** — Box-Plot Graphs by Counties for the Variable Level of Sociability.

As in the previous chapter, it is again possible to observe the differences between counties in relation to the median values for the level of trust of the inhabitants in those counties. In the box-plot graph (Chart 2) it can again be seen that these differences are not large. This time, Šibenik-Knin County and Zadar County had the highest median values (Me = 35 for both counties), which means that in these counties their residents had the highest level of trust towards state and private institutions, compared to other counties. However, it should be emphasized that from a practical point of view, the differences between counties are still relatively small. Also, as with the level of social solidarity, for the level of trust it was identified that Primorje-Gorski Kotar County has the lowest mean rank value due to the presence of outliers that deviate greatly from all other results.

## Level of Sociability

The Results section will present the findings for the last indicator that can be used to describe social cohesion, and that is the level of sociability in people. Using the Kruskal-Wallis test, a conclusion was reached that there is a statistically significant difference between individual counties (H (5) = 26.8; p = 0.000). As in previous analyzes, the Dunn-Bonferroni post-hoc method was further used with the aim of a pairwise comparison of counties to identify between which of them there is a significant difference. In Figure 3, it can be seen that differences were found between the smallest number of pairs of counties so far, that is, between three of them (continuous lines): Primorje-Gorski Kotar County vs. Split-Dalmatia County, Istria County, and Šibenik-Knin County. As with the previous indicators, the lowest mean rank value (MR = 364.9) was found for Primorje-Gorski Kotar County compared to other counties.

Finally, it is possible to present box-plot graphs (Chart 3) in order to see what the median values of the counties are in relation to the 'level of sociability' of their inhabitants. It can be seen that all counties have the same median value (Me = 1), but this should not be surprising considering that this indicator is constructed on the basis of dichotomous variables. Regardless, variability of the data expressed for each county can be considered as an interesting result for this part. It can be seen that the data for Split-Dalmatia County is within the interquartile range, which means that no extreme values were found that would indicate emphasized differences between individuals in the level of their sociability, that is, it can be concluded that respondents in that county were a homogeneous group. For all other counties, it is evident that the data variability is not so homogenous and that for some counties there are outliers on the right side of the box, which indicates that in these counties there were individuals with a very high level of sociability, compared to the rest of group.

## Discussion

The presented results can show us a different degree of the three dimensions of social cohesion regarding Mediterranean counties. Based on the results, we could confirm our theoretical presumption of significance of figurations and the social context in defining the ways that social cohesion is expressed. This could be explained with the two main theoretical backgrounds. One is socio-historical. This viewpoint can interpret the results macro-sociologically. From this viewpoint it is possible to assert that despite the political and cultural differences throughout time, there has been one similar collective identification across these counties. For example, no matter if the area has been under the government of Hungary, Austria, Venice, Croatia; identity of Dalmatian or later Croat, it has remained as a factor that connected politically divided territory. This similarity has had an influence for the relatively close ratio of social cohesion dimensions.

The second theoretical explanation of the results focuses more on the micro level of the foundation of social cohesion. Differences in social cohesion will always exist as long as there is social interaction and "space of the life-world"3, however these differences will vary regarding the degree of reflection toward societal structures of a larger area of meaning-formation (nation state, macro dimensional forms of collective knowledge). For example, it is known how some things are done, but those things are manipulated and adapted by the individual who enters social action and interaction (so he or she could easier achieve their goals). This goes along with De Certeau's concepts of strategy and tactic. While strategy is macro-conceptual, something that is given to us by the structures of society, tactic is purely ours. Tactic is something that we do with strategy, manipulating it to our own advantage (De Certeau, 2003). But by doing this, the rules of interaction are slightly modified and with it, the rules of social cohesion. Thus, social cohesion in the larger viewpoint is different in its own dimensions (on Mediterranean), but on closer examination, these dimensions are just the ways that social actors are adapting larger structures in their own lives. Differences were evident but those differences are just interactional figurations of the given, macro-structural components of social life. This explanation follows the concept of figurations by Norbert Elias, mentioned at the beginning of this paper. Figurations are random, sometimes planned but realized differently. Figurations do not follow the rules of structures alone, but the rules of social interaction as well.

In the two mentioned possible explanations of the results, the stance has been organized according to the second, microstructural, figurational approach. It is everyday life that makes differences in social cohesion, which makes it dynamical. Everyday life in the six counties examined is similar, the economy is mostly based on the tourism and service industry, the cultural background that has an impact on everyday life is also similar. The results are showing that social life; the life-world is fully operational across the Mediterranean. Everyday life is not passive, but an active co-creator of social reality.

But even with these presumptions, research of differences in social cohesion cannot be concluded. It remains an unanswered question how exactly and why is the contemporary setting of dimension manifesting itself in that order/ratio in some counties? To being able to answer this, the very formation of collective meaning inside the individual must be discussed. In other words, to conclude the ways social cohesion is forming in specific counties, we have to conduct qualitative, phenomenological research on the subject of specific dimensions which had the highest degree of difference. Right

<sup>3</sup> Life-world as a concept in sociological theory is widely used by authors (Schütz, Habermas, Berger, Luckmann, Giddens...) that are trying to reflect a dynamic and independance of interaction in everyday life from the purely structural pressure. Life-world is a field of interaction in everyday life with all its knowledge internalized inside the individual (Schütz and Luckmann, 1973).

there lies one of the main benefits of this paper. With mentioned theoretical presumptions confirmed, it provided the needed data for future research on this subject. In other words, the mentioned phenomenological research, the meaning analysis (individual meaning of social): with which dimensions?; in which counties? and between which counties? Presented research provided the support for the figurations, but these figurations (in one point in time — a contemporary setting) should be investigating in future research.

## CONCLUSION

This paper approached social cohesion as a sociological phenomenon worthy of analysis. Social cohesion in this paper is sociologically analyzed through three key categories, trust, solidarity and sociability. These categories are defined in the theoretical part and operationalized and explained in the research part of the paper.

The degree of social cohesion, operationalized through trust, solidarity and sociability has a significant impact on quality of life in a society due to the assumption that people are social beings and want to trust institutions, but also trust their neighbors and live in solidarity with them. Viewed through this prism, research into the degree of social cohesion in different parts of the country can also have its social value. The data for this analysis comes from the largest European transnational survey — The European Values Study (2018). For the purposes of this paper, the following counties were analyzed: Dubrovnik County; Istria County; Primorje-Gorski Kotar County; Split-Dalmatia County; Šibenik-Knin County; and Zadar County. The total number of respondents in the selected counties is 504.

Statistical analysis indicated the existence of statistically significant differences in the degree of social cohesion in different counties and thus confirmed the basic hypothesis of the paper. The fact that the observed differences are not large indicates that everyday life, which is culturally and economically very similar in the observed counties, also significantly affects the level of trust in institutions, solidarity and sociability.

The paper started from the assumption that the diversity and heterogeneity of historical and cultural forces that influenced the Croatian part of the Adriatic can have an impact on the different degrees of social cohesion that are present in different Croatian Adriatic counties today. However, by further theoretical elaboration of the phenomenon, it could have been pointed out that not only historical and cultural forces drive the different ratio or values of social cohesion. It is a part of everyday life, as a microsociological concept, to produce, reproduce; construct and deconstruct the elements of social life (that is social cohesion). The figurations of social cohesion in the Mediterranean that we know today are a result of complex interactional relations throughout history. Although a larger structural (e.g. political) context contributed to defining social cohesion, it was the individual that made sense of these structural settings in their life — defining by it the reality of solidarity, trust or sociability (reality in the sense that

those concepts can actually be evident from the observation of some action). But as much as theoretical elaboration presented in this discussion provided much needed insight, it has also shown us that the method we used in the analysis of differences had its own limitations. The limitations of our method could be pointed out with the scope of conclusions that we could provide with the data that was obtained. We could have identified the differences and different ratios of the dimensions of social cohesion across the Mediterranean, but we could not have given the scientifically grounded explanation of why these dimensions manifest themselves that way.

Due to this, it is important to add that this paper did not have the ambition of a definitive interpretation of the observed differences because for such a level of analysis it is necessary to conduct additional, complex qualitative phenomenological research. Nevertheless, the observed differences suggest that the level of social cohesion depends on many social forces and that it needs to be sociologically studied and researched. In this sense, this paper can serve as a theoretical basis for further research of the phenomenon and articulation of reliable methodological instruments. A combination of our results with more focused qualitative approaches could be, at the end, be a decent basis for public policies that can be adopted with the aim of encouraging social solidarity and raising the level of sociability and trust in social institutions.

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## ALL THESE WONDERFUL DISHES: GENDER, OLD AGE, AND THE MEANINGS OF FOOD

#### Abstract

Food is imbued with many layers of meaning and is associated with interactions in different socio-cultural contexts (Germov & Williams, 2009). The focus of the analysis is the YouTube project *Pasta Grannies*, more precisely a video in which 100-year-old Ms Letizia demonstrates her culinary skills. The analyzed video material and numerous comments from the global audience showed different layers of meaning that indicate the gender and age component of food, the global/transnational perception of Italian cuisine and food as a generator of memory but also "imagined nostalgia" (Appadurai, 2005). The video material functions as a kind of projection screen on which the global audience inscribes various meanings generated from personal (and imaginary) experiences, but at the same time uncritically supports and perpetuates some gender, age and ethnic stereotypes.

Keywords: Italian food, old women, authenticity, nostalgia, Pasta Grannies

Food, its cultivation, processing and preparation, serving and consumption are imbued with many layers of meaning and are closely related to interactions in different so-cio-cultural environments (Germov & Williams, 2009). That is why sociological and anthropological analyzes of food can be developed in different theoretical and research directions, and focusing on historical, cultural, structural, critical factors (Germov & Williams, 2009) and specific topics (for example, taste, gender, identity, class, memory, globalization, post/modernization, etc.) open up a fascinating and inspiring field, both in theoretical and research terms (Mintz & Du Bois, 2002; Sif Karrebæk, Riley & Cavanaugh, 2018). Food has been shared/given/received for thousands of years, and meal preparation is determined by gender, age, religion, ethnicity, class and status rules. In this sense, Robin Fox (2014, pp. 1, 3) emphasizes that food is a symbol but also a "reality of, love and security", a symbol of personal and collective identity, and cooking, serving and the way of consuming food is a "symbol of our humanity". Moreover, Fox (2014, p. 5) points out that "of the most basic things in our behavioral rep-

ertoire, eating is the most accessible and effective for conveying our messages to others", and continues by arguing that "every meal is a message, and where we eat is as important as what we eat in getting the message across". It should be pointed out that these messages are not always simple and self-evident but "complex intersecting" (Holtzman, 2006, p. 363).

# THE PASTA GRANNIES: THE VANISHING ART OF MAKING HOMEMADE PASTA

A smiling 100-year-old Ms. Letizia from Sicily enters her kitchen. Leaning her palms on the kitchen table, she looks at the camera, introduces herself and talks about how she still makes pasta the way her ancestors did and how she did it for her children, to prevent famine during World War II. In the 6-minute and 59-second video, Ms. Letizia kneaded and cooked pasta and prepared fava bean, onion and wild fennel sauce but at the same time revealed her deep transgenerational, transtemporal and identity connection to traditional food and its preparation techniques. Ms. Letizia is one of the participants in the YouTube project Pasta Grannies, a global YouTube hit (Severson, 2019). Namely, every Friday on the YouTube channel Pasta Grannies (651K subscribers on October 15, 2020), it is possible to watch how grandmothers (and a few grandfathers) from Italy and the Italian diaspora make pasta and prepare delicious meals in their homes according to traditional recipes. Vicky Bennison came up with the idea for this project about the disappearing tradition of handmade homemade pasta in Italy inspired by the delicious meals of older neighbors (after moving from London to Italy) (see Pasta Grannies official web site, https://www.pastagrannies.com/; Severson, 2019). Living in Italy, Bennison gained insight into the important social, cultural and symbolic meanings of pasta in both family and community life, but she also realized that it is a practice and knowledge that, due to wider social changes and processes related to food preparation, probably will not pass on to future generations (Severson, 2019). The videos for the Pasta Grannies project were shot "raw", without embellishments and unnecessary stylizations, one could say in a documentary or even an ethnographic manner. In addition to relaxed participants, the impression of authenticity is increased by the home ambience in which the videos are recorded. Bennison's project provoked predominantly positive reactions from a global (gastro and amateur) audience, which also influenced her decision to publish seventy selected recipes in the book Pasta Grannies: The Official Cookbook: The Secrets of Italy's Best Home Cooks (2019).

The video in which Ms. Letizia prepares a meal according to her recipe (as well as other published videos) is interesting material for reflecting on the symbolic, social and cultural complexity of food and meal preparation. After watching Letizia's video several times and recording our own impressions, which we commented on as a team, we read the viewers' comments (767,363 views, 18K likes, 214 dislikes on 15 October 2020) which helped us significantly gain a deeper understanding of: 1) global/transna-

tional perceptions of Italian cuisine both by people with an Italian background and by viewers of a non-Italian origin; 2) constructing meaning — by reading and analyzing these comments, we realized that recordings of Italian older women and their art of cooking simple, folk, local food, function as a kind of projection screen in which viewers write different meanings generated from their personal (real and imaginary) experiences, but at the same time they tend to uncritically perpetuate a number of gender, age and ethnic stereotypes. We have thematically sorted and analytically linked these comments, as well as our observations, to the findings from the existing anthropological and sociological literature and the theoretical approaches generated in feminist theory and cultural studies.

#### GENDER, FOOD AND FOODWORK

The relationships between gender, food, and cooking are diverse and complex (Voski Avakian & Haber, 2005). In traditionalist (and in "neo-traditionalist") communities, families and partnership arrangements, food preparation is semantically fixed by gender, gender division of labor and gender roles, meaning that it is primarily defined as "feminized labor" (Natalier, 2003 as cited in Wade & Marx Ferree, 2015, p. 251) and feminized practice (Gerson, 2010 as cited in Wade & Marx Ferree, 2015, pp. 253, 254). Moreover, food preparation is a crucial part of doing and affirming femininity. The gendered practice of meal preparation and cooking is also shown by the example of Ms Rose from Faenza, one of the participants in the Pasta Grannies project. She recounts how the skill of making pasta was highly valued in her community, so, for example, the day after her wedding, her father-in-law tested her skill in making dough and the quality of the meal she prepared (Severson, 2019). This example points to a culture in which the preparation and cooking of homemade meals is considered an extremely important thing in the catalog of women's jobs, activities and knowledge. Numerous feminist studies have pointed to the complex relationship of "food, gender and domestic life" and mainly pointed out that attributing the primary role in food preparation to women "express and reflect their subordination", that is, that these obligations serve to maintain that subordination (Beardsworth & Keil, 2002, p. 86).

In different temporal and cultural contexts, cooking can be an oppressive gendered practice within a patriarchal system, but also a way of expressing creativity. Moreover, Avakian (Avakian & Haber, 2005, p. 2) points out that research on the relationship between women and food "helps us to understand how women reproduce, resist, and rebel against gender constructions as they are practiced and contested in various sites, as well as illuminate the contexts in which these struggles are located". In doing so, special attention should be paid to the contexts in which these practices of acceptance and challenge take place. From the insight into complex power relations, interpretations of cooking as a "simultaneously oppressive" and empowered activity for women (Counihan, 2010 as cited in Sutton, 2014, p. 19) arise, which are an important

part of women's (local) culture and heritage. Ethnographic research has shown gender complexity in transgenerational modes of transmission, reproduction, and transformation of local culinary knowledge and cooking modes, as well as meal sharing and consumption (Sutton, 2001, 2014). In research on the island of Kalymnos (in the Aegean Sea) in the early 1990s and mid-2000s, Sutton describes how local cultural knowledge, tips and tricks of taste are exchanged inter/intragenerationally but also within defined gender frameworks (Sutton, 2014, p. 20). The kitchen is "a space of cultural contestation, and of processes of identity and memory formation" (Sutton, 2014, p. 20; see Meah & Jackson, 2016). Meal preparation is part of the so-called "kitchen choreography", which includes the organization and furnishing of the kitchen, ie its equipment with household appliances and tools for meal preparation and food processing, but also a set of "bodily movements and postures" that are taken during cooking (Sutton, 2014, p. 10). The video with Ms Leticia indicates that meal preparation is a process that is planned and performed entirely in the kitchen and consists of several stages — multi-stage dough preparation, sauce preparation, dough cooking and meal completion. What particularly fascinated the YouTube audience was the fact that preparing the dough was a demanding physical activity performed by the 100-year-old lady without any visible problems even though she reached the kitchen with the help of an orthopedic aid. In this context, it should be noted how - not only in the case of Ms Letizia — age and gender intertwine. Although this was not her intention, Bennison evoked a number of positive associations in part from the audience, which were articulated in gender and age stereotyping ways - some viewers uncritically interpreted the cooking skill as a moral skill, as a confirmation of one's goodness, wisdom, correctness and honesty. In this way, the stereotyping and flat image of "the little old lady" is (re)constructed, which eliminates the complex existential experiences of the older women (Kerner Furman, 1997, p. 3).

This positive stereotype of the good old woman is often associated with food because it relies on the essentialist idea of "special" relationships between older women and food, moreover older women were considered carriers of "food heritage" as a matrilineally transmitted gift "that mothers give to their daughters" (Meyers, 2001 as cited in Holtzman, 2006, p. 370). Abbamonte and Cavaliere (2016b, p. 5) point to the prevalence of "female anachronistic behavioral models" in American food advertisements — we will add, in other cultural texts such as movies and series, too. American commercials have been exploiting "typically Italian' Food, Family & Females (FFF) stereotypes" for decades, with women in the 1980s and 1990s primarily portrayed as caring mothers or grandmothers and defined by traditional women's household practices (usually symbolized by an apron) (Abbamonte & Cavaliere, 2016b, p. 5).1

<sup>&</sup>lt;sup>1</sup> From the 2000s to 2010s, "new and more fashionable stereotypes" appeared (Abbamonte & Cavaliere, 2016, p. 5).

# AUTHENTICITY OR INVENTION? ETHNICITY AND FOOD IN A GLOBALIZED WORLD

In recent decades, major changes in the food preferences and aspirations of people in the Global West have become visible. These changes can be viewed as indicators of far broader global social, economic, cultural, and political changes that have affected the cultivation, production, distribution, and consumption of food (Beardsworth & Keil, 2002; Fox, 2014). In this regard, we should mention globalization processes, migration, the influence of the media and digitalization, and the phenomena of healthy food, "ethnic food" and "multicultural eating" (Holtzman, 2006, p. 371; Fox, 2014).

Mediterranean gastronomic cultures survive beyond the social, cultural, geographical and political boundaries of the Mediterranean (Abbamonte & Cavaliere, 2016a). Some of them, such as Italian food, exist in a "distinctive transnational commercial and cultural space" (Cinotto, 2018, p. 59). Italian food certainly owes its popularity, ubiquity and recognizability to the dynamic global media space — advertisements, movies, social networks, blogs, etc. (Abbamonte & Cavaliere, 2016a, p. vii). Abbamonte and Cavaliere (2016a, p. viii) point out that in the globalized (and Americanized) media space, Italian heritage is presented through very "anachronistic behavioral models such as an ethnocentric sense of family, fixation on food and mafia" and the already mentioned clichéd portrayal of women (Abbamonte & Cavaliere, 2016b, p. 1).

In addition to drawing attention to the gendered and age dimensions of food, the popularity of the Pasta Grannies project also points to very strong links between food and national/ethnic identities. Numerous anthropological studies have indicated a complex and significant association of certain dishes, foods, or spices with collective (family, local, ethnic, national, racial, religious) identities (Holtzman, 2006). Moreover, in many cases, collective identities (e.g., in the diaspora) are maintained and performed mostly through the essentialist evocation of ties to origins and ancestors and the recreation of the mythical past through the preparation and consumption of certain foods (Holtzman, 2006, p. 366; Voski Avakian, 2005; Buckser, 1999). Davide Girardelli in the article "Commodified Identities: The Myth of Italian Food in the United States" (2004) points to the popularity of Italian food and its presence not only in "America's mainstream appetites" — through various TV shows and restaurant chains — but also, we can say, in the global collective imagination because Italian meals like pizza or pasta are an indispensable part of the mainstream offer of globalized popular culture (2004, p. 308). Girardelli points to eight themes that constitute "the Myth of the Italian" in American culture: (1) family, (2) rusticity, (3) Old World/memory/nostalgia, (4) slowpaced lifestyle, (5) genuineness/unadulterated, (6) openness, (7) expressivity and (8) romance (Girardelli, 2004, p. 319). But "authenticity" and "real" are very modern words, which are heavily exploited in the Italian food industry (Brumback, 2001 as cited in Girardelli, 2004, p. 308), even in cases where presenting certain meals as Italian can be

very problematic. To protect the authenticity of Italian gastronomy, the International Association of Italian Restaurants (ARDI) has set certain standards that must be met by restaurants wishing to obtain a certificate that they are Italian. Hooper called the initiative "gastronomic nationalism", which raises questions about the links between ethnic identity and food, as well as questions about ownership — "When is Italian food 'really authentic'? What does 'Italian food' mean? Who has the right to define what Italian food is?" (Hooper, 2003 as cited in Girardelli 2004, p. 309).

It is well known that modernization processes have disintegrated and devastated traditional food cultivation and preparation practices as well as systems of local cooking practices and culinary knowledge, which were once transmitted transgenerationally in situ, most often matrilineally (Sutton, 2014, pp. 3-5). Italian cuisine and its global popularity are a great example of how food has become detached from local knowledge, practices and the context (geographical, socio-cultural, economic, etc.) in which it was created and maintained, due to population migration and globalization (Beriss, 2019). This media transmission of recipes and culinary skills has provoked debates both in the academic community and on the gastro scene. Important questions are asked in these debates. What, for example, happens to a recipe rooted in its specific local gastronomic tradition once it is isolated from its original context? Is it possible in other contexts to recreate dishes and flavors prepared by Italian nonnas? Is it enough to watch carefully the video material showing the culinary skills of Mrs. Letizia, Rosetta, Gandolfa, Maria, Giaconda; know the ratios of ingredients; to get the ingredients and spices they use in their kitchens and try to imitate the "choreography" of their pasta preparation? Opinions are, not surprisingly, strongly polarized and there are no indications of consensus on these issues. Michael Pollan (In Defense of the Food Network, 2009) described a conversation with a friend's chef on the topic of whether viewers "could learn anything about cooking by watching the Food Network?", and a friend answered by asking: "How much could you learn about playing basketball by watching the NBA?". Can local flavors and recipes be recreated and transferred from one locality to another? Sutton (2001, 2014, p. 5) mentions views that emphasize the dynamism and adaptability of recipes that are part of traditional, local knowledge, but are also open to the influences of social, cultural, economic, and material factors and change easily. This dilemma (between "authenticity" and adaptability) on the one hand reflects the constant struggle between premodernity/tradition and post/modernity, and on the other hand points to the potentials of invention and modification of tradition. Cinnoto (2018, p. 61) states that Italian regional cuisines are in fact "recent inventions" — rural migrants from Italy who arrived in America at the beginning of the last century were not familiar with the concept of national cuisine but with the "patchwork of local food habits". For example, the Neapolitans "had only in the 1830s begun to sauce their macaroni with tomatoes", and Italian rural migrants who arrived in the US in the early 20th century had no ingredients available from the old region, so they created syncretic Italian cuisine in which they used ingredients from other parts of Italy as well as entirely new, industrially processed foods then available on the food market (Cinnoto, 2018, p. 61, 62-63). It should be mentioned that in that period the food of Southern Italian rural migrants, from the perspective of the taste of the middle class (from Italy and from the United States), was considered "too spicy, too garlicky and too greasy; a vulgar and vilifying mocery of 'Italian Cuisine'" (Cinnoto, 2018, p. 62).

The popularity of Italian food as a specifically Mediterranean food in the Global West after the Second World War stems from the fact that the medical and nutritional establishment has been promoting this type of diet as the healthiest for decades. Accordingly, the YouTube audience tends to recognize and acknowledge the links between the Italian diet and health. The importance of using olive oil and consuming meals prepared from locally grown vegetables is especially emphasized. But in addition to healthy food, the longevity and vitality of Italian grandmas is explained by their activity, happiness, sunshine and involvement in family life.

#### FOOD AND GOOD OLD DAYS: MEMORY, NOSTALGIA AND SENTIMENTALITY

Above all, food is also a powerful generator of memory, nostalgia, and sentimentality (Holtzman, 2006, pp. 365-270; Sutton, 2014, p. 8; Abarca & Colby, 2016). It is quite clear that the meals we have consumed throughout our lives, as well as the foods we have preferred at certain stages of life, represent an important part of our personal narrative and are significant (but often underestimated) markers on the life journey map. The French proverb "Tell me what you eat and I'll tell you who you are" or the German proverb "You are what you eat" point to strong socio-cultural and symbolic links between food and individuals/communities/cultures (Messer, 1984, pp. 205). Smells and tastes of dishes consumed in childhood and youth, delicacies eaten on tourist trips, hearty meals at holiday tables or seasonally available food — all these are important sensory experiences that take us back to the past (Geiger Zeman & Zeman, 2012). This phenomenon was inspiringly described by Sutton in the study "Remembrance of Repasts" (2001), introducing the concept of the so-called "Proustian anthropology" — through the food we remember events, people and localities (also Sutton, 2014, pp. 8, 15; Holtzman, 2006, p. 365).

We have already shown that recordings of older Italian women are very powerful, multilayered and polysemous depictions that provoke different comments from the global audience on social networks, but also emotions that evoke memories of older members of their families (grandmothers, mothers, etc.) and childhood. A simply equipped kitchen, homely atmosphere, a nice old woman who prepares food according to a traditional recipe — these are the things that evoke predominantly positive emotions and positive associations, but also sentimental, simplified and romanticized reconstruction of good old, honest and simple times of community and family which

symbolically functions as a counterbalance to the new, unpredictable, and alienated late capitalist world. In this context, the concepts of "imagined nostalgia" and "armchair nostalgia" by Arjun Appadurai, described in the book 'Modernity at Large: Cultural Dimensions of Globalization' (2005, p. 77; also Holtzman, 2006, p. 367), are incredibly inspiring. Appadurai (2005, p. 78) pointed out that a merchandiser in consumerist capitalism supplies us with "the lubricant of nostalgia" which can be "nostalgia without memory" (Appadurai, 2005, p. 30). Thus, the video material works for some viewers as a lubricant that facilitates the generation and evocation of experienced or imagined nostalgia for things that may have existed, and may actually be "that never were" (Appadurai, 2005, p. 77).

The cooking skills of Italian grandmothers, of course, did not arise in an economic or class vacuum. Bennison thus pointed out that in these women's youth, "dry pasta" was a privilege of the middle class and a signifier of higher incomes (Severson, 2019). Since they could not afford such food, women from rural areas made pasta by hand. They, as Bennison puts it, literally "made pasta for survival" (Severson, 2019). The experience of poverty, hunger and the struggle for survival of these women denies the fantasy of global viewers about the good and beautiful old days and calls for a deeper questioning of the class aspects of food.

The *Pasta Grannies* project and the analyzed video in which Ms Letizia prepares tagliarini pasta with fava bean, onion and wild fennel, shows the semantic complexity of food, food preparation and presentation, but also the richness of meanings produced by watching/reading cultural texts or videos that record the food preparation processes and mediate them to a global audience. In this context, it is not only the food and meal recipes that are important, but also the person who prepares the food, the place where it is prepared, as well as the people who will ultimately consume that food physically or virtually. As in countless other cases, phenomena and subjects at the micro level reflect phenomena, processes and controversies at the macro level. Therefore, food is a significant research and theoretical topic, which has yet to find a visible place in the domestic academic context, which it has deserved long ago.

#### Note

When we sent a summary in early 2020 entitled "All these wonderful dishes: an older person talking about good Dalmatian food", we planned to conduct field research. Due to the coronavirus crisis, and the concern for the health of our potential participants, we modified our original research plan. For this reason, the original title of the paper was changed. We thank the moderators of the session "Culture and Tradition" and the Organizing Committee, especially Ms Ozana Ramljak, PhD, for understanding the situation and accepting this change.

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# TRAJECTORIES OF THE COAST AND ISLANDS: THE MEANINGS OF THESE JOURNEYS AMONG PEOPLE EXPERIENCING HOMELESSNESS

#### Abstract

This article analyses the ways in which some people experiencing homelessness re-situate leisure related activities by traversing to different coastal and island locations. Based on findings from two projects, 1 this study examines the trajectories some people experiencing homelessness take and the meanings that they attach to these journeys in Croatia. The introductory part of this paper briefly outlines trajectories related to new work opportunities, albeit mostly temporary in nature. Instances of reluctance to make these journeys are also discussed. Following this brief outline, this work focuses on another virtually unexplored reason this marginalised group may spend time at the coast or on islands. Specifically, it innovatively examines the use of leisure among people experiencing homelessness, which is generally an under-researched theme in the research literature. Common misconceptions about the importance and overall benefits of leisure for people experiencing homelessness are initially discussed. Based on qualitative research methods, this study specifically draws on 34 in-depth interviews and ethnographic field notes collected between 2019-2020. Using an inductive approach, we present themes related to leisure from our fieldwork and the meanings of these experiences to this marginalised population in this article. Findings show that living in poverty does not reduce the need for leisure or lessen the desire to be part of the broader community. Through an analysis of these homeless trajectories revealing different life-situations, this article intends to give deeper insight into the complexities and multidimensionality of homelessness in Croatia as well as the potential benefits of leisure for people that are socially excluded and living in poverty.

Keywords: trajectories, leisure, homelessness, coping strategies, Croatia

Prior to any discussion about the use of leisure among people experiencing homelessness, this introduction covers the other possible reasons why people living in precari-

<sup>&</sup>lt;sup>1</sup> GENMOD project Relational Gender Relations in Croatia: Modernization and Development Perspectives (HRZZ-IP-2016-06-6010) and the CSRP project Exploring Homelessness and Pathways to Social Inclusion: A Comparative Study of Contexts and Challenges in Swiss and Croatian Cities (No. IZHRZO\_180631/1).

ous situations make these journeys. For example, many people experiencing homelessness take advantage of employment possibilities that are available in construction work, hospitality and tourism along the coast and on the islands.<sup>2</sup> Even though these jobs are most often seasonal, they still may offer a temporary exit from homelessness. During fieldwork, we frequently met people staying at homeless shelters in search of work who had travelled from the continental parts of Croatia or from Bosnia to find jobs along the coast. On the other hand, some travel to islands during the summer months may be a survival strategy that involves work, but of a different kind. For example, Kaspar is a rough sleeper in his late thirties who travels to islands during the summer months to feed his addiction to heroin that began in his early twenties. He does this by stealing from holidaying tourists at crowded beaches. Kaspar also engages in shoplifting on islands where he is not recognised by staff at local shops. This is a strategy<sup>3</sup> used by Kaspar because all the tactics he has used so far have been exhausted. Interestingly, many of the people experiencing homelessness in coastal towns who we met during the course of this study originally came from and grew up on islands. Estranged relations with a parent were usually the reason behind their reluctance to return to the islands of their birth. In contrast, an absence of any emotional connection to these spaces make it difficult for homeless people to readily choose nursing homes on islands as their "last station" in the absence of suitable accommodation in coastal towns where long waiting lists are the norm.

**<sup>2</sup>** It is worth mentioning that both formal and informal work opportunities have been limited or are no longer available in light of the recent Covid-19 pandemic, particularly for people living in poverty.

<sup>&</sup>lt;sup>3</sup> Reports from research participants and our ethnographic field notes consistently showed that drug addiction entails a lot of organisational, calculation and planning work. Ultimately "getting their next fix" and making sure that this lasts to their next supply becomes their main obsession. Persons with drug addictions spend all their time and energy on this, which means that they cannot concentrate on anything else e.g., stable housing and employment. Without the resources to sustain his drug addiction, Kaspar incessantly engages in illicit activities becoming even more vulnerable and powerless. He travels to islands because other coastal towns, he says have become "too tight" as he is often recognised in these shops and this has become "too risky". For this reason, during the summer months, he frequently travels to islands where there are more tourists so it easier for him to make ends meet and remain unrecognised.

<sup>4</sup> For example, Lovro bitterly refers to one of his parents and recalls their difficult relationship but lovingly remembers his grandparents who brought him up on an island during his first years. According to Lovro, when tension between them escalated he was sent to a correctional facility to deal with his "delinquency" that was inevitably followed by long-term prison experiences as an adult. As a consequence, he is reluctant to return to his birthplace even for a visit although he emotionally struggles with separation from his grandparents. In another example, Enrico adamantly refuses to return to the island where he was born because of unbearable relations with his father even though this would permanently solve his housing problem.

#### ISN'T ALL THEIR TIME — FREE TIME?

It is commonly misconceived that people experiencing homelessness have a lot of free time. However, in reality, homeless people who live in poverty struggle with day-to-day survival filled with uncertainty in which they attempt to realise normalcy. Obtaining some sort of food and shelter at the present moment is of first priority and is an all-consuming activity (Davis 1996). Correspondingly, a number of studies have convincingly shown that surviving homelessness is hard and stressful work (Borchard, 2010; Goodman, Saxe, & Harvey, 1991; Stolte & Hodgetts, 2014). Undeniably, the main focus is on staying alive and safe, that is succinctly summed up by Leon who spent three and a half years on the street "This is a struggle for existence, nothing else!" (Leon, 61).

When all energies are focussed on staying alive and safe, this does not leave much time or concern for leisure. Based on the false premise that homelessness is a personal choice, persons with safe and secure homes (un)wittingly judge homeless people and feel that they should not be entitled to leisure. Likewise, since this population (especially those living on the street) lack private spaces, leisure pursuits engaged in by homeless people are often contested (Borchard, 2010).

#### RIGHTS TO LEISURE

People experiencing homelessness (whether they are rough sleepers or use a night shelter) have a right to be citizens which requires access as well as the opportunity and possibility of engaging in leisure. However, leisure is largely inaccessible to those society has deemed undesirable and chosen to prohibit from public space (Mitchell, 2017). Besides, the recreation and leisure needs of people experiencing homelessness are seen as trivial (Ward, 1990 as cited in Dawson & Harrington, 1996) and consequently recreation and leisure have traditionally been put at the bottom of priority lists with regard to homelessness services (Kunstler, 1993). Seemingly, access to experiences that enrich their daily lives and provide some measure of stability and self-esteem has been traditionally ignored. Nevertheless, it has been shown that homeless people's participation in civic life and their right to inhabit prime public places are important because this allows them to experience belonging and to move out from marginal spaces (Hodgetts, Stolte, Chamberlain, Radley, Nabalarua & Groot 2008). Further, studies have confirmed that leisure can be important in improving the way people feel about themselves and in building a better sense of community (Dawson & Harrington, 1996; Trussell & Mair, 2010). This can involve simple and ordinary activities that are a departure from the hardships of street life or shelter existence,5 allowing them to feel more themselves and therefore less marginalised.

<sup>5</sup> Studies have reported that life at homeless shelters is usually characterised by rules, obligations, and an overall lack of privacy.

#### BENEFITS OF LEISURE

Studies have consistently shown that people's lives may be enriched through the opportunity for leisure. It is a vital part of life that may offer time to relax, recover, or refresh from other responsibilities. The beneficial outcomes of participation in leisure activities in terms of emotional/physical/mental health and well-being have been well documented (Coleman, 1993; Coleman & Iso-Ahola, 1993; Iso-Ahola & Park, 1996). Leisure research also highlights the idea of buffering or protection where leisure is used to develop stress coping and stress survival strategies (Iwasaki & Schneider, 2003). Studies have shown that leisure is a positive diversion or "time out" from stress-inducing situations and thoughts, and a context for rejuvenation and renewal (Iwasaki, Mactavish, & Mackay 2005). Kleiber, Hutchinson, and Williams (2002) saw leisure as a means to help cope in the short term with day-to-day stress and to help adapt to major negative life events over the long term. They identified four distinguishable functions of leisure that relate to self-protection, self-restoration, and personal transformation. In sum, they concluded that leisure activities buffer the impact of negative life events by: i) distracting, ii) generating optimism about the future, iii) aiding in the reconstruction of a life story that is continuous with the past, and iv) as vehicles for personal transformation. In their research with homeless people, Hodgetts and Stolte (2016) demonstrate the importance of recreational activities for reducing stress, building social ties, regaining a sense of self and place, buffering against adversity, finding hope and meaning, and experiencing inclusion and control. In other qualitative studies, Klitzing (2003; 2004) found that homeless women used various leisure-based coping strategies to deal with stress such as being with others, engaging in diversionary leisure to relax, religiosity, positive thinking and physical activities. Grabbe, Ball, and Goldstein (2013) claim that being homeless may in itself also create mental health issues, for example, depression and anxiety and recount the benefits of gardening in helping relieve stress in homeless women. Their results show that a gardening experience can be a resource for food and increased positive social interactions as well as a link for marginalised individuals to the larger community. In the context of homelessness, Knestaut, Devine, and Verlezza (2010) discuss how engagement in dance classes can promote self-determination. Sherry and O'May (2013) conclude that sport can provide an effective vehicle for the accrual of social capital, which may positively impact the mental health and substance abuse patterns of participants from marginalised and at-risk communities. A recent process evaluation by Sofija, Plugge, Wiseman, and Harris (2018) found that formerly homeless individuals experienced improvements to their overall wellbeing and social inclusion through participation in a group exercise intervention.

#### **METHOD**

This qualitative analysis is part of two larger studies on: 1) homelessness and pathways to social inclusion and 2) gender relations and leisure in Croatia. Since there is a marked absence of recreation and leisure programmes for homeless shelter users, rough sleepers or more generally for people living in poverty, we were interested in the following research questions:6 i) Where can they be? ii) When can they be there? and iii) What can they be doing? In other words, we specifically explore where people experiencing homelessness or those living in poverty can engage in leisure activities, at what times can they participate as well as what kind of leisure activities are available/suitable for these marginalised groups. Decisions involving personal choice and leisure time as well as the meanings of these experiences were of particular relevance. This study draws on 34 in-depth interviews from persons experiencing homelessness and ethnographic field notes collected between 2019-2020. All interviews were recorded and transcribed, word for word with informant's knowledge and oral consent. Initially, all transcripts were read and listened to a number of times to ensure familiarity. Reading and listening to the transcripts ensured that we did not lose the meaning or misunderstand the context of what was conveyed during the interviews. Analysis was thematic and inductive, based on the principles of grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990). This involved close reading of the interview transcripts, noting central concepts, key emerging themes, patterns, consistencies, contradictions and variation. This inductive approach allowed themes to emerge from the data rather than imposing a "top-down" approach in which themes were previously determined and sought from the data. For example, leisure was identified inductively as a coping strategy for participants from our reading of interview transcripts and field notes, which were a good way of recapturing fieldwork (i.e., descriptions of people, places, situations, conversations, and events). To ensure analytic rigour, preliminary codes were reviewed for accuracy and refined, as needed. To preserve the anonymity of our participants, all names and other identifying information have been changed.

#### **RESULTS**

The following section considers some of the different ways leisure activities are experienced by people who participated in this research. We attempt to show how homeless people find agentive ways to enrich their lives, seek relief and reflect on their distressing situations through leisure. The themes that emerged from the research materials include: Judgement-free leisure spaces: "Summer is the mother of the poor!", Get-

<sup>&</sup>lt;sup>6</sup> All of these questions i.e., where, when and what are open research questions were used in the larger study; they generated research materials related to other activities such as sleeping, income-generating, life-sustaining and general human activities, etc. not just leisure.

ting away to preserve anonymity and privacy, and Going away for a sense of empowerment.

# JUDGEMENT-FREE LEISURE SPACES: "SUMMER IS THE MOTHER OF THE POOR!"

Beaches, especially during the summer months, were reported as judgement-free spaces and a place where some research participants did not feel stigmatised. According to a former rough sleeper who was homeless for three and a half years: "Summer is the mother of the poor!". This suggests that colder months are much harsher and even life-threatening for people living in poverty. As an example, he explained that beaches are public, freely accessible spaces that offer peace and relaxation as well as a place to shower and sleep. In his own words: "When you sleep under a tree at the beach, no one touches you and you can have a shower, which is a big plus" (Oliver, 42). Clearly, this example shows that public beaches are not stigmatised spaces but a place to be and do what others are doing (Hodgetts et al., 2008). Attentively, they need to take care that they do not appear as threats and have to abstain or regulate any alcohol consumption, substance use or disruptive behaviour. Beaches are prime public places where they can be citizens; this holds a particular meaning for identity in comparison to homeless shelters where people are identified specifically as homeless people. Evidently, judgement-free leisure spaces are essential as spaces where homeless people can be accepted and included instead of being marked as "other" (Trussell & Mair, 2010).

Apart from being judgement-free spaces, many research participants located in a coastal town mentioned the value of these coastal spaces for recreation purposes such as swimming and walking. Conveniently, beaches give them a place to be during the day for free without feeling stigmatised and where they feel they belong. In addition, some even mentioned the aesthetic value of these locations as a form of relaxation. For example, Gordan, who currently uses a night shelter and has lived in a coastal town for the last four decades, said that he likes to be "in nature" the most and has walked along all the beaches in the area: "By looking at nature, I can rest my eyes". He also reports that he combines this leisure activity with work: "During the summer, I walk along the beaches, I have a swim and then walk some more... I collect up to 50-100 bottles in one day" (Gordan, 58). This also shows that summer months with an influx of tourists presents the possibility of engaging in grey economy activities to generate some extra money for persons living in poverty.

A chance to get away in nature has a calming effect on some because there are no other distractions. A fishing trip for Kruno holds personal value because he feels invigorated and relaxed for up to a month afterwards, which can make substantial differences to his quality of life:

Well, it's nice, to calm your nerves, this is true, some say it's not, it's true, in nature, there's no noise behind you, no cars, no trams, nothing... birds sing to you, and at least it's like that for me, whether I've caught anything or not, I recharge my batteries when I go fishing... This is very relaxing for me, I recharge my batteries for a month on every fishing trip. (Kruno, 54)

Since this study focuses on marginalised persons living in poverty, leisure constraints can be expected. In other words, they are more likely to experience discrimination and greater difficulty in accessing leisure programmes or engaging in leisure activities. Our study revealed that these were either financial, related to (mental) health issues, physical injury, age, and exclusionary practices or a combination of these reasons. For example, Leon explains that after a month on holiday at the seaside with friends that often involves drinking, taking drugs, and "adventures" he feels very tired instead of refreshed. This state could be attributed to health issues and being older than his friends: "I come home from the seaside tired, instead of rested, so this is not really a holiday for me!" (Leon, 61).

#### GETTING AWAY TO PRESERVE ANONYMITY AND PRIVACY

Islands for some are potential spaces where people can get away, relax and remain anonymous for a short period in contrast to living in coastal towns where there is little privacy. For example, a former rough sleeper, who spent seven years on the street explained that summer months are opportunities to travel to islands with two of his friends from continental parts of the country who come to the coast for their holidays. He explains that "loneliness kills" and that he enjoys this time on islands socialising with them, especially because he can preserve his anonymity and privacy in these spaces. Last summer, he spent about a month on two different islands with his friends that provided him with an opportunity to socialise without having to explain his addiction or talk about this topic. He also explained that this was also a way of controlling his consumption so that he does not exceed his gram dosage.

I don't even like to go to places where people know (about his long-term addiction to heroin) because they talk non-stop about this... Who did what? What they did? Who bought new stuff?... it's always the same story, that I'm not really interested in, I consume as much as I need and then I leave, I don't have to talk about this day and night. So I prefer to avoid this and be on my own rather than be in a situation where I need to increase my dosage because I'm coping well with a gram... until when we'll see. (Jakov, 62)

Another research participant, Karlo subsequently left his coastal town and travelled to an island where he could receive therapy and preserve his anonymity to escape family pressures to join a commune.

#### GOING AWAY FOR A SENSE OF EMPOWERMENT

People can also gain a sense of empowerment from their leisure, which may be particularly significant to and useful for marginalised populations living in poverty. For example, Nikša7 (41), sells newspapers and explains that he "cracked up" last year and decided to hitchhike a ride to the coast. This trip was not planned as he reported that he never likes to plan anything because "if things don't turn out as planned he becomes disappointed". He was "on holidays" for ten days and stayed at two coastal towns and on an island. He secured meals from local restaurants by asking cooks to save leftovers for him each day. Satisfyingly, he reported that this packaged food was enough to last him until the next day. He was even invited to eat these meals at a particular restaurant if they were not busy. As for accommodation, he used a deck chair at the beach (that can be rented during the day) and slept "under the open sky." This is a good example of how he resists exclusionary practices by occupying a prime space at a marginal time (Mitchell, 2003). As for money, he mainly relied on church donations but also did some work collecting bottles:

You have to do a little lying, I'm not much of a liar, but I said that I needed this and that for the ticket and then a priest gave me 500 kuna... In fact, it was good for me because I was at the seaside on holidays, I left with 200 kuna and came back with 1300 kuna. (Nikša, 41)

He also explained that he was careful not to attract attention by not consuming alcohol:

I literally spent about 300 kuna, I spent most of it on cigarettes, I didn't want to drink anything, because then the police would suspect that I had nowhere to stay, I would then have problems with that, so I just had soft drinks. (Nikša, 41)

In sum, Nikša's holidays involve physical journeys to the coast and an island, which offered some distance from the dehumanising aspects of street life to gain a refreshed perspective on life. He spends most of his time at public beaches (that are not stigmatised spaces but "a place to be and do what others are doing"). This example shows clearly how Nikša gains a sense of empowerment from his leisure (Shaw, 2001) by being: i) a social actor (with agency) who perceives and interprets social situations and because ii) his leisure experiences are relatively freely chosen. In other words, this holiday has provided Nikša with a space for presenting himself as an agentive and deserving human being while convincing him that there are possibilities of genuine escapes into a better life (Hodgetts & Stolte, 2016).

<sup>7</sup> This is a pseudonym even though this particular research participant mentioned that we did not need to anonymise his contribution because he felt that he had "nothing to hide."

#### DISCUSSION

On the face of it, these mentioned leisure spaces/activities or holidays are mostly shortterm coping strategies or ways to escape from the everyday drudgery of homelessness. Evidently, they do not resolve homelessness, but appear to stabilise people for a time, encourage agentive reflection and improve people's quality of life in a manner that aids survival (Hodgetts & Stolte, 2016). Crucially, this study also shows that leisure, for people experiencing homelessness, is not only as an "escape from adversity" but also an "escape into society" (2016, p. 912). This importantly shows that living in poverty does not reduce the need for leisure or lessen the desire to be part of the broader community. Clearly, leisure pursuits offer opportunities for being something more, where marginalised populations can identify with mainstream society rather than being defined by their homelessness or poverty. Although this study is limited because it only analyses the ways in which some people experiencing homelessness re-situate leisure related activities by traversing to different coastal and island locations it still gives insight into how leisure experiences and holidays afford opportunities for people to live differently, to change routines and to experience other aspects of life (McGabe, 2009). These qualitative findings show that leisure is valuable in relation to coping, transcending life on the streets or in shelters as well as asserting one's humanity and rights. As Kleiber et al. (2002) assert, leisure might not only serve as diversion, relief, escape, or respite, but also as a space to reflect and be optimistic about the future.

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# FORGOTTEN WISDOMS OF THE CROATIAN MEDITERRANEAN PAST: HERITAGE DELIGHTS AND DANGERS IN THE CONTEXT OF 2020 COVID-19 — INTERTWINING SOME MULTIDICIPLINARY DEBATES

#### Abstract

Regardless of the restrictive directives of the world's most powerful culture broker and tourist patroniser, such as UNESCO, Croatia was successful in entering the 2013 world's Heritage intangible list with 14 cultural domains worth safeguarding. The public health system that has been dealing with epidemics since 13th century Dubrovnik (Grmek, 1980, 1996; Blažina and Blažina, 2008) to the 2020 Corona virus was not one of them. With a plethora of factography, the analysis of this paper encompasses major global issues regarding today's treating of cultures where cultural paradigms are abused in the service off elite-driven competitive global concepts (Matta, 2016), including their capacity for dealing with pandemics. It further analyses the continuing issue of Croatia's Štamparian health system dismantlement of over three decades (Špoljar Vržina, 2008, 2011, 2012, 2020) in which the history of Croatian medicine became almost obsolete in its power to be presented to the world as a path-breaking system in which solidarity, specific knowledges of its professionals and humanity of all its people were (and are) intertwined and not divisible into classifications, lists and conglomerates of monetary instrumentalized cultural values. If today's only comparison that can be drawn is the geographical potential of a Croatian site for a Hollywood mega hit (Vis, "Mamma Mia!" 2, 2017), it should also be known as a global site prepared for Corona virus outbreaks. Especially in view of the fact that the island Vis, as much of Croatia's natural "beauty", encompasses caves with over 10 bat species (one of the main vectors of the virus, Zhou et al., 2020) and a timeline of its people's capability of answering the pandemic quest, both professionally and ethically. Yet no official list is interested in such a complex heritage, which remains to be further contested.

Keywords: Covid-19 pandemic, Štamparian medicine, Grmek's pathocenosis, Blažina's Chazamorbi, complex heritage

It was March of 2020 and the Covid-19 urgency agenda was revealing itself within Croatia. Disinfectants, home isolation and masks became the norm of which only the last obligation became of paramount importance. A metaphor of our COVID-19 times, so to speak<sup>1</sup>. Yet, if we historicize our ahistorical times and remind ourselves of the history of global illnesses — especially the Mediterranean past stands as a solid historical marker of human survival among the many disease causative agents. The analysis of this paper is done with the conviction that in times of perplexing biological realities one is doomed to feel lost if one does not remember one's cultural and heritage-based past (Špoljar Vržina 2020, 597; 2008, p. 999). This statement is not in contradiction with the sheer fact of experiencing the full-fledged global menu of salvage instructions that seem not all quite adequate in providing a good enough wisdom scheme through our global high-tech supported lives. The more we delve in that quasi-epistemic direction the more we can confirm (bio)medicine as counter-productively disregarding its cultural roots or any world cultures roots for that matter (Good 1994, preface xv-xvii).

Luckily for Croatia and the Mediterranean, the story of that kind of wisdom can easily be called upon, regardless of the fact that the global existence of success is measured by some very crude competitive factors. For instance, in the case of natural and cultural beauties it is a country's positioning on the UNESCO heritage list<sup>2</sup>. While on the COVID-19 biological front, it is isolating the Covid-19 virus and making the first global vaccine. In all cases the question of positioning cultures and populations on the most prominent competitive lists of elite distinguished positions of success is the main aim. What Matta (2016, p. 347-348) is questioning when criticizing the many discriminatory faces of UNESCO heritage lists or other authors when criticizing the imaginary delegating to imaginary group responsibilities (Ilcan & Phillips, 2006, p. 59; Stoczkowski, 2009, p. 7), can also be elegantly translated into the domain of genetical, biological and medical scientific races that go parallel to real populational issues and needs in all countries and cultures of the "periphery".

# PERPLEXED BIOLOGICAL REALITIES AND CHANGED (PATIENT) IDENTITIES

Thus, we are living in a chaotic war-like frenzy of battles fought on the global level between culture brokers, tourist patronisers and biology adventurists in the form of philantrocapitalists, failed politicians and corporative media showmen. All above paint our perplexed biological realities and cultural landscapes of our current survival. In this sense to memorize, historize and remember one's own past is to survive with one's

<sup>1</sup> The new restrictions of a partial lockdown begun again around the deadline of sending this paper to the organizers — 28th. November 2020.

**<sup>2</sup>** For a thorough analysis of Croatia's most current positioning and accompanying problems see Zebec T. (2020) Living Heritage — Intangible Culture at Risk from the Moment of Selection.

own knowledge and authentic potential patient identities. To anthropologize our knowledge is to draw on the old anthropological traditions of interdisciplinarity that weave together the many times impossibly joined approaches, yet always reaching the conclusionary remark — we are our lived-through culture (Špoljar Vržina & Rudan Pavao, 2009). Thus, the problem of dealing with Covid-19 is as much a Croatian, and extrapolating even farther, Mediterranean cultural and historical issue as much as it is a (bio)medical one. It should be treated as such, but seldom is. The history of medicine at this moment is globally swept under the rug of binary classifications between the "useful" and "useless" knowledges. While the medical health systems are totally mainstreamed into urgent health service modes of functioning in which the global situation of Covid-19 becomes the main medical reasoning agenda without any recognizable ethical bases. Simultaneously, we scarcely hear about the co-morbidity issues with accompanying death and dying statistics in its range. This in itself was only yesterday thought of as un-comprehensible from the standpoint of basic epidemiology and public health epistemic traditions. Together with no knowledge about the results of obductions, serological, immunological and virological (virus types and its mutation capacity) issues.

Furthermore, Croatia's Štamparian health system dismantlement developed over three decades (Špoljar Vržina 2008, 1005; 2011, 974; 2012, 1111) in which the history of Croatian medicine became almost obsolete in its power to be presented to the world as a path-breaking system within which solidarity, specific knowledges of its professionals and humanity of all its people were (and are) intertwined and not divisible into classifications, lists and conglomerates of monetary instrumentalized cultural values. The eponym "Štamparian", by the way of involvement of two major medical institutions that carry this historical WHO forefather's name, is in the backdrop of every media coverage of the current Covid-19 pandemic from day one, yet the meaning of his teaching is heavily underrepresented. Today's biomedical knowledge platform does not recognize ethical problems in turning patients into customers or communities into market targets. All of which Štampar was heavily against as one of the leading men in establishing the WHO (Štampar 1919, p. 2; 1923, p. 2).

If sought in this context the current terms and processes of a "lockdown" and "opening" of societies and communities are more in the service of economic factors that need doctors turned into policemen delegated as frontmen's of Ministries of Health and hospitals turned into service units of the globalized and neoliberal agendas of medicine. Patients are now openly promoted buyers of health and in the case of pandemics — the conductors of recommended social measures, solidarized recipients of vaccines to be created *ad hoc* (regardless of all prior scientific protocols) and, above all, responsible for the outcome of the pandemic. However, even in the worst Štampar's nightmare's over the world-wide capitalist medical systems had pandemic schemes of action with rigorous scientific foundations. Today's variable pandemic settings are driven exclusively by economic aspects of one's physiological exposition and making one

responsible for any economic loss gives new dimensions to any known epidemiological and public health definition of urgency. Talks over saving local restaurants, coffee shops, party clubs, theatres, cinemas or any form of cultural life form preside and mask the real issues of governments economic re-compensations to all economic losing actors in the pandemic outcomes. Simultaneously, it would be quite impossible to explain to doctor Stampar the incongruencies of epidemiological and public health procedures within this pandemic and answer the questions — Is the quality of masks that are recommended for wearing unified? Are the chemicals treated as "disinfectants" in front of every entrance tested for its (safe) substances? Is the wearing of masks in any way calculated by the standards of hypoxia and the dangers of oxygen loss levels in many comorbid illnesses? — all this and many more go into the golden rules of the Health for all medicine movement and the Stamparian medicine tradition to which the simplistic nature and terror of today's globalized unsophisticated approaches give reasons to any future outcry of doctors awakened and distanced from this global, quite scientifically unbased, dictatorship. In the backdrop of such a conscious medical stance, Croatian doctors were always respected for exposing wrongly presented scientific and/or historical biomedical facts. There are two such outcries of Croat scientists of paramount importance for the analyses of this paper. One pertaining to the 80's and the AIDS epidemic, while the other to the 14th-16th century Mediterranean situation in Dubrovnik amidst a plague epidemic. Both deserving eponyms for life-long research and entering the subjects of research into mainstream scientific thought.

#### AIDS EPIDEMIC: GRMEK'S PATHOCENOSIS

In the midst of last century, in the 80's AIDS, a new disease, was presented in its full global spread with a similar global competition of a scientific race towards finding a vaccine among the world's famous immunological laboratories. Dražen Mirko Grmek, as a Štamparian oriented medical doctor and world-wide respected expert in the domain of the history of medicine, amidst the pandemic, boldly questions the history of AIDS. The main thesis of Grmek's exceptional analysis was that the world scare of the "new" virus is in fact of dual possibilities concerning its temporal and spatial characteristics: as a virus already known to mankind yet, due to changed dynamics within communities where the balance of *pathocenosis* is lost, thus in fact old in its nature<sup>3</sup>, as well as possibly a new one. In the case of the virus' old nature, he described the situation of a breakage of a balance between man and his environmental microbes in

<sup>&</sup>lt;sup>3</sup> The dynamics of infectious disease causative agents and community relationships falling out of balance at any given historical moment Grmek termed the *breakage of pathocenosis*.

<sup>&</sup>lt;sup>4</sup> If the immunological unpreparedness of the populations' organisms enable very abrupt reactions and disease outbreaks, such as in the case of Uganda's serological HIV-1 type of AIDS in 1987., parallel to the old disease of identical symptoms known as *Slim* (Grmek 1991, p. 191).

which in the history of man all civilizations, in various times, went through (Grmek, 1991, p. 169-170). In the case of new microbes entering into populations, he cautioned that the organism's abruptness of reaction towards the virus defines its nature (Grmek 1991, pp. 190-191). In the closing chapters of his study, Grmek presented the glory and sorrow of many world-wide medical actions and biomedical interventions of that time (in the 70's and 80's) in which the divide of African and Western medical experts developed in the backdrop of the apparent unethical and corruptive work of most medical establishments (WHO and other global organizations) making the heaviest biological burden upon African populations. For instance, while conducting highly recommended vaccinations but disregarding the shortage of needles needed for that action (Grmek 1991, p. 192).<sup>5</sup> This divide of unethical procedures of over decades goes totally unmentioned today. The sheer fact that today's global African situation is of a total opposite to the rest of the world and is quite under-reported in the Western media remains a quest for future research in itself. Namely, how can the low numbers in countries of the most economically underdeveloped and deprived continent of the world be explained? The gaze of a Western involvement and its self-proclaimed post-colonial "success" in all African cultural settings would suggest that this is a result of often claimed "Western ways illiteracy" resulting in underreporting statistics of "the locals". However, according to Grmek we must question the possibility of a slow distancing, country by country, from the plugged in corporatized medical system within the globalism of a current Western-centred focused world. This rather recent history of all pathologies of the world rewritten into only one diagnosis of Covid-19 seems incompatible with the already existing undermining of the Africa's states and populations from the West. As if Grmek's very well-argued observation from the early 80's had its further resolution in the distancing, paradoxically so, of already failed African medical systems from those of the most developed parts of the globe, currently on the same path of destruction. Can we perhaps talk of failed public health and global medical systems tested with western medical programs two decades ago in the south and already run over by farmaco-corporatives? (Forth et al., 2004, pp. 1-10)

#### PLAGUE PANDEMIC: BLAŽINA'S *DUBROVNIK SIGNORI CHAZAMORBI*

Deeper into the historical explanatory gazes of pandemics, we can draw upon the story of "distancing" known all to well for Croatia and the Mediterranean. Namely, it was Dubrovnik that had the first quarantine in the plague-stricken Europe in 1377 organized

<sup>&</sup>lt;sup>5</sup> An equal biomedical disaster happened in view of the blood banks of Europe and the case of hemophilia patients (Grmek, 1991, p. 172-178), bringing one to question the long lost security of bio-(blood) products.

in the part of the town called Lazareti where newcomers were held 40 days.6 In the sense of economy, monetary dealings and geographical trade dynamics of that time, we can talk of a globalized Mediterranean of sorts in the 14th century onwards, taken aback by the plague epidemic and put into a total "lockdown" by an invention of the Dubrovnik city diplomats and politicians of that time. It may come as a shock for the seriousness and way of conduct of our current Covid-19 pandemic measures that the "lockdown" meant literally a total lockdown of 40 days and that there were officials of the Dubrovnik Republic that controlled these processes of contra pandemic defence whenever needed throughout the duration of a few centuries. In her epitomal work Zlata Blažina, also a Croatian medical historian, did an in-depth research of the Dubrovnik quarantine phenomena. Her life-long study is encompassed in the work "Expelling the Plague — The Health Office and the Implementation of Quarantine in Dubrovnik, 1377—1533", where we can not only testify, step-by-step, the ways of constructing the sophisticated mechanism of Dubrovnik's pandemic plague control of over a few centuries, but learn of the main actors of it all — the Dubrovnik citizens themselves. Called Signori Chazamorbi7, they paradoxically or not, did not have any medical knowledge, but were there to conduct the quarantine measures and see that they were not violated, even if risking one's life for the survival of the Republic. They were drawn from the aristocracy of the Grand Committee of the Dubrovnik rulers and were not compensated in money for their work (Blažina & Blažina, 2015). According to the authors, no other country of that time had such a continuous quarantine implementation from a health office. The Signori Chazamorbi were sought as honorary workers for the survival of the Republic and they were a marker of the fact that the gent of that time, especially Dubrovnik politicians were aware of the social fragile points of Dubrovnik society and the time of withdrawal from the trade markets of those days.8 People's lives were, at least demographically contemplated, above the earnings of the Republic. Perhaps, we must underline the current pandemic situation and state — unlike today.

**<sup>6</sup>** A *lazaretto* or *lazar house* called after the biblical figure of Lazarus, raised from the dead by Jesus were places where the plague stricken were sent to die or survive, while the quarantines were simultaneously established in the ports where ships and sailors were to wait for 40 days (quaranta giorni) in which time their biological destinies would be revealed. Dubrovnik, today's Croatian town, was at medieval time under Venetian territory, and thus the scholars agree on the first *quarantine* and *Lazaretto* to be established in Dubrovnik, while Venice itself had this established in 1403 (26 years after the one established on the island of Mljet, outside the post city of Dubrovnik) (Armstrong, 2016, p. 169.).

<sup>7</sup> The original analysed document is entitled *Libro degli Signori Chazamorbi* containing a rare health record of the plague epidemic in 1526-27.

<sup>8</sup> A balance against a to idealistic portrayal of these maritime quarantine negotiation times can be sought in the work of Chirp and Martinez (2018, pp. 14, 120, 242, 258)

# OBLIGATORY CONCLUSIONS: (COMPROMISED) KNOWLEDGE VS. PEOPLE'S LIFE'S ABOVE ALL

We testify of times in which the honour of medical work or any other medical service has nothing to do with upholding populational health and the strength of a global populace9. These times can be extended into the prior twenty years of contemplating over the trios of "economic productivity", "national security" and emerging infectious disease programmes sought in First World countries (Bashford & Hooker, 2001, pp. 2.). As a populace, we were long ago all sought under the terms of "tested", "vaccinated", "contagious" or "non-contagious" while in the superb 21st century of possibilities - from molecular, highly technological to robotic innovativeness — protection lags behind, forgetting to take into account the (not only biological) resistance of local communities (Lynteris & Poleykett, 2018, pp. 434-436). It all falls into the choreography of evolutionary factors of strong genes and beneficial environments. Could that be the reason why the island of Vis, with one of its greatest bat species sources in Europe<sup>10</sup>, regardless of them being the proclaimed vectors of the virus (Zhou et al., 2020), is not more seriously hit with outbreaks of Covid-19? Some seemingly unscientific answers come into play where the immunity of the 21st century Mediterranean Croatia is equal to that of the 14th century one — with or without Chazamorbi, positive thinking and solidarity boosting, but always without a serious quarantine. Or perhaps "the contagion" is not what a "contagion was", back then. Today's definitions have less to do with the statistics and are more in sinc with the open world global trade, while those who die are (evolutionary) predictable by the standards of growing numbers which become uncountable with every day worse than the day before. Yet the isolation of the ill stays an uncontrollable factor, while posh journalism seems to overlook the issues of ethics and morality 11. For all the reasons pointed out through this analysis, Croatia and the whole Mediterranean with the long forgotten Global South are places (not only spaces) where equations never work. Primarily in the context of the beneficial factors from which immunities are strengthened and given by birth — sun, air and salt water, or expressed as scientific jargon, trans-genetically and epigenetically passed on forming an immunitywise strong population genome of the country. Scientific or not, this type of reasoning is now fully concordant with the seriousness of wax and wane rigors of global recommendations, and totally in line with one of Croatia's leading expert on molecular biology and forensics, instructions — "Vitamin D is crucial, we should spend more times

**<sup>9</sup>** Here the *Hippocrates Oath* is omitted on purpose, since although a frequent synonym for ethical medical standards it is partly discriminatory, but its referees obviously cite it by words of mouth rather than reading and studying it.

<sup>10</sup> In the local Komiža dialect of the island of Vis the bat is called "half of a mouse, half moth" — "Pul-miša-pul-matopira" (Mardešić Centin, 1977 p. 298).

<sup>11</sup> For such a journalistically simplistic text on the matter of infectious diseases see Spinney, 2017.

outdoors" (Primorac, 2020) — all fortifying the importance of old Croatian wisdoms. Even if not abiding by old historical knowledges and traditions but certainly in genes, the environment and God we trust (discerning from the one on the US dollar syntagm).

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## CULTURE AND NUTRITION: MULTIPLE CONNECTIONS BETWEEN THE MEDITERRANEAN DIET AND AGEING

#### Abstract

Food and food practices are deeply immersed in a complex world of discourses, material and symbolic relations, networks of un/written norms and rules, systems of meaning, taboos, customs, social distinctions, policies, globalization processes and so forth. Food policy and dietary guidelines are an area of disciplining and regulating behavior of the population (Falbe & Nestle, 2009). The Mediterranean diet plays an important role as the normative dietary model. From a biomedical viewpoint, the Mediterranean diet is one of the healthiest diets. From the standpoint of the social sciences and humanities, the idea and the concept of the "Mediterranean diet" are problematic in many ways. In recent decades, the discourse of healthy eating has begun to partially overlap with the discourse of active-successful-healthy aging, where healthy eating and aging need to be considered contextually and intersectionally, in more critical and reflexive categories (Katz, 2013).

Keywords: food, Mediterranean diet, biomedical construct, critical perspective, ageing

# WHY IS FOOD IMPORTANT FOR THE SOCIAL SCIENCES AND HUMANITIES?

One of the unquestionable facts is that all living beings must eat to ensure physical survival. But food cannot be reduced to nutrients and calories, nor can its functions be reduced to ensuring mere survival. Food is a multidimensional phenomenon in which physiological, social, symbolic and psychological aspects are intertwined in complex, often contradictory ways (Holtzman, 2006). In this paper, we understand food as a (primarily Western) cultural construct, being fully aware of all the limitations of this approach, if we look at it from an anthropological perspective (Holtzman, 2006).

Meal preparation and food consumption are practices that have connected nature and culture in incredible and creative ways for thousands of years. In this sense, food is becoming an inspiring topic and a stimulating research area, calling for interdisciplinary collaborations and exchanges of knowledge, ideas and experiences across all terminological, conceptual, methodological and other boundaries (Germov & Williams, 2009a). Thus, on the territory of 'Food Studies', anthropology, history, ethnology, sociology, culinary science and literature meet (Holtzman 2006), but also biomedical sciences and public health.

Observing food, cooking and food consumption from the perspective of the social sciences and humanities, we can see that it is deeply immersed in a complex world of discourses, material and symbolic relations, networks of (un)written norms and rules, systems of meaning, taboos, customs, social distinctions, policies, globalization processes and so forth.

Food policy and dietary guidelines form a large area of disciplining and regulating population behavior. These policies and guidelines are influenced, on the one hand, by economic pressures and, on the other, by scientific trends (Falbe & Nestle, 2009). This disciplining and regulating are carried out in order to prevent chronic diseases and promote psychophysical health and are performed in the form of "statements of recommendations for the way in which populations are advised to alter their food habits" (Germov & Williams, 2009b, p. 13; see also Falbe & Nestle 2009, p. 128). In this context, in recent decades, the Mediterranean diet has played an important role as the normative dietary model — especially when it comes to older people. This becomes even more important if we keep in mind the global affirmation of the discourse of active-successful-healthy ageing, which raises numerous sociological and anthropological questions.

# FOOD AND HEALTH/DISEASE: MEDITERRANEAN DIET AS A BIOMEDICAL CONSTRUCT

Since the 1960s, thanks to the "Seven Countries Study", a major project led by Harvard physiologist Ancel Keys, the Mediterranean diet has been recognized as "one of the healthiest diet patterns to follow" (Roman-Viñas & Serra-Majem, 2014, p. 69) and as "an evidence-based biomedical model for healthy eating, a paradigm for healthier lifestyles and an effective tool for weight loss" (Phull, 2015, p. 35). By the Mediterranean diet, Keys meant "the food habits of some populations in the Mediterranean area" (Contaldo, Pasanisi & Mancini, 2003, p. 117), or, more precisely, the diets that were typical of the island of Crete in the early 1960s, the biggest part of the Greek mainland territory and southern Italy (Plastina, 2016, p. 204). From a medical point of view, it is a functional and "healthy isoenergetic diet, with a large variety of foods, mostly of vegetable origin rather than animal" (Contaldo, Pasanisi & Mancini, 2003, p. 118). In addition, Contaldo, Pasanisi and Mancini (2003) point out that the earliest description of this type of diet included emphasizing the importance of physical activity, which is especially emphasized in recent recommendations to "overweight middle-aged people" (p. 118).

The traditional Mediterranean diet involves some common food items in the nutrition systems in the Mediterranean countries (Dernini & Berry, 2015): olive oil and olives; fruits and vegetables; (mostly unrefined) cereals; nuts and legumes; moderate amounts of fish and dairy products; low consumption of meat and meat products; wine consumption — if it is in accordance with socio-cultural, more precisely special religious norms.

The Mediterranean diet is commonly popularized by the famous representation of the pyramid (Mediterranean diet pyramid), by which experts suggest the most important elements and essential structural relationships within such a diet. That pyramid was revised again in 2009/2010, and this revision boils down to two elements (Dernini & Berry, 2015, p. 2): 1) it is "simplified" to be applicable in different geographical and cultural contexts, with particular emphasis on "frugality and moderation"; 2) the idea of sustainability was introduced by suggesting eco-friendly products, locally produced food and biodiverse conservation. Due to its high nutritional values, but also because of its "environmental, economic, and socio-cultural dimensions", the Mediterranean diet is cited as an example of "sustainable diets" (Dernini & Berry, 2015, p. 2).

#### A CRITICAL REVIEW OF THE MEDITERRANEAN DIET

However, the idea of the "Mediterranean diet" is problematic in many ways, as pointed out by many scientists in the social sciences and humanities, who have criticized reductionism and cultural blindness that characterize a strictly biomedical-nutritional perspective. These critics insist on introducing a socio-cultural perspective into the research, the presentation and promotion of Mediterranean food traditions and habits. For example, González Turmo (2012, p. 116) points out that the term "the Mediterranean Diet" is derived from the Greek word dßaita, which means "way of life, connection between the spirit, the body and the surrounding environment". Therefore, this is not exclusively a nutritional but a broader socio-cultural phenomenon, which includes: "food production, marketing, consumption, conviviality, ritual and symbology of the Mediterranean, as well as Mediterranean cuisines and foods" (González Turmo, 2012, p. 116). Thus, the Mediterranean diet encompasses all those practices that have historically been established around food and nutrition, forming a complex whole that needs to be viewed integrally, in its entirety (González Turmo, 2012, p. 116).

Surinder Phull (2015, pp. 35-37) convincingly pointed out the key problems related to the term "Mediterranean":

This is a biomedical concept and generic model of nutrition (Phull, 2015), which is extremely problematic from an anthropological perspective because it connects (in one definition) very different diets from a geographically large and culturally heterogeneous area (Contaldo, Pasanisi & Mancini, 2003, p. 117);

- b It is about a "mythical American construct" that mirrors American "dietary guidelines", ideals and "economic limitations in the 1950s and 1960s" (Phull, 2015, p. 36);
- c It is about "an American invention" of regional nutrition and the construction of an idealized regional identity through representations of the Mediterranean diet on web portals, in advertisements, on blogs, and so forth "from an outsider's perspective" (Phull, 2015, p. 36);
- d The term "Mediterranean diet" is a homogenizing umbrella term that covers geographically wide, distant and culturally diverse areas (Contaldo, Pasanisi and Mancini, 2003). Dernini and Berry (2015, p. 1) point out that the Mediterranean diet is a system that represents a "particular historical and environmental mosaic", so in fact there is no "one single Mediterranean diet" but different variations not only in diet but also in "cultural expressions of different Mediterranean food cultures and lifestyles". In addition, the existence of permanent historical intercultural dissemination, exchange, takeover, adaptation of food between countries in this geographical area should be taken into account (González Turmo, 2012, p. 117).
- e Some nutritional experts point to the Eurocentric "geographical parameters of the diet" (for example, the Northern Italy diet does not fully fit into the Mediterrane-an diet model, and both the French and Croatian diets are only partially compatible with this dietary model) (Phull, 2015, p. 36);
- f The indisputable fact that changes in diet and eating patterns are always part of broader social changes (Holtzman, 2006) is convincingly confirmed in Mediterranean countries as well. Globalized food production and distribution, as well as numerous social, cultural and economic changes, have influenced the westernization of food patterns and the abandonment of traditional food in the Mediterranean area. This is confirmed, among other things, by the high percentage of malnourished, on the one hand, and overweight and obese, on the other, in the Mediterranean area as well as widespread chronic diseases associated with inadequate nutrition (Phull, 2015, p. 37; see Contaldo, Pasanisi & Mancini, 2003; see Dernini & Berry, 2015). There is no doubt that this is, at least in part, a consequence of the difference in price between the foods recommended by the pyramid of the Mediterranean diet and those cheaper food products offered in retail chains (Phull, 2015; Dernini & Berry, 2015). This socio-economic turn is sociologically very interesting also because the foods on the traditional "Mediterranean" table were once perceived as food for the poor (Phull, 2015).

This catalog of problems and conceptual challenges associated with the "Mediterranean diet" raises some more important questions (Phull, 2015). We will only mention them here. Problems are also created by doubts produced by differences in professional and lay definitions of the Mediterranean diet, but perhaps one of the most important

questions is whether the positive health effects of the Mediterranean diet could be reduced exclusively to nutrients (and more modest caloric intake) or they should include broader environmental and socio-cultural aspects, such as the daily preparation of meals from locally grown and fresh food and spices, traditional recipes, seasonal nutririon, the practice of the 'slow food' doctrine, lifestyle, strong social network of the local community and so forth (see Phull, 2015)? All these questions become even more interesting and challenging if we include the dimension of aging in the analysis.

#### OLDER PERSONS, NEW PARADIGME OF AGEING AND THE MEDITERRANEAN DIET

The idea of close links between food and health/disease is almost a cultural universalia present in all world cultures (Sikkink, 2009), but nutritional discourse and the discourse of healthy eating emerged only in the last century. Within these discourses, the Mediterranean diet has been given special significance and given an important position and status of global cultural heritage (Plastina, 2016; Abbamonte & Cavaliere, 2016; González Turmo, 2012). Anthropological, ethnological and sociological research has indicated the dissolution of traditional eating styles and meal preparation patterns, which is an inevitable consequence of broader modernization processes and changes that have, among other things, established a culture of the consumption of fast food, industrially processed food, and 'take out' meals (Fox, 2014). However, in recent decades, the discourse of healthy eating has begun to partially overlap with the discourse of active-successful-healthy aging, trying to popularize "the conspicuous consumption of food" through public health programs (Fox, 2014, p. 4) among the older population as well. Older people face a number of food and nutrition problems that are most often considered and presented in biological terms, but without taking into account social, cultural and economic factors, which need to be kept in mind if deeper insights are to be gained (McIntosh & Kubena, 2009; Burns, 2009).

There is no doubt that the topics of active aging, healthy eating and the Mediterranean diet open up a lot of inspiring questions for both theoretical and empirical research. In this sense, the need for thorough, comprehensive field research based on innovative and classical qualitative methods should certainly be emphasized. Here we will briefly review the insights of existing research.

A number of biomedical studies have found that the "Mediterranean diet does promote healthy aging", but some other research points to general difficulties that older people mention as reasons why they do not implement new eating habits (Health Europe, 2020). For example, "certain older people may have dental problems and/or difficulty swallowing, meaning that eating a Mediterranean diet may be largely impractical" (Health Europe, 2020).

But if we look at lifelong eating styles — as well as aging — from sociological and anthropological points of view, medical recommendations for healthy, active aging and healthy eating show their other, no less important, face. Namely, they are transformed into normative, disciplining and moral discourses, which a part of the elderly population cannot or does not want to internalize due to various class, socio-economic, identity, worldview, psychological, health and other reasons. There are many factors that can lead to such resistance (McIntosh & Kubena, 2009, pp. 311-319): low income, general poverty, "unhealthy" lifestyles, other eating habits [preferring local cuisine, not consuming fish], depression, (im)mobility, ability or inability to cook, loneliness, resignation, dysfunctional social relations, lack of social network and support for obtaining food, unavailability of "Mediterranean" food, physical isolation and so forth. Following critical theory, it is necessary to think about this issue contextually and intersectionally, in more critical and reflective categories (Katz, 2013, pp. 53-54; Calasanti & Slevin, 2001). Researchers are bound by important and unavoidable questions: "What constitutes good health and well-being for older adults?" (Sadana et al., 2016, p. 180). And, what is the relationship between the discourses of healthy aging, that is, the Mediterranean diet as a prescribed model of the ideal diet, with the real lives of older people?

It should be stressed that the paradigm of healthy (we will add: active and successful aging) — to some extent — represents "a positive shift, which responds to a deficit model of aging based on disengagement and dependence (Townsend, 1981), and to problems of aging and neglect" (Stephens, Breheny & Mansvelt, 2015, p. 716) because it challenges ageism and traditional stereotyping narratives about aging as decay. However, the idealization of active-successful-healthy aging and the model of a healthy (Mediterranean) diet associated with it, contains elements of oppression, which can have multiple negative effects (Stephens, Breheny & Mansvelt, 2015). Many critically oriented authors — Stephens, Breheny and Mansvelt (2015), Katz (2013), Sadana et al., (2016), Sandberg (2013) and Hasmanová Marhanková (2011) — point out that these discourses homogenize the older population, by constructing a flat picture of aging and experiences of aging without respect for important social categories, privileges-deprivations and power relations. These important factors include, for example, socio-economic status, residential status, age, gender, health status, chronic diseases, disability and so forth (McIntosh & Kubena, 2009). Gilbert and Powell (2005 according to Stephens, Breheny & Mansvelt, 2015, p. 716) emphasize that "older people construct their identity on the basis of dominant discourses" which form a definition and notion of "what it means to be an older person at any particular time" (Townsend, 1986 according to Stephens, Breheny & Mansvelt, 2015, p. 716). The precise answer to the question of what it exactly means to be an older person is defined by a socio-cultural construct, which inevitably changes over time because it crucially depends on changing living conditions and experiences of life and one's own health — from the position of the older persons themselves (Stephens, Breheny & Mansvelt, 2015; Cole & Ray, 2010; Calasanti & Slevin, 2001). It is not easy for older people to balance between social and cultural expectations of being healthy and successful, on the one hand, and their own experiences and all the challenges of real everyday life, on the other. Insisting on activities, healthy lifestyles, independence, and engagement in older people can cause comparisons of one's life with lives of others (or proclaimed ideals), which in turn can result in frustration, low self-esteem, feelings of inadequacy, failure, and dissatisfaction (Hasmanová Marhanková, 2011).

The discourse of active-successful-healthy aging constructs a new "pedagogy of aging" (Marshall & Rahman, 2014), which includes greater awareness of healthier eating, with dietary style and food decisions understood as a kind of moral obligation, both to oneself and to the system. The discourses of active-successful-healthy aging and healthy nutrition are largely complementary to neoliberal ideology, which maximizes the virtues of neoliberal economic ideology and self-management policies ideology — in this context, the imperatives of individual responsibility, self-control and individual self-care stand out (Katz, 2013). Thus, the system expects that the primary responsibility for one's own health and quality of life in old age should be taken by the elderly themselves, in order to reduce the consumption of social resources and social support (Stephens, Breheny & Mansvelt, 2015). It is exactly in this context that the adoption of healthy lifestyles, following the recommendations of doctors, regular medical examinations, healthy eating, social engagement and maintenance of social networks, are presented as key factors for living a quality life. For example, in the new gerontology or a model of successful aging — such as the one developed by John Rowe and Robert Kahn during the 1980s — lifestyle has been reduced to exercise and diet choices and the imperative of non-smoking, with particular emphasis on the importance of personal control (Katz, 2013). Such models of active and successful aging neglect "social constraint and historical contingency" and the necessity of sociological studies and lifestyle considerations (which, of course, includes food-related choices) (Katz, 2013, p. 53). Diet and lifestyle patterns, as well as health status in later life, are influenced by privileges, discrimination and inequalities (related to gender, class, health, education, living conditions, working conditions), social and professional circumstances, life chances — all that accumulates during life preceding old age (Grundy et al., 2013, according to Sadana et al., 2016, pp. 179-180; Katz, 2013; Calasanti & Slevin, 2001). We must also not forget that many older people who have significantly reduced incomes when they leave the labor market and retire, become marginalized in many ways and have to deal with an increased risk of poverty. That is why active-successful-healthy aging cannot be based solely on lifestyle choices but should take into account broader environmental and structural relationships (Katz, 2013). Due to social and economic reasons and their psycho-physical condition, not all older people can live actively and independently, in accordance with the rigorous requirements of the new discourses of aging and nutrition (Stephens, Breheny & Mansvelt, 2015). Taking

these indisputable facts into account helps us to see more clearly that the discourse of active-successful-healthy aging is exclusivist — it can only be satisfied by "an elite minority" (Stephens, Breheny & Mansvelt, 2015, p. 717). From all this follows the conclusion that defining healthy aging as primarily an individual achievement and the consequence of an individual's correct choices and decisions (related to food, activity, selfcare, etc.) represents a sociologically very problematic position (see Stephens, Breheny & Mansvelt, 2015, p. 718).

Finally, it is worth mentioning the anthropological argument, which claims that theories, assumptions, categories, policies and strategies of active-successful-healthy aging (which includes suggesting the Mediterranean diet as a global food panacea) are primarily oriented to Western countries and well-educated middle class older people. Therefore, more inclusive and flexible definitions of good health and good nutrition in old age are urgently needed. For only such definitions, open to the enormous diversity that characterizes the lives of older people across the globe, will serve as a quality basis for creating more sensitive and inclusive public policies focused on the real needs of older people (Sadana et al., 2016).

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# ČIOVO ISLAND RESIDENTS' SELF-ASSESSMENT OF DIALECT STIGMATIZATION AND THE INFLUENCE OF INFORMAL LEARNING ON THE PRESERVATION OF CULTURAL IDENTITY

#### Abstract

Stigmatization of dialects entails the language forms that are negatively evaluated by society. On the island of Čiovo, especially Okrug Gornji, the linguistic identity of the inhabitants has changed significantly in the last 30 years (especially after the Civil War). That begs the question whether the inhabitants who speak the so-called "regional" dialect experience discrimination during its use, that is, whether the value of judgement toward the dialect changes in a way that disrupts the cultural identity of a locality. What is the role of informal learning that arises from experience and the influence of society on the attitude, knowledge, and ability of an individual? This paper will attempt to give an answer to the problem question of what effect informal learning has on the preservation of cultural identity, as well as give an overview of the data regarding the perceptions of the residents of the island of Čiovo on the influence of language identity change on the dialect of its residents. The research will be conducted in the period from January to the end of March 2020. A questionnaire will be used as the research instrument. The representative sample will include the residents of Okrug Gornji, aged 25 to 65. This research paper should make a contribution to this topic in a theoretical and practical sense. By elaborating on the theory and its empirical counterpart, this paper could provide valuable insight into future research and indicate an increasing need for research on the topic of dialect stigmatization and its purposeful connection to informal learning as a possible preventive measure aimed at preserving cultural identity, since by protecting language, all customs, habits, knowledge and abilities, performance and expression, instruments and handicrafts are protected, as are the behaviors with which the people and the community grow and live.

Keywords: Dialect stigmatization, informal learning, globalization, cultural identity, values

The concept of identity is complex and dynamic on the one hand, but also static and common on the other. Discussions about the content, characteristics and importance of identity are ongoing at all levels, from global and national to local and private. We live

in a time of identity crisis in which ideas about "us" and "others" are being re-reflected (Spolsky, 2015) Language, culture and identity are key concepts within every community. Encounters and relationships with other people make us think about who we are, what we belong to and how we differ from others (Trudgill, 1995). These identities are complex and dynamic, they change over time and are weighed against each other anew in every situation (Spolsky, 2015). Interaction with others activates social identity, while personal identity becomes less dominant. This does not mean the disappearance of personal identity, but rather reticent personal reactions. The activation of social identity offers the possibility of creating a new, collective group identity. The role of context in constructing identity must be considered. Since identity is constructed through experiencing diversity, the juxtaposition between "us" and "others" is relevant in constructing identity (Hall, 2000). The languages of the environment provide the framework in which an individual assesses, uses and develops his language skills. Above all, the possibilities of use, the position and appreciation of different languages and their mutual relationships in a society are decisive. A language cannot be clearly defined at all because a language is changing all the time. Depending on the context, a language takes on new forms, and each language contains a multitude of dialects, idioms, texts and discourses. Because of their dynamic nature, a spectrum of identities arises under the influence of language. Therefore, a common language does not directly mean a common identity. Rather, various socio-cultural aspects, including, for example, communities, politics, religion and linguistic competence are decisive in the development of a linguistic identity (Labov, 2001).

# THE ROLE OF DIALECT AND CULTURE IN BUILDING IDENTITY AND INFORMAL LEARNING

A negative linguistic identity is linked to the underestimation of self-image, which again easily results in poor foreign language skills. Newcomers to the island of Čiovo (Okrug Gornji) have not been around for too long, but the identity issues of the children and grandchildren of a newcomer are an increasingly important issue in Croatian-Dalmatian society. Questions like: Which factors influence the preservation or disappearance of one of the "Okruški" dialects in the new environment?; Can cultural identity (including certain linguistic and national stereotypes) exist at all without connection with the corresponding language?; If so, in what way? Therefore, another question is raised: Are we looking for a linguistic balance? A dialect is identity-creating and something like a mobile home that you can take with you (Pavlov, 2003; Cifrić, 2014). There is neither total equality nor complete functional equivalence of languages in multilingual contexts, since such an equivalence would of course automatically make multilingualism superfluous (Gee, 2012; Spolsky, 2015). The question of whether the standard dialect situation disadvantages the residents of the island of Čiovo, since they have to learn

two languages at the same time, must certainly be kept in mind. So in many schools there is language maintenance. School is based on communication and is therefore an ideal social environment for dealing with language (Bourdieu, 1992). Are dialects in schools considered to be a friend or a foe? Dialects and school have been more or less a topical issue in EU countries for decades since dialects play a formative role in the identity of many children, this aspect is inevitable in a country with a large number of distinctive dialectal varieties at the moment of particular importance when children become pupils (Gee, 2012; Spolsky, 2015; Jelaska, 2005). The Chakavian speakers of the island of Čiovo retained their local dialectal and spoken features<sup>1</sup>.

When we talk about learning, learning processes or learning successes, we mainly mean the (formal) context of learning in school. This is a very limited, albeit significant, share in learning. Much of the knowledge and competence is acquired in other extracurricular contexts.2 "Informal learning is a natural accompanying phenomenon of everyday life" (Commission of the European Communities 2001, p.9). Informal learning, for example, consists of: observing, trying out, reading, using the media, hospice, practice, visiting trade fairs, exchanging and consulting (Hager & Haliday, 2006). This implies informal learning in the context of continuing education, but also a means of preserving the dialect in order to preserve cultural identity. The stigmatization of dialects means that these language forms are negatively assessed in society. On the island of Čiovo, especially in Okrug Gornji, the linguistic identity of the population has changed significantly in the past thirty years (especially after the Homeland War). The question is whether the residents who speak the Okrug-Island dialect experience discrimination in its use, that is, whether value attitudes towards the dialect change in a way that violates the cultural identity of its place. What is the role of informal learning arising from the experience and influence of society on individual attitudes, knowledge and skills? According to the Central Bureau of Statistics of Croatia, 0.7% of the population of the Split-Dalmatia County are inhabitants of the Okrug municipality, this number has been increasing in the last 20 years with the number of inhabitants (according

<sup>1</sup> The idioms of the Chakavian dialect are spoken mostly on the Croatian islands from Lastovo and Korčula to Krk. The exceptions are the Shtokavian dialects on Korčula (Račišće), Hvar (Sućuraj), Brač (Sumartin) and on Šolta (Maslinica). Čakavski is also in the Croatian part of Istria, with the exception of the Štokavian town of Peroj. The Dalmatian coastal area from Privlaka and Novigrad near Zadar to the Cetina is mostly Chakavian, but many speak Štokavian: Nin, Zaton, Sveti Petar (formerly Krmčina), Pirovac, Šibenik and surroundings, Seget and some others. Today, Split is dominated by Shtokavians and Ikavians, while Chakavians used to predominate. Zapadni Pelješac (Lovište, Kučište, Viganj, Orebić, Trpanj, Kuna, Pijavičino, Potomje) can also be included in the Chakavian dialect, although in most of these places the share of Shtokavism is very significant, and so it is elsewhere, e.g. on some islands (e.g. on the south island of Pag) (Kapović, 2004; Jelaska, 2005).

 $<sup>{\</sup>color{red}^2} \ file: \ /C:/Users/HP/AppData/Local/Temp/informalno\%20i\%20neformalno\%20ucenje\%20giz.pdf$ 

to the 2011 census) being 3349, with the location area of  $13.65~\rm{km^2}$  and population density of 250 inhabitants/km.

#### **METHOD**

#### Problem - Research Question

The research of attitudes towards dialects also contains questions related to attitudes that are closely related to the feeling of attachment to the community and to the future of dialects. Regarding the future of these language varieties, the question was whether the survival of the dialect is important, that is, how informal learning affects the preserved cultural identity as well as providing data on the perception of the inhabitants of the Čiovo peninsula of the impact of the change of language identity on the dialect.

#### Procedure, Sample and Instrument

The research study was conducted with a suitable sample<sup>3</sup> of 460 respondents with an average age of 42 (SD = 1.86), among which there were 58.3% male participants and 41.7% female participants, residents of the island of Čiovo, Okrug municipality. The survey was conducted in the period from January to the end of April 2020. An online survey questionnaire (23 questions) was used as the research instrument. The sample of respondents included residents of Okrug Gornji aged 25 to 52 years. All respondents participated in an online questionnaire that contained tasks related to checking both Chakavian district dialects. It is important to note that the online questionnaire has tasks designed in different ways to encourage different forms of thinking; rounding, supplementing, researching the text, tasks with open-ended questions and answers, and tasks of self-forming sentences and shorter text. A questionnaire on attitudes towards the dialect was also conducted, which contained open-ended questions, supplementation and assessment on a five-point Likert scale. The following variables were set in the survey: the results of the online questionnaire with regard to the length and type of stay (newcomers and natives), with regard to origin, the results of self-assessment with regard to respondents' attitudes towards the dialect, with regard to respondents' attitudes about the role of informal learning and with regard to respondents' self-assessment of the metalinguistic awareness of the Okrug dialect. Based on these variables, a statistical analysis was made in the SPSS program for statistics. The HI-square test was used to check whether there was a statistically significant influence of (non)dependent variables. Based on these variables, a statistical analysis was made in the SPSS program for statistics by non-parametric methods since it is an abnormal distribution of data, and the following were used: Cramare's correlation coefficient and the method of phonological memory were used in the online questionnaire to identify individual (Chakavi-

<sup>3</sup> Note: due to the COVID-19 pandemic at the time the research was conducted, elderly participants were not included in the study as it was originally planned.

an) dialect and its recognition of words with the standard Croatian language. Phonological memory as a method; Reid (2009) states that phonological memory refers to the phonological coding of information for temporary storage in working or short-term memory. This coding is also commonly referred to as the phonological loop (Baddeley, 1986; Torgesen, 1996). Difficulties in this area can reduce opportunities to learn new material. Wagner et al. (1999 as cited in Reid, 2009) point out that this is especially important when decoding new words, especially polysemous, and is most often used to examine the meaning of a dialect. Phonological memory is therefore determined in terms of storing or recalling verbal information. Thus, the method of developing phonological awareness (Goswami, 2002) was used: awareness of words (separates sentences into words), syllables (separates polyphonic words into syllables) and awareness of onset (separates the first part of a word from the rest; connects the first part of the word with the rest of the word) according to the scale: shallow and deep awareness in the range of points from 0-10 (Gillon, 2004).

#### Research Results

**Table 1** — Data Presentation by Place of Birth (Source: authors)

Carrature of brindle	Ε 9/
Country of birth	F %
Croatia	71
B&H	24
Germany	4
Austria	0.5
Sweden	0.5
N	100%

Table 1 indicates that most respondents were born in Croatia, that is, 71% (M = 1.05, SD = 0.85), and in Bosnia and Herzegovina 24% (M = 0.15, SD = 1, 15).

Table 2 — Presentation of Respondents' Data on the Length of Stay-Residence in the Municipality of Okrug (Source: authors)

Length of stay	F %
5 to 17 years	4%
17 - 20 years	11%
20- 28 years	36%
28 - 36 years	28%
36-42 years	21%
N	100%

Table 2 indicates that most respondents have been living in the municipality 20-28 years in terms of the variable length of stay, that is, 36% (M = 1.25, SD = 0.52), then between 28-36 years — 28% (M = 0.25, SD = 1.52).

Table 3 — Respondents' Answers on The Type of Residence in the Municipality of Okrug (Source: authors)

Type of stay	F %
Natives	50
Newcomer	44.4
The rest - I don't know	5.6
N	100%

Table 3 indicates that mostly natives live on the island of Čiovo, that is, 50% (M = 1.25, SD = 0.52), then newcomers 44.4% (M = 0.25, SD = 1, 52).

**Table 4** — Respondents' Opinion on the Introduction and Integration of Dialects in Educational Work (Source: authors)

f the respondents / Answers find that unnecessary.	
think it should be optional.	
ery positive. Preserving speech and customs as they are like pearls.	
legative.	
xtremely positive.	
consider it a part of the legacy that should be nurtured and which stroduced to children.	should be
ad.	
is not necessary.	
support it.	
hat should be mandatory.	
My position is approval.	
is necessary to preserve the dialect at least in addition to school or	similar.
gainst the introduction.	
just sometimes use some words in the dialect.	
believe that children need to know the words from their speaking a nd that the same enriches their vocabulary and expression.	rea
he dialect can only be an obstacle in learning Croatian language.	
ne dialect should be nurtured in order to preserve cultural values.	
rialect is necessary.	

Table 5 — Respondents' Opinion on Ways to Enrich Their or Their Child's Acquisition of Words and/or Concepts (Source: authors)

### Respondents' opinions — the most frequent answers of the respondents /Answers

Conversation: I speak rarely to my children in the old Okruška pronunciation because that pronunciation is used less and less.

In association with the native speakers of the dialect.

By learning.

Internet — Conversation with locals and literature that contains Okruška words and expressions (Okruški ričnik).

Let the children talk together without correcting them.

Everyday speech.

Communicating with older family members.

Talking at home.

Talking okruški.

Through family relationships, relationships with other residents, Okruški kartolina, Facebook group Okruški Škafetin.

Constant use of the dialect in everyday conversation.

By forcing Chakavian into everyday speech and life.

I remember and tell them how some words or concepts were uttered and spoken by our ancestors.

By retelling some events.

By reading, talking.

The child's father is a native and he interprets words from this area.

Table 6 — Presentation of Respondents' Data on Participation in Cultural Events (Source: authors)

Participation in cultural events	F %	
Always	6%	
Very often	10%	
Sometimes	64%	
Rarely	15%	
Never	5%	
N	100%	

Table 6 indicates that 64% of respondents (M = 1.58, SD = 0.45) participate in cultural events, while only 6% (M = 1.22, SD = 0.78) believe that they always participate at cultural events, which are often a symbol of maintaining the cultural values of a place.

Participation in cultural events	Pearson's coefficient (r)	Country of birth	Length of stay	Type of stay
sometimes	Pearson Coefficient Probability / significance	1.00		
very often	Pearson Coefficient Probability / significance	* 0.62 0.00	1.00	
rarely	Pearson Coefficient Probability / significance	0.25 0.1 <i>7</i>	* 0.62 0.00	1.00

**Table 7** — Interpretation of Correlation Coefficient Values (Source: authors)

The correlation between the isolated two particles (very often and rarely) indicates certain significance at the level of 0.00. From this we can conclude that the length of stay on the frequency sometimes (participation in cultural events) and on the frequency rarely (r = 0.62, P = 0.00 — moderate to good connection between the dimensions) that there is a positive correlation between the length of stay and the type of stay. A moderate to good correlation t can be seen (r = 0.62, P = 0.00), which means that respondents who stay longer and who are natives of the island of Čiovo more often participate in cultural events.

**Table 8** — Opinions of Newcomer Respondents and/or Non-Speakers of the District Dialect on the Reaction to Residents Who Use the District Dialect (Source: authors)

Some like it	, and some even find it an unacceptable excuse.
	s from B&H do not understand them and are surprised, newcomers from ostly understand, but the dialect is slowly disappearing as the old die.
They don't u	understand.
Normal.	
I do not kno	)W.
Objections of	due to misunderstanding but insist on the use of Čown« dialect.
With mocke	ery.
l am a newo	comer and I find the district dialect interesting and worth getting to
They have c	a hard time understanding them.
l don't know	about others, I personally look at it very positively, it's part of their identify
Most have a	a negative attitude.

Opinion of respondents	F %
Yes	68%
No	32%
N	100%

Table 9 indicates the data that 68% of respondents (M = 1.52, SD = 2.25) believe that the residents who speak the Okrug Peninsula dialect are discriminated against in its use. The responses to the question as to whether they consider that value attitudes towards the dialect change in a way that violates the cultural identity of their place were analysed and the data is presented in Table 10.

**Table 10** — Respondents' Opinion on the Violation of Cultural Identity (Source: authors)

Opinion of respondents	F %
yes	46.9
no	37.5
I do not know	15.6
N	100

Table 10 indicates that 46.9% of respondents are of the opinion (M = 1.65, SD = 1.45) that value attitudes towards the dialect change in a way that violates the cultural identity of the native place.

Table 11 — Opinion of Respondents on the Impact of Informal Learning on Dialect Preservation

Opinion of respondents	F %
Yes	59.4
I do not know	37.5
No	3.1
N	100

Table 11 indicates the data about possible preventive measures for the preservation of cultural identity (because by preserving the language, all customs are preserved), that is, holding a workshop, forum and so forth. Respondents' most frequent answers are: Workshops; Public discussions, performances at Okruška and so forth; Public discussions; Holding events that nurture the Okrug dialect; Publish newspapers in the dialect, news from the fish market, fairs, markets, sports and so forth; Through music and klapa singing; Everyday unrestrained use of dialect. For example, in the menus of all local restaurants list expressions from the Okrug dialect! Let this be a condition for a work permit; Separate newspaper on the topic of indigenous cultural values; District summer events; Establish a society to preserve the tradition in dance, song and language; Collecting cultural heritage in one place; Informal learning; Extracurricular activities and workshops; Kindergarten and school children should have a language lesson in the district dialect; Holding events with an emphasis on district speech; Publishing books in the dialect that use as many words as possible in everyday speech and make those available to guests ... support it financially; Through interactive social programs; Lots of it is in preserving the tradition; Find ways to preserve the dialect but also various other things related to the cultural heritage of the place (customs, objects...);

Include it in the present and pass it on to children and show it to guests; More education at school. (Source: authors)

Table 12 — Overview of Respondents' Opinions on the Help of Innovative Technologies in Combating the Stigmatization of the Okrug Dialect (Source: authors)

Opinion of respondents	F %
Yes	70.6%
Not	8.8%
I do not know	20.6%
Qa	100%

Table 12 indicates the respondents' opinion that 70.6% (M = 0.45, SD = 1.25) believe that innovative technologies can help combat the stigmatization of the native language, while the worrying data of 20.6% (M = 1, 69, SD = 0.25) is not sure, that is, they do not know. Can a future research problem regarding information-communication awareness, that is, digital literacy and its connection with informal learning be investigated here? The following analysis referred to the respondents' self-assessment and recognition of individual words of the native language and their meaning in the Croatian standard language.

**Table 13** — Respondents' Self-Assessment of the Recognition of Individual "Okruški" Dialect-Words and Their Meanings in Croatian Standard Language (Source: authors, the difference is significant at the level of p <0.05)

Dialectal awareness of the Chakavian word	Type of awareness	Scoring (range 1-10)	df	% (F)	Р
Shoulders	Shallow	2	2	23,184 th	, 008
(pleća)	awareness			most common	
Spine	Deep	6	2	5,002 th	, 000
(škina)	awareness			most common	
What	Deep	4	2	10,306 th	, 000
(ča)	awareness			most common	
	Shallow	2	2	9,318 th	, 000
(šotana)	awareness			most common	
Underwear	Deep	8	2	45,996 th	, 000
(mudante)	awareness			most common	
Pillow	Shallow	]	2	20,104 th	, 000
(blazina)	awareness			most common	
	Shallow	2	2	11,262 th	, 000
(ugota)	awareness			most common	
Nightstand	Deep	9	2	9,563 th	
(kantunal)	awareness			most common	, 000

Deep	9	2	11,692 th	, 000
awareness			most common	
Deep	7	2	16,632 th	, 000
awareness			most common	
Deep	7	2	26,623 th	, 000
awareness			most common	
Shallow	1	2	1,362 th	, 000
awareness			most common	
Shallow	1	2	4,625 th	, 000
awareness			most common	
Shallow	2	2	8,658 th	, 000
awareness			most common	
Deep	6	2	7,625 th	, 000
awareness			most common	
	awareness  Deep awareness  Deep awareness  Shallow awareness  Shallow awareness  Shallow awareness  Deep	awareness  Deep 7 awareness  Deep 7 awareness  Shallow 1 awareness  Shallow 1 awareness  Shallow 2 awareness  Deep 6	awareness         7         2           Deep awareness         7         2           Deep awareness         7         2           Shallow awareness         1         2           Shallow awareness         1         2           Shallow awareness         2         2           Deep 6         6         2	awareness         most common           Deep         7         2         16,632 th           awareness         most common           Deep         7         2         26,623 th           awareness         most common           Shallow         1         2         1,362 th           awareness         most common           Shallow         1         2         4,625 th           awareness         most common           Shallow         2         2         8,658 th           awareness         most common           Deep         6         2         7,625 th

The results show that a statistically significant difference between the groups exists on all variables (Table 13). Table 13 indicates that shallow awareness at the level of scoring of the arithmetic level M = 4.80 prevails among the respondents, which is actually very little.

Table 14 — Respondents' Opinion on the Role of Informal Learning Regarding the (Preservation) of the District Dialect (Source: authors)

#### Respondents' opinion — the most frequent answers from the respondents

First, the native speakers must make an effort to "stubbornly" keep their native grandfather's speech, and not to flatter the newcomers. Then, through socializing and working together, the dialect will become more understandable and acceptable to newcomers.

I am not educated enough.

From losing the dialect, that is, not falling into oblivion.

Mostly through family.

By talking about it to young people.

Various programs and additional hours in the dialect.

To establish a society.

I do not know.

In a way that older family members teach younger ones. Also, in the free time reading literature written in the dialect of the Čiovo speaking area.

Well, you said it yourself — to speak it during everyday activities, for example in the kitchen while lunch is being cooked.

Performances for children in the dialect... "Translation" of famous short plays into the dialect. Workshops, drama sections in kindergarten, school... Cultural and artistic societies should organize activities related to heritage.

Using it at home, or in individual workshops in kindergarten or school.

Through everyday communication.

I have no idea.

#### Differences and Correlations

A statistically significant correlation was obtained ( $\chi$ 2 = 137.12, df = 3, p < .05, Cramers V = .17) between indigenous respondents in relation to newcomers, where natives consider it very important that informal learning and new technologies help in combating the stigmatization of the dialect and thus help preserve the dialect and the cultural values. Furthermore, testing of statistical significance showed that the majority of respondents residing in the Okrug municipality for more than 20 years have a very good recognition of the Okrug dialect and compare it with the Croatian standard language in the context of meaning ( $\chi 2 = 147.12$ , df = 2, p < .05, Cramers V = .19) in relation to those respondents who have a registered residence less than 17 years, at the level of statistical significance less than 1% (p≤0.01). The calculated values of the correlation coefficient indicate a slight correlation between the place of birth of the respondents and the attitude towards the introduction and integration of dialects in educational work (r = 0.01, p≤.05) as well as the way in which respondents regard personal commitment and child language acquisition terms (r = 0.09, p≤.05). Therefore, those respondents who are natives of Croatia have a more positive attitude towards the integration of dialects into educational work in relation to those who indicated that their place of birth was outside the Republic of Croatia; also respondents who are born within the borders of Croatia have greater motivation to participate in cultural events which preserve the identity of the homeland. There was a statistically significant difference and a slight correlation between respondents who use digital media more frequently with regard to the importance of informal learning as a possible approach in combating dialect stigmatization ( $\chi 2 = 99.47$  df = 17, p < .05, Cramér  $_{\rm b}$  s V = .07).

Table 15 — Results of the Hi-Square Test with Regard to the Influence of the Informal Regarding the Preservation of the Okrug — Chakavian Dialect and Phonological Awareness (Source: authors)

hi-square	Phonological awareness	Value	df	p (significance)
χ2	Deep awareness	27.00	33	0.464
	Shallow awareness	19.79	27	0.922
Probability ratio	Deep awareness	28.88	28	0.367 the most common
	Shallow awareness	23.47	31	0.796 the most common

When investigating the influence and connection of the phonological awareness of the respondents on their general attitude towards the native language, the value  $\chi$ 248.43 was obtained, with 54 degrees of freedom (df = 54), which gives a critical value of  $\chi$ 2 = 49,335. Given that the obtained value is less than the critical value, with a significance of p = 0.642, we conclude that there is no statistically significant difference between the respondents with regard to their phonological awareness. Shallow awareness yielded a value of  $\chi$ 219.79, with 27 degrees of freedom and a significance of 0.796, concluding that there was no statistically significant difference between the deep

awareness of dialect recognition of a particular word and the significance of the influence of informal learning in preserving the native dialect. The hi-square test calculated whether there were statistically significant correlations between innovative technologies in combating stigmatization of the district dialect and length of stay on the island of Čiovo. A value of  $\chi 29.37$  was obtained, with 10 degrees of freedom and with a significance of 0.258.

#### CONCLUSION

Analyzing the respondents' answers according to the variable of recognizing certain Okruška words, it can be concluded that more frequent participation in various cultural events, such as Okruško ljeto and professional workshops such as an exhibition of old Okruška pictures can influence better recognition of certain words of the Okruška Chakavian dialect compared to those respondents who rarely participate. There was a statistically significant difference and a slight correlation between respondents who more often use the dialect in conversation with the opinion of respondents who very rarely use it in speech, given the recognition of certain old words and its comparison with the Croatian standard language which was to be expected ( $\chi 2 = 81.35$  df = 18, p <.05, Cramer b with V = .12). It can be concluded that it is very important to raise awareness of the importance of a meaningful connection with informal learning as a possible preventive measure for the (re)preservation of cultural identity, because preserving a language preserves customs, habits, knowledge and skills, performances and expressions, instruments and handicrafts, but also the behaviours with which people and the community grow up and live. It can be seen in the research that respondents who use only their native language in their free time (M = 61.67) have the most positive attitudes towards their native language, while those who use a mixture of the native and standard language (M = 54.04) have the most negative attitudes. Research has shown that speakers who do not use native idioms but predominantly standard idioms have more negative attitudes than respondents who use native idioms in their free time. Still, from the descriptive parameters, somewhat more negative attitudes of those respondents who were not born in Croatia as well as those who have the shortest length of stay, that is, less than five years, are visible. It turned out that the respondents who use only the standard language in their free time have more negative attitudes towards the native language in everyday life. Their answers about using the standard language in their free time must be taken with a grain of salt because no speaker has a standard or a native language, so it is unlikely that this group of respondents uses pure standard language without the admixture of their native language. The role of all educational actors (parents, peers, teachers) in choosing ways of learning that can be the main innovators in forming and motivating children for self-learning the district dialect, especially in preventing the ridicule of children at school during use, could be the topic for the next investigation! The diversity of languages and dialects represents the great

cultural wealth of Europe and represents the identity of the population that we need to preserve. Due to the process of social integration, migration and the development of technology, some dialects in EU countries are less and less used and there is a risk that they will disappear. It is a particularly big problem for those dialects that have no written traces or where there are very few and they are often professionally processed only thanks to the work of enthusiasts. "Days of the Croatian language" has been celebrated since 1997 with the goal to preserve the Croatian language and all its dialects and to familiarize the public with Croatia's rich Croatian linguistic heritage and history (Croatian Language Days are celebrated from March 11 to 17). One French linguist said that a dialect is only a language that has lost a battle, and a standard language only a dialect that has succeeded politically (Vinay, 1977). Each of us, teachers and parents should have a dialectal role in the upbringing and education of the future generation: a literary, linguistic and methodological role in order for all of us to survive in the fight against the stigmatization of the dialect and the preservation of cultural identity. However, in the work of such educational actors, native dictionaries and grammars are needed that would enable them to learn the speech of their students. Ignoring their speech would ignore part of their personality and thus influence the stigmatization of the native language which is an important factor in preserving the cultural identity of the island of Čiovo and the municipality of Okrug.

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# HISTORY GEOGRAPHY MIGRATION



Dora Medić: The sky in the sea

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# THE IMPACT OF THE VILLAGE ON THE ISLAND POPULATION AND THE HVAR STATUTE FROM THE 14th CENTURY

#### Abstract

Taking into account developmental policies based on island specificities, this paper explores available analyzes of the European Parliament's Smart Village Initiative for rural development, which focuses on islands, aims at environmentally sustainable agriculture, supports the survival of OPGs and the introduction of the food supply chain (digital single market with urban-rural connectivity, bio-economy, eco-innovation and precision agriculture). It compares with the analysis of the EU initiative "for clean energy on the islands", on the negative impact of wind farms on the biodiversity and landscape of the islands and freestanding solar power plants on land scarce, in light of Parliament's recommendations that subsidies remain the predominant way of financing EU projects with close cross — sectoral cooperation and dialogue with the local community on the use of natural resources. So, let's look back at the past. The second part of the paper will describe the provisions of the Hvar Statute related to agriculture, which were also valid for the Vis district. The agriculture of the island population was significant for life and existence, as evidenced by the Hvar Statute, which in several provisions addresses the issues of agriculture in Hvar and Vis. The paper will begin by examining the issue of the landscaping of agricultural land, keepers of Hvar and Vis fields, grazing livestock, exporting gram from Hvar and its district, field borders, and harvesting and damages will also be discussed.

Keywords: EU Initiatives, island specificities, sustainable agriculture, local community, Hvar Statute

The islands have functioned as independent and self-sufficient for centuries, relying on their own resources, and today they are dependent on the mainland for transport, water and electricity, food and medicine, education for children and youth, employment, health care and so forth. Modernization and exposure to outside island influences bring about lifestyle changes and lead to leaving the island but promoting the importance of local food, short supply chains and green public procurement has proven important in a crisis caused by the coronavirus pandemic. The European Parliament's initiatives for the development of rural areas, which are the most abundant on the islands, are based on island specifics. For revitalization, efforts are being made to valorize the resources

of each island separately, to support an ecological agricultural policy with indigenous plants and organic farming. The village can be viewed as a better place to live than the city when there are urban conditions and that is why smart thinking and strategy for the development of island environments is important. Competent institutions can contribute to the employment of indigenous and new islanders, in the investment of small and medium-sized enterprises in projects of common interest. The European Parliament recommends that subsidies remain the predominant way of financing EU projects with close cross-sectoral cooperation and dialogue with the local community on the use of natural resources and integrated spatial planning. The so-called smart village of the future represents a synergy of traditional agriculture, the Internet, local networks and innovations that lead to specializations and new business models of small entrepreneurs in agriculture. In order to achieve energy self-sustainability of the island, adequate decisions are made for the installation of wind farms and solar power plants, considering that land is a limited resource of the island and especially agricultural land. The goal of revitalizing island villages includes the EU initiative for clean energy on the islands, which also discusses the issue of landscape protection and biodiversity, and in order to succeed at home, to make the island as self-sufficient as before.

# INITIATIVES FOR THE DEVELOPMENT OF RURAL COMMUNITIES, ISLAND AGRICULTURE AND VIRTUAL MARKETS

The EU's common agricultural and fisheries policies do not address the specificities of the islands because they fall within the area of spatial planning of the island member itself. Given that agriculture has always ensured the islanders' survival on the island, and that rural areas predominate on the island, development measures are being designed to preserve the island's identity in accordance with national and EU policies that stop the process of leaving the island<sup>1</sup>. In this paper, we present some of the European rural development initiatives. European Rural Parliament is under the Council of Europe and brings the Declaration which strengthens local economies. Having in mind that many rural areas face a decline of traditional industries, the threat of automation or even closure and relocation of businesses. There are promising examples where rural communities managed to develop new smart economies based on their strongpoints and most vital economic sectors. This Declaration call upon national and European policy makers to support such experiments. The aim should be to stipulate the strengthening of the regional economic structure and realisation of smart growth, taking account of the important role of SME's in rural areas. Such a programme fits the approach presented as EU action for smart villages. The European Rural Community meeting in Ven-

<sup>&</sup>lt;sup>1</sup> In the past, the Croatian islands were characterized by a ban on selling and donating or renting real estate to any person outside the island under the threat of a fine and confiscation of such real estate in favor of the island municipality (Lastovo Statute).



Figure 1 — National Internet Market Message from Tržnica.hr for Brač, Hvar, Šolta and Vis

horst revealed the enthusiasm of rural citizens to engage for their communities and to develop multiple initiatives to strengthen the vitality of rural areas<sup>2</sup>. Since the beginning of 2020, the self-sufficiency of islands and agriculture have been topics of interested caused by the corona crisis, when markets are closed, and producers have problems with the placement of their products and are more oriented to online sales.<sup>3</sup>

The islands are most often geographically isolated from the mainland but have always encouraged innovation. Islands have significant potential in terms of food sovereignty, and it can be an opportunity for better competitiveness of small businesses in agriculture. In European rural development initiatives after 2020, the focus is on the self-sufficiency of national and local production with the strengthening of domestic supply chains and opting for an ecological approach to everything for an ecology that in the future it will be easier to sell products and services in the field of ecology than conventional products and services. It means that all agriculture and food processing should be ecologically enabled, and all investments of all activities should be ecologically designed and defined in order to attract investors. The new EU initiatives include the idea of the so-called open hotels that turn deserted villages into accommoda-

<sup>2</sup> The Venhorst Declaration, European Rural Parliament, the Netherlands, 21 October 2017.

<sup>3</sup> There are large surpluses that cannot be sold due to lower consumption in restaurants, are exported at dumped prices and bring down the price to domestic producers.

**<sup>4</sup>** The Croatian initiative "Living Village for Food Sovereignty" was presented on July 4, 2020. The Initiative was launched by about 50 agricultural associations.

<sup>5</sup> Denmark has a 100% ecological approach.

tion facilities. It is a model of rural development with elements of eco-tourism that would combine the different natural and economic potentials of the island in an optimal way. Such a form of development would be based on creating conditions for the most frequent use of cottages on the islands<sup>6</sup>, and abandoned villages. In addition to efforts focused on ecologically sustainable agriculture with family farms and towards using a short food supply chain, the islands are successfully participating in the creation of an innovative Europe. For their overall progress and to better hear the voices of the islanders, rural municipalities are given a central role in development policy to serve the well-being of the island (eg. traditional culture also contributes to maintaining the economic development of villages, preserving livestock, folk values). The quality of life in the countryside can be higher than in the city if it is related to the preservation of nature and local customs, and the planned improvement of certain economic activities (eg. fishing, viticulture, olive growing, fruit growing). The way to encourage the development of the island community can be determined on the basis of the effects achieved by the implemented projects in order to support small public benefit capital projects. Within the reform of the EU's common agricultural policy, rural development measures have been introduced to protect products at the Union level, thus encouraging local production. The most important principle in agricultural policy is the emphasis on the quantity of food. Acquiring special quality labels enables the competitiveness of indigenous products on the market because a high quality and protected origin are required, and that makes a difference. Croatian island producers use the special quality label "HOP" (Croatian-island-product) for the production of their original and quality products and create preconditions for equalizing business conditions in relation to participants from the EU environment, linking agriculture with tourism. Thus, the local inherited value created in the long and continuous process of shaping on the island, with the HOP mark on the product, becomes visible and guarantees the consumer to buy a product of above-average quality.

#### CIFAN ENERGY INITIATIVE ON THE ISLANDS

European islands have always tried new forms of sustainable living, today as living labs, they can offer solutions in the field of various policies through entrepreneurial innovation, which are also applicable in the mainland. The first initiative that brought to-

<sup>6</sup> The Finnish Island Committee with National Policies is developing a model of rural development using cottages on the islands. The Irish Island Federation is helping its government, which (2019) announced the establishment of a special island policy to keep the population on its islands, to give the islands greater economic importance in order to increase ecumenism (population) and subecumene (occasional population) on the islands.

<sup>7</sup> Calls for proposals to promote European agricultural products within the EU and in non-member countries are published on the European Commission's website, for a wide range of organizations.

gether European island communities was developed in a political context with the aim of promoting sustainable energy and more efficient environmental management (ISLE-NET), then grew into another initiative, for efficient energy planning (ISLEPACT) and formed island clusters for economic development on the islands. This has led to the establishment of an official European initiative (Pact of the Islands) with a view to combating climate change, and that a number of islands reduce carbon dioxide emissions and establish an action plan for energy sustainable development of the islands8. Finally, the concept of a new Smart Islands initiative was created with the Declaration on Smart Islands, which considers the integrated management of resources and infrastructure of European islands. In the European Union as an economic integration, the rule of free competition has a primary character and it is expedient to develop entrepreneurship on the islands, but without harming natural resources and the environment because the islands are characterized by limited resources. This Declaration was followed by the concept of Smart Villages in order to bring island villages to that status. In the next programming period 2021—2027, rural development is envisaged with local partnerships and a bottom-up approach. With the obligatory protection of rural areas and nature, they are key to develop sustainable agriculture. In this regard, the EU Green Plan and projects whereby islands can obtain their own RES should be considered as they are limited with fertile soil. Therefore, instead of a stand-alone solar power plants and wind farms, the islanders can decide to build small wind turbines and solar collectors on their roof surfaces or in their yards because they are not on any needed land that the islands have limited amounts of. But for now, there is a legal equating of micro-solar and small wind farms with large wind farms or buildings, which does not attract such a solution. In this context, the distinction of islands as real estate and agricultural land in trade is interesting. Foreign nationals from EU MSs or non-EU countries are not able to buy and register agricultural land in their own name. The moratorium on the sale of Croatian agricultural land to foreigners has been extended until 2023 because the Croatian farmer is not yet strong enough to be able to participate on an equal footing with foreigners in the possibilities of buying agricultural land. A small privately owned island without agricultural land is in many cases outside the State Program for Small Islands. It is not subject to a moratorium on the sale of Croatian island to foreigners, and due to the multiple importance of the Croatian archipelagos in the Adriatic Sea, a further step by the legislator is to be expected.

At the beginning of the 21st century, the islands faced a number of challenges arising from the development of the modern world. Islands have specific problems in planning sustainable development, energy is the basis for all planning strategies, it drives

<sup>&</sup>lt;sup>8</sup> Croatian innovator Jakov Stojan from Zagreb (during his lifetime), submitted his patents to state institutions in the field of waste management, energy, water, sanitation, and for a hydropower plant based on the kinetic energy of sea waves (2007).

all activities on the islands, social and economic processes. Energy is necessary for development, but on the islands the energy and technologies used have a decisive influence on sustainable development, because their selection is often inadequate and unsuitable for island conditions. The implementation of the wrong energy model can seriously endanger the economy and the environment, as well as opportunities for quality development, because energy is closely linked to the management of natural resources on the islands.9

#### MEDIEVAL COMMUNAL STATUTE — HVAR WITH THE VIS DISTRICT

The Hvar Statute contains provisions regulating the matters related to agriculture, which was important throughout history for the livelihood of people on the islands of Hvar and Vis. The medieval Hvar commune, apart from the territories of the islands of Hvar and Vis, also included smaller islands. The total agricultural and forest land under the rule of Hvar was about 200 km2 in size to which a large area of coastal sea was also added (Hvarski statut, 1991, p.17).

In the first half of the 16th century, the Hvar commune had a population of just over 10,000. Almost 3,500 people lived in Hvar itself, around 2,000 lived on the island of Vis, while the majority of people occupied the villages around the Hvar plain in the northern part of the island. (Hvarski statut, 1991, p.17). Wine growing was the most important branch of agriculture. The most famous and best-preserved field is the Agris of the Stari Grad Plain on the island of Hvar. Greek colonists divided the flat and fertile soil of the Stari Grad Plain into regular rectangular plots measuring approximately 900x180 meters, which were surrounded by stone walls. (Poljoprivreda i razvoj, 2005, p. 133).

The Hvar statute lays down the rules for different matters, such as the setting of boundaries between plots of land, matters related to the guardians of the Hvar and Vis fields, those who cultivate vineyards or gardens, trees, matters related to the grazing of livestock, export of grains from Hvar and its district, fruit harvesting and damage caused to the fields. All these rules will be discussed below.

Chapter XIII in Book One of the Hvar Statute Lays Down the Rules Related to the Oath Taken by Appointed Guardians of the Vis Fields.

For the wellbeing of the people living on the Vis island, the guardian is obliged, when invited, to assess the damage done to a field, vineyard or garden on the island of Vis and to do it conscientiously and in good faith. The legislator also laid down that in the event of a major damage at least two guardians must take part in the damage assessment (Hvarski statut, 1991, p. 98).

**<sup>9</sup>** Taken from the National Energy Supply Program of the Islands within the National Energy Program CROTOK (2005, p. 16)

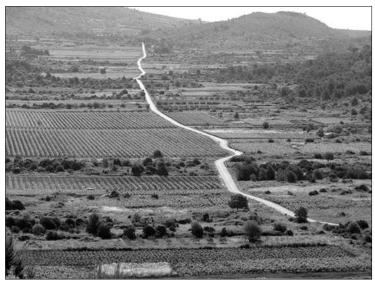


Figure 2 — Viško polje

Chapter XXI of Book Two Regulates Matters Related to Those Who Cultivate Vineyards or Gardens.

Those who take on the duty to cultivate a garden, field or vineyard are obliged to prune the vine regularly, that is, to dig up the vineyard, field or garden every year. In case they fail to act accordingly, the owner can take the garden, field or vineyard away from them without any obligation to pay compensation for any previous works (Hvarski statut, 1991, p. 115).

Chapter XXII on Fining Those Who Harvest Grapes or Grains Without the Permission of The Owner

In the case that the cultivator of the land decides to harvest the vineyard or the wheat at his own will without the permission and will of the landowner, he is to pay a fine for each individual offense. The amount of the fine is divided into two halves, one half belongs to the owner of the land and the other to the commune, and the cultivator also has to compensate the owner for the entire damage (Hvar Statute, 1991, p. 116).

Chapter XXIX on Fining Those Who Drive Large Cattle Over Someone Else's Cultivated Land

It is laid down that no one may walk or drive a large animal through a vineyard, garden or sown field, if communal roads are available there. The fine is imposed for the violation of this provision, both on offenders and for each individual offence (Hvarski statut, 1991, p. 119).

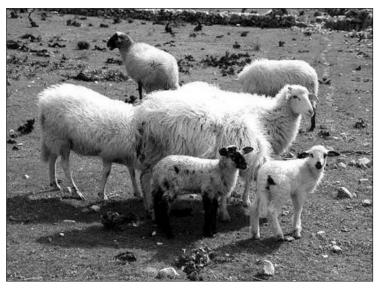


Figure 3 — A Herd of Sheep Grazing on the Viško Polje

The above matter of the passage of animals through sown fields has been known since ancient Egypt in the work "Peasant Complaints" (Stari Egipat, 2004, p. 92). It is about a peasant Inpu who set out on a journey to Egypt to procure things for his children. He brought a surplus of his products with himself to sell: reeds, wood, salt, leopard skins, jackal's fur, and some other fruits. On his journey, while on the river bank, he met a man named Totnakht who admired the peasant's donkeys. As Totnakht's house was on the road by the river, and the road was as narrow as the length of a linen scarf, there was water on one side and a wheat field on the other. Totnakht, with his clothes touching the water and the wheat, blocked the way. While the peasant and Totnakht were talking, one of the donkeys filled its mouth with a sod of grain. Totnakht decided to take the donkey away from the peasant as compensation for the damage caused. The peasant who was ready to compensate the damage did not want to accept this. Totnakht then took the green branch of the tamaris tree to whip the peasant's arms and legs, he also took the peasant's donkeys and brought them to his house. The peasant then went to the town of Ninsu and made a complaint to governor Rensi. It was only after the third complaint that R had sent two servants to arrest Totnakht. All the property of Totnakht was seized, together with his servants and his cattle, which was given to the peasant.

Chapter I of Book III on Fining Those Who Cut Down Someone Else's Tree

If a person cuts a fruit tree without the consent of its owner, a fine is imposed for each tree cut down. The amount of the fine is divided into two parts. One part



Figure 4 — An Ear of Wheat

belongs to the commune and the other part belongs to the claimant (Hvarski statut, 1991, p. 126).

Chapter V on Fining Those Who Drive Cattle in the Fields

The chapter lays down that no small ruminants are allowed to enter or be driven over the fields of Hvar and Vis or otherwise a fine will be imposed. If animals cause any damage to the fields, the damage needs to be compensated. A half of the amount of the fine belongs to the commune, while the other half belongs to the claimant. (Hvarski statut, 1991, p. 127).

Chapter VIII on Fining Those Who Export Grains From the Island of Hvar and its District

Those who export grains from Hvar, Vis or their districts without the permission of the Prince and his judges shall be fined. Every person committing the offence and every offence will be fined. One half of the fine belongs to the commune, while the other half goes to the claimant. In its last part, the provision prohibits the resale of grains without the permission of the commune leaders and judges (Hvarski statut, 1991, p. 128).

#### CONCLUSION

The provisions elaborated above testify to the importance of island agriculture and to the need to regulate this activity. Agriculture meant the survival of the population, as it was often throughout history the main source of livelihood for islanders. Living conditions on the island were difficult due to the shortage of drinking water, limited availability of agricultural land and a general lack of natural resources.

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### KARST FIELDS (POLJA) OF LASTOVO ISLAND, CROATIA, ON TOPOGRAPHIC MAPS (1:25,000)

#### Abstract

In the paper, the author considers the graphical depictions of the Lastovo Island karst fields on older and newer topographic maps (1:25,000) from the 19th and 20th centuries. The Lastovo is the sixteenth by area, and eighteenth by population among Croatian islands (2011). It belongs to the South Dalmatian islands within the Dubrovnik-Neretva County (Adriatic Croatia) and, including associated islands and islets, it makes a separate municipality covering 56.00 km<sup>2</sup> (Lastovo itself 40.82 km<sup>2</sup>) with 792 residents (2011). The carbonate relief with many karstic forms (hills, abyss, cliffs, rocks, karst fields, caves etc.) prevails. Although relatively small, the fields have been an important geomorphologic phenomena in the karst relief of Lastovo and since ancient times they had great importance for settling, living and surviving the inhabitants of its settlements. On the Lastovo, there are more than forty small karst fields (Vino polje, Nižno polje, Jurjev do, Šupalj do or Šipanj do), Zle polje, Žegovo polje, Dubrava—Lokavje—Ždrijelo—Peržina, Hrastovo polje, Bozonji do, Volji dolac, Uresovi dolac, Duboke, Prgovo, Čuča(l)j do, Barje, Kal, Kosovo, Udovin do, Velja lokva, Vrsej (Uresovi) dolac, (U)Dovin do, Studenac, Poljice, Kruševa njiva, Gornji Portorus, Portorus, Dosibje do, Radaš do, Veliko dolce, Malo dolce, Pršnaš do, Zle polje (Ubli) and some quite small ones. Regardless of their importance, they are depicted rarely on topographic maps, except in those of 1:25,000, from the Habsburg Empire (1869—1887) — Third Military Survey 1:25,000 to the contemporary topographic Croatian DGU maps with multiple field markings. Special considerations are given to the field names, the visualization of the objects and the contents within the fields (cultivated areas, culture, appearance of water, drywall, constructed objects, etc.), to the hipsographic features, contact zones around the fields features, belonging to settlements on the island and so forth.

Keywords: Lastovo, karst field (polje), Adriatic Croatia, Dubrovnik-Neretva County, topographic map

Lastovo is the fifteenth-largest Croatian island according to its surface area, but only the eighteenth according to its population (2011). It belongs to the South Dalmatian islands in the Dubrovnik-Neretva County, Adriatic Croatia. Lastovo is a separate municipality (52 square kilometres, with the associated neighbouring islands and islets of Priježba, Mrčara, Kopište, Sušac, Lastovnjaci and so forth. The island itself covers 40.82 square kilometres and its coastline is 48.97 kilometres long (Duplančić Leder et al., 2004). At its longest, the island measures 9.8 km and 5.6 km at the widest point. The highest peak is Pleševo Brdo (417.8 m), slightly higher than Hum (417.0 m). According to the

2011 census, the population of the municipality was 792 (692 on the island itself), while the highest measured population was recorded in 1931 (1822). The dominant carbonate relief has many karst forms (hills, karst fields, dry valleys, caves, pits, abysses, cliffs, etc.). Although they cover only a small area, the karst fields are an important geomorphological phenomenon in the relief of the island of Lastovo and have played a central role in the life and survival of the islanders since ancient times, as they have done on many other Croatian islands. This research included 33 karst fields of various sizes, with a total surface are of 5.7 square km.

This topic has not been dealt with in previous geographical and geomorphological research. The production potential of the land in the karst fields of the island of Lastovo was the main theme of recent research (Husnjak et al., 2014). The aquifer of the western part of Prgovo polje has also been investigated (Buljan et al., 2006.). Some published papers have considered the general geographical features of Lastovo (Forenbacher, 1911; Riđanović, 1971; Nadilo, 2000) and Rača Cave (Šenoa, 1926). Similar issues regarding the karst fields of Dugi Otok in the Zadar Archipelago (Central Adriatic Croatia) on topographic maps (1:25,000) were also elaborated on recently (Magaš, 2019).

### THE KARST FIELDS OF LASTOVO ISLAND ON TWO TOPOGRAPHIC MAPS

This research discusses the Lastovo karst fields (*polja*), which are natural phenomena of great significance for agriculture production and land potential and are important in ensuring the main prerequisite for people living on the island, as depicted on two topographic maps in a scale of 1:25,000. The first topographic map is from the Third Military Survey (1869—1887) (1:25,000) (TMS) created during the Austro-Hungarian Empire (URL1). It is referred to in this article as the 'old map'. The second is the Republic of Croatia State Geodetic Administration's Topographic Map 1:25,000 (*Topografska karta, Državna geodetska uprava / DGU*) (TK), available now in electronic form (URL 2; preglednik.arkod.hr.). It is referred to as the 'new map'. Other topographic maps in various scales and editions (1:50,000, 1:100,000, etc.) are not considered in this paper, because their content regarding the karst fields on Lastovo is negligible.

In the geographical and geomorphological (karstological) literature, the term *polje* comes from the Croatian (also Slovenian and Serbian) word for a field, so a karst *polje* means a karst field or field in the karst. It can be a plain in a limestone area or a flat-bottomed area in an enclosed limestone basin. The floor of a karst *polje* is mostly soil, with thick sediments of *terra rossa*, loam, sand or other types of pedological cover, often modified by anthropogenic activity. The Lastovo fields are dominated by anthropogenic soils planted with vineyards, olive groves and garden tillage, which are composed of loessoid loam (57.5%) and eutheric brown soil on fossil terra rossa (23.0%), while other soils are found on over a significantly smaller surface area (Husnjak et

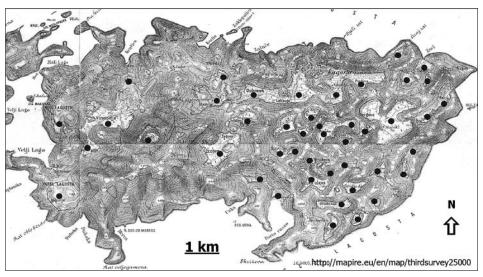


Figure 1 — Location of the Lastovo Fields (polja)

al., 2014). The name of Pržina (or Peržina) Field (in Croatian *pržina* means dry sand) vividly describes the composition of the soil in the field. It may be similar to the name Pršnaš Do (*pršnaš* is fine sand that sprays like dust).

There are usually water resources in larger karst fields (watercourses, springs, ponds, lakes) and some are even flooded, but on Lastovo, due to its aridity and the high permeability of the cracked limestone, water resources in the fields are extremely scarce. There are only a few ponds and wells in the fields on the whole island.

This analysis of more than forty karst fields (*polja* or *poljice* — small fields) and similar smaller fertile areas in the karst on Lastovo, which are predominantly situated in the eastern part of the island. The total surface area of all the fields covers about 5.7 square kilometres (Husnjak et al.). The fields belong to three settlements: Lastovo Town, Ubli and Skrivena Luka.

Although relatively small, the fields are important geomorphological phenomena in the karst relief of Lastovo (Figure 1), and since ancient times have been of great importance to the settlements and the life and survival of the inhabitants. There are more than forty small karst fields in Lastovo, belonging to three settlements:

- Ubli: 1. Vino polje, 2. Nižno polje, 3. Šupalj do (Šipanj or Šupanj do), 4. Jurjev do, 5. Zle polje (Ubli), 6. Velji pod;
- Lastovo: 1. Zlepolje (with Na(d)zlepolje), 2. Žegovo polje, 3. Hrastovo polje (or Hrastove, Rastovo), 4. Volji (Voji) dolac, 5.-8. Dubrava (or Dubrova) Lokavje (with Kolač) Ždr(i)jelo (Ždrilo) P(e)ržina, 9. Bozonji do, 10. Kosovo, 11. Uresovi (Vrsej, Vreseji) dolac, 12. Duboke i Zlokoža luka, 13. P(e)rgovo (including Gornje Prgovo, Podanje, U Vrela and Cjepija luka), 14. Čuča(l)j do, 15. Barje, 16.





Figure 2 — Prgovo Polje and Neighbouring Fields Near Lastovo Town, on the Old and New Maps

Kal, 17. Velja (Velika, Veja) lokva, 18. Dosibje do, 19. (U)Dovin do, 20. Pršnaš (or Prsnaš) do, 21. Studenac, 22. Poljice (or Pojice), 23. Kruševa njiva, 24. Radaš (or Radaž) do, 25. Veliko dolce (in Dovci), 26. Malo dolce (in Dovci), 27. Pasjeka, 28. Zace, 29. Na Zace (Zaiz), 30. Gračišće, 31. Tufače, 32. Bokonji dolac, 33. Petrovi dovci (Petrovi dolac), 34. Bučen (Bučin) dolac, 35. Podi (Veliki i Mali), 36. Luburin dolac, 37. Pojanica, 38. Dol, 39. Kovačin dolac, 40. Trubalin dolac, 41. Vrsi (Veli i Mali);

— Skrivena (Crljena) Luka (Portorus): 1. Gornji Portorus (Kod Ražnjeva), 2. Portorus.

In spite of their importance, they are rarely depicted on topographic maps, except on the 1:25,000 maps from the Habsburg Empire (1869—1887) Third Military Survey and the 1:25,000 contemporary topographic Croatian SGA maps with multiple field markings. Special considerations are given to the field names, visualization of objects and contents within the fields (cultivated areas, cultures, presence of water, drywalls, constructed objects, etc.), hipsographic features, contact zones around the field features, and their links with island settlements.

The largest fields are the Prgovo polje complex (Figure 2) southeast of Lastovo Town and Vino Polje (Figure 3) northeast of Ubli. A complex of four connected fields Dubrava — Lokavje (with Kolač) — Ždrjelo — Pržina near Lastovo Town (Figure 4) comprises the greatest field zone. In terms of its surface area, Žegovo polje also stands out. It is debatable whether all considered locations are actually karst fields, as some of them, especially the smallest ones, are merely large, indistinct sinkholes or wide-

nings in the karst (e.g. Veliko dolce, Malo dolce, Pasjeka, Zace, Na Zace, Gračišće, Tufače, Bokonji dolac, Petrovi dovci, Bučen dolac, Podi, Luburin dolac, Pojanica, Dol, Kovačin dolac, Trubalin dolac and Vrsi). They have all been included in this list because the local population perceives them as *poljes* — important zones of agrarian use.

In the past, all these locations (except Zle polje near Ubli) had economic significance because their fertile soils were cultivated regardless of whether they were close to settlements. Although partly abandoned today, they are potential locations for future agrarian production.

In order to show the field-related content of the two topographic maps and their differences as clearly as possible, two tables are given. They show the names of the settlements with the respective karst fields, their actual names, names on the maps and contents such as ponds, wells and cisterns shown on the maps.

**Table 1** — Karst Fields and Small Agrarian Areas According to Settlements and Contents on Old and New Topographic Maps

	Contents on the map										
Settlement	Karst field	Name on TMS	Name on TM	Well TMS	Well TM	Pond TMS	Pond TM	Crops TMS	Crops TM		
Uble	Vino polje	Vinopolje	Vino polje	-	-		3	v, oth	v, o, oth		
И	Nižno polje	Nižno polje	Nižno polje	-	1	-	-	٧	v, o, oth		
II .	Šupalj do	Šipanj do	Šupalj do	-	-	-	-	v, o, oth	(bush)		
II .	Jurjev do	Jurjev do	-				И	11	o, (b)		
<i>II</i>	Zle polje	Zlepolje	-	-	-	-	-	(f)	(f)		
II .	Velji Pod	-	Velji pod	-	-	-		v, oth	(f)		
Lastovo	Zlepolje	Zlepolje	Zlepolje	-	-	-	-	o, v, (b)	v, (f)		
II .	Žegovo polje	Žegovo	Žegovo polje					v, o, oth	o, v, oth		
II .	Dubrava	Dubrava	Lokavje	-	-	-	-	o, v, oth	0		
II .	Hrastovo	Hrastovo	Hrastovo								
	polje		polje	-	]	-	-	v, o, oth	oth, v, p		
II .	Lokavje	Lokavje	-	-	1	-	1	v. o, oth	V, O		
II .	Volji dolac	-	Volji dolac	-	-	-	-	o, oth	٧		
И	Ždrijelo	Ždrjelo	-	-	-	-	-	o, oth	oth, o		
<i>II</i>	Pržina	Peržina	Pržina	-	-	-	-	o, v, oth	v, o, oth		
<i>II</i>	Bozonji do	Bozonj do	Bozonji do	-	-	-	-	v, o, oth			
II .	Kosovo	Kosovo	-	-	-	-	-	0	b		
II .	Vrsej dolac	Uresovi d.	Vrsej dolac	-	-	-	-	V, O	v, b		
II .	Duboke	Duboke	Duboke	-	-	-	-	v, o, oth	v, o, oth		
II .	Prgovo	Pergovo	Prgovo	-	5	-	-	٧	v, o. oth		
II .	Čučalj do	Čučalj do	Čučaj do	-	-	-	-	v, oth	v, oth		
Ш	Barje	Barje	Barje	-	-	-	-	v, oth	v, oth		

	Kal	-	-	-	-	-	-	v, oth	o, oth
	Velja lokva	Velika lokva	Velja lokva	-	2	-	-	oth, v	р, о
	Dosibje do	Dosibje do	-	-	-	-	-	p, v	р, о
	(U)Dovin do	Udovin do	Dovin do	-	-	-	-	oth, v,	p, (f)
	Pršnaš do	-	Pršnaš do	-	-	-	-	oth, v	p, o, (f)
	Studenac	Studenac	Studenac	-	-	-	-	v, o, oth	(b), p
	Poljice	Poljice	Poljice	-	-	-	-	v, oth	р
	Kruševa	Kruševa	Kruševa					4 -	- ( - f)
	njiva		njiva	-	-	-	-	v, oth	o, (b, f)
	Radaš do	-	Radaš do	-	-	-	-	v, oth	p
	Veliko dolce	-	V. dolce	-	-	-	-	V	(f)
	Malo dolce	-	M. dolce	-	-	-	-	(p)	(f)
	Zace	-	-	-	-	-	-	V	(b)
	Na Zace (Zaiz)	-	-	-	-	-	-	O, V	(b)
	Pasjeka	-	-	-	-	-	-	O, V	0
	Dol	-	-	-	-	-	-	0	o (f)
	Gračišće	-	-	-	-	-	-	٧	٧
	Tufače	-	-	-	-	-	-	0	0
	Bokonji dolac		-	-	-	-	-	0	0
	Petrovi dovci	-	-	-	-	-	-	V, 0	v, p
	Bučen dolac	-	-	-	-	-	-	0	V .
	Podi (V. i M.)	-	-	-	-	-	-	V, 0	o, p, (f)
	Luburin dolac		-	-	-	-	-	٧	0
	Pojanica	-	-	-	-	-	-	٧	V
	Dol	-	-	-	-	-	-	0	o, (f)
	Kovačin dola	C	-	-	-	-	-	-	o v, (f)
	Trubalin								
	dolac	-	-	-	-	-	-	V, O	(f)
	Vrsi	-	-	-	-	-	-	O, V	(b)
	Nimeš dolac	-	-	-	-	-	-	O, V	0
krivena ka	Gornji Portorus	-	Gornji Portorus	-	-	-	-	v, o, p	o, (b), p
	Portorus	(Porto rosso)	(Skrivena luka)	_				p, v, (b)	(b), p, o
			iukuj		10	-	4	ρ, ν, (b)	In1, h, 0

TMS — Third Military Survey, TM Topographic Map; v — vineyard, o — olive grove, p — pasture, oth — other, b — bush, f — forest

An analysis of how the Lastovo karst fields (polja) and smaller fertile zones (dolac, pod, poljanica etc.) are shown on the topographic maps reveals the following: when comparing the marked objects in the fields, the content is nearly the same on



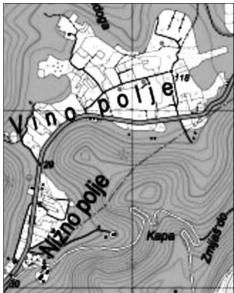


Figure 3 — Vino Polje and Nižno Polje Near Ubli on the Old and New Maps

both maps. The number of fields and the various phenomena and objects shown in them do not diverge much. Generally, the content on both maps is rather poor. The names of fields are given twenty-five times on the old map and twenty-five times on the new one. Unnamed fields appear eight times on the old map (Volji dolac, Kal, Pršnaš do, Radaš do, Veliko dolce, Malo dolce, Gornji Portorus and Portorus) and eight times on the new one (Jurjev do, Zle polje near Ubli, Lokavje, Ždrijelo, Kosovo, Kal, Dosibje do and Portorus). Seventeen small fields are not marked on either map (Pasjeka, Zace, Na Zace (Zaiz), Cjepija luka, Gračišće, Tufače, Bokonji dolac, Petrovi dovci (Petrovi dolac), Bučen (Bučin) dolac, Podi (Veliki i Mali), Luburin dolac, Pojanica, Dol, Kovačin dolac, Trubalin dolac, Vrsi (Veli and Mali). These are very small patches of agricultural land in the karst, which do not actually have the characteristics of developed karst fields, not even in micro forms.

The names appear with small variations on the two maps. The old map has several field names printed in an old, archaic style used in the mid-1800s (Peržina, Pergovo, which appear on the new map as Pržina, Prgovo, and Udovin, which is shortened to 'Dovin do' on the new map). Some names are similar but have different meanings. The name 'Šipanj do' on the old map (also called Šupanj do) may be connected with water, perhaps from the Ancient Greek  $\sigma l \varphi w v (siphon - a)$  pipe or tube for conveying liquids). A less credible solution is that the name comes from the Croatian word for a pomegranate ( $\delta ipak$ ). On the new map, it is designated as 'Šupalj do' meaning hollow vale, which is quite different, but may also be connected with Greek etymology. There is a similar problem with Uresovi dolac on the old map and Vrsej dolac on the





**Figure 4** — Complex of Four Connected Fields Dubrava — Lokavje (With Kolač) — Ždrjelo — Pržina Near Lastovo Town

new one (some people say also Vreseji dolac), revealing the uncertainty of the etymology. Also, Lokavje on the new map includes both Lokavje and Dubrava on the old map. An obvious connection with water has survived in the ancient names of Kal (Greek  $kal\acute{a}$ ,  $kal\acute{o}s$ ,  $\kappa\alpha\lambda\acute{\alpha}$ ,  $\kappa\alpha\lambda\acute{\omega}\varsigma$ , meaning a well), Lokavje and Velja lokva fields (lok-va in Croatian, meaning a puddle or pond, similar to the Old Slavic laky, Greek  $l\acute{a}kkos$  ( $\Lambda\acute{\alpha}\kappa\omega\sigma\varsigma$ ), and Roman aqua (Italian l'acqua). (Hrvatski enciklopedijski rječnik, 6, 2004, 31). In Lokavje there were three ponds in the past (the hydronyms Malo Lokavje and Za Lokvu still exist). However, the name Barje field in the eastern part of the island (Barje means swamp, bara in Croatian) shows that in the past it was periodically filled with water. Through cultivation, flooding has been eliminated. Also, the name of Studenac polje (the Croatian word for a cold well, or a well with cold water), shows that there used to be a well there.

No ponds or wells were marked on the old map, but the ponds are depicted on the new map. Although no names are given, four ponds have topographical markings, three in Vino polje near Ubli (one of which is Šešanova lokva), and one in Lokavje near Lastovo Town. The connection with water (*lokva = puddle, pond*) has survived in the name of Lokavje. Wells in the fields, shown only on the new map, are somewhat better depicted and appear ten times, although without names: five in Prgovo polje (in a part of the field called *U Vrila* that means *In the Springs*), two in Velja lokva, and one each in Nižno polje, Hrastovo polje and Lokavje fields. The important well in Duboke which collects the water supply for the island is not marked.

There are two important water intakes on the island exploiting deposits (lentil) of the underground brackish water: in Prgovo (a well captured in 1964) and in Duboke (captured well). They have been used to supply Lastovo Town and the settlements of Zaklopatica, Ubli and Pasadur by applying the process of desalination and using the pumping station in Prgovo (Ridanović, 1971; Vodoopskrbni plan..., 2009). There are no watercourses or springs shown on the maps in the Lastovo karst fields. This confirms the fact that there are no major water resources on the island which could be used for irrigation.

#### CONCIUSION

An examination of two maps that include the karst fields on the Island of Lastovo in Dubrovnik-Neretva County shows that along with the usual relief features (contour lines, altitude markers, etc.) specific contents are also displayed. The names of the karst fields, the water phenomena in them, crops and other contents are mostly appropriately depicted. The names on the old map are sometimes written in an archaic form, but this is expected given the year of printing and publication in Vienna. Individual field names have several similar forms. However, a large number of fields and fertile areas are not named on either map. The inventory of water bodies and phenomena is also rather poor, especially on the old map. Further evaluation of the Lastovo fields should focus on the revitalization of the population, neglected agricultural surfaces and the water supply. The Lastovo karst fields should not be repurposed, because they are an extremely valuable and a potentially useful resource.

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# THE ZADAR ISLANDS BETWEEN EXTINCTION AND THE RENEWAL OF THEIR POPULATION AND SCHOOLS

#### Abstract

This paper analyses demographic trends on the Zadar islands throughout history, with special reference to changes in recent times, that is, the period after the independence of the Republic of Croatia. Many authors have analysed demographic indicators and become aware of depopulation or even the extinction of the population on many islands, particularly small and remote ones. The aim of this research is to analyse numerical trends in the island population, the numbers of primary school children and those in pre-school institutions, in order to discern which Zadar islands have begun demographic renewal and are achieving the prerequisites for economic recovery, and which are not yet on this path. The paper covers sixteen inhabited islands which are connected with Zadar in traffic and functional terms, and which constitute the greater part of the North Dalmatian archipelago in Adriatic Croatia. According to the administrative-territorial criteria of spatial organisation, they belong to Zadar County and Lika-Senj County.

Keywords: Croatian islands, Zadar islands, bridged islands, depopulation, extinction, demographic renewal, primary school, early learning and preschool education.

According to contemporary research (Duplančić Leder et al., 2004), the Republic of Croatia has 79 islands, 525 islets, and 642 rocks and reefs (a total of 1,246), and their total surface area is 3,259.6 km². Today, 55 of them are inhabited. In terms of location, most are divided between the North Adriatic Croatia (Istrian and Kvarner), Middle Adriatic Croatia (North Dalmatian, Zadar and Šibenik) and South Adriatic Croatia (Middle and South Dalmatian, or Split and Dubrovnik) archipelagos (Magaš, 2013). The North Dalmatian island group includes the Zadar, Kornati and Šibenik islands (Faričić, 2012).

Over time, six regional centres to which the islands gravitate have developed in the Croatian coastal area (Pula, Rijeka, Zadar, Šibenik, Split and Dubrovnik), according to the nodal-functional criterion of spatial organisation. According to the modern territorial organisation of the Republic of Croatia in counties implemented in 1992 and 1997 (Faričić, 2012), the coastal-island area is organised in seven counties (administrative-territorial criterion): Istria, Primorje-Gorski Kotar, Lika-Senj, Zadar, Šibenik-Knin, Split-Dalmatia and Dubrovnik-Neretva. The main "Zadar" islands belong to Zadar County, while only the northern part of the island of Pag (Novalja Town) belongs to Lika-Senj

County (Magaš, 2013). This work considers the entire island of Pag and all the inhabited islands in Zadar County, that is, the island groups that fall within the zone of influence of the city of Zadar.

The territorial organisation of the counties in administrative cites/towns and municipalities means that the Zadar islands have twelve such units in Zadar County (the city of Zadar, the town of Pag, and the municipalities of Povljana, Kolan, Vir, Preko, Kali, Kukljica, Pašman, Tkon, Pakoštane, Sali), and in Lika-Senj County, the town of Novalja.

The total surface area of the islands which gravitate towards Zadar (including the entire island of Pag) is 663.48 km<sup>2</sup>, and according to the population census of 2011, there were 24,615 inhabitants on them (in 2001 there were 22,378, and in 1991, 25,316). A comparison of census years reveals that the highest inhabitation was reached in 1948, with 36,839 inhabitants.

The Zadar island area also includes pseudo-islands (linked to the mainland by causeways), but they are mostly very small and uninhabited (Lopata, Artina, Sveti Pelegrin and Sveti Klement). Nin (*Aenona*) has been joined to the mainland by a bridge since antiquity, becoming functionally integrated with the mainland and losing its insular features. Pag and Vir have been linked by bridges to the mainland in modern times, but have retained the natural properties of islandness, while being functionally integrated with the mainland.

Many scientists have researched the population and inhabitation of the Zadar islands throughout history, but the results are difficult to compare due to different approaches to the territorial range of the area. For example, Batović considered the inhabitation of the Zadar islands from Pag and Premuda to Kornati during the prehistorical period (Batović, 1974) and Suić looked at the same area in antiquity (Suić, 1974). Both authors mentioned several significant locations as hubs of life and the economy on Pag, Pašman, Dugi Otok, Ugljan, Iž, Rava, Sestrunj, and so on.

Jelić discussed 17 permanently inhabited Zadar islands in the Middle Ages (Jelić, 1974) from Premuda to Vrgada (Vir, which belonged to Nin, and Pag, which was separate, were not considered). These were Premuda, Silba, Olib, Škarda, Ist, Molat, Rivanj, Sestrunj, Zverinac, Ugljan, Ošljak, Pašman, Babac, Vrgada, Iž, Rava and Dugi Otok. According to the 1527 census, they had 6,859 inhabitants. The number remained between 5,000 and 7,000 during the 16th and 17th centuries, but in the 18th century rose to around 10,000, and continued to grow in the 19th century (in 1857, 19,737 with Pag and Vir, and 14,816 without them), right up to the beginnings of mass emigration to mainland towns or foreign countries. Friganović analysed the particular features of inhabitation and demographic issues on the Zadar islands during the 19th century and up to the 1970s (Friganović, 1974), and included Vir, but not Pag. Later (Friganović, 2001), similarly to Nejašmić (1997), he dealt with the demographic features of the Croatian islands as a whole. The island of Škarda lost its last inhabitants in the 1980s, and

is no longer counted among the inhabited islands. Damir Magaš, alone (1977, 1981) or with co-workers (Magaš, Filipi 1983; Magaš, Faričić, 2000, 2002, 2009, 2012; Magaš, Čuka, 2003) researched certain demographic aspects of some Zadar islands in particular.

In 2011, of the 55 inhabited Croatian islands and islets, 18 were in the Zadar island groups (Table 1).

Table 1 — Basic Data on the Inhabited Zadar Islands, 2011 (Source: Duplančić Leder et al., 2004; URL 1)

Island	Surface area (km2)	Population 2011.	Population density 2011 (per km²)	Highest population density (per km2; year)
Pag	284.56	9,059	31.8	32.3 (1948)
Dugi otok*	114.44	1,652	14.4	40.8 (1948)
Pašman	63.34	2,845	4.9	68.0 (1948)
Ugljan	50.21	6,049	120.4	210.2 (1948)
Olib	26.09	140	5.3	57.3 (1900)
Molat	22.82	197	8.6	42.8 (1948)
Vir	22.38	3,000	134.0	134.0 (2011)
ĺž	17.59	615	34.9	156.8 (1921)
Silba	14.98	292	19.5	104.1 (1857)
Sestrunj	11.10	48	4.3	34.4 (1948)
lst	9.70	182	18.7	56.9 (1948)
Premuda	9.25	64	6.9	62.4 (1857)
Rivanj	4.40	31	7.0	25.0 (1921)
Zverinac	4.20	43	10.2	44.5 (1921)
Vrgada	3.70	249	67.3	145.4 (1948)
Rava	3.60	117	32.5	136.3 (1921)
Babac	0.79	3	3.8	
Ošljak	0.33	29	87.8	
Zadar islands (inhabited)	663.48	24,615	37.1	55.5 (1948)

<sup>\*</sup>includes the islet of Vela Sestrica

Some of the basic characteristics of the natural features of the Zadar islands are these: fragmented, scattered islands; predominantly Dalmatian type of coastline; geological youth; limestone composition of the base and karst relief with karst fields and small flysch hollows; shallow sea; predominantly eu-Mediterranean vegetation (sub-Mediterranean only on the east side of Pag), and low heights above sea level (the highest peak is on Pag, 349 m, and the next is on Dugi Otok, 337 m). Accordingly, the traditional economic activities have been agriculture, fishing and lime production on almost all the islands (Suić, 1974; Faričić, 2012; Magaš 2013).

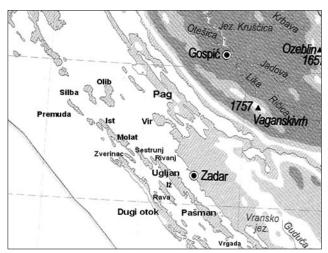


Figure 1 — Location of the Inhabited Zadar Islands in the North Dalmatian Area (Adriatic Croatia)

The most widely grown cultures are olives, grapevines and figs. The wide karst pastures (the largest are on Pag) have allowed the development of sheep-farming. Fishing has concentrated on oily fish (sardines, anchovies, mackerel and tuna), but also includes white fish (dentex, gilthead and bass), crustaceans and shellfish. Since the early 16<sup>th</sup> century, the islands of Sali, Premuda, Iž, Molat and Pag have had the most fishermen, and in recent times, Kali has become a major fishing centre. Traditional fishing has been supplemented by mariculture.

Since antiquity, the stone quarries on Sestrunj, Dugi Otok, Lavdara and Pag have been exploited, while those on Pašman and Ugljan do not date back as far. Good supplies of holm-oak enabled lime production in the past (mostly on Pašman, Škarda, Molat and Dugi Otok). There were well-established salt-works on Pag, Dugi Otok and Iž (Suić, 1974), but today, only those on Pag are still functioning. Until the arrival of mass tourism, seafaring and other services formed only a modest part of the total economy.

The effects of littoralisation processes in the second half of the 20th century transferred the hubs of social and economic activities towards the shores, as can be seen in increased construction in the narrow coastal belt of islands (Pag, Dugi Otok, Ugljan and Pašman). In the island interiors, arable land was abandoned. The devastation of the traditional cultural landscape progressed, particularly on the small islands with inadequate traffic connections. The small, remote islands became a depressed economic area and did not enjoy the benefits of littoralisation (Faričić, 2012). The fact that 8 small islands (Premuda, Silba, Olib, Škarda, Ist, Molat, Iž and Rava) became administrative parts of the City of Zadar has not so far resulted in any noticeable improvement in their inhabitation or economies. More significant progress has been noted only on the bridged islands, Pag (1968) and Vir (1976), and to a certain extent on Ugljan and Pašman, where more frequent shipping and ferry lines have been introduced from Zadar and Biograd.

### POPULATION NUMBERS AS INDICATORS OF VITALITY ON THE ZADAR ISLANDS

Trends in population numbers on the Zadar islands can be traced from the first quarter of the 16<sup>th</sup> century for most islands, in the censuses for the Zadar district taken in 1527, 1608 and 1634, and in the 1759 list compiled by Šimun (Simeone), Lantana (omitting Vir and Pag) (Faričić, 2012, 208, 219). As in other parts of Croatia and the world, the population oscillated depending on natural and social disasters (diseases, wars, famine, migration, etc.). The lowest inhabitation on the islands was recorded in 1608, when there were 5,873 inhabitants (in 1759, there were 10,498). If we add the estimated number of inhabitants on the island of Pag, around 1,500, and Vir, between 58 and 130, we can conclude that by the mid-18<sup>th</sup> century, the Zadar islands had a population of around 12,000. The highest level was achieved in 1948, when 36,839 were recorded in the census. This also meant the highest population density (55.5 pop/km²), which fell by 2011 to only 37.1 pop/km². A comparison of population trends on the Croatian and Zadar islands (index) and changes in the percentages on the Zadar islands in characteristic years (Fig. 2, Table 2) is indicative.

Table 2 — Population Changes on the Zadar Islands 1857—1948, and the Situation in 2011 (Source: Smoljanović et al., 1999, 119-235; for 2011, Lajić, 2013.)

Island	18 <i>57</i>	1900	1948	Change (%) 1948/1857	2011	Change (%) 2011/1857	Change (%) 2011/1948
Pag	4,568	7,039	9,188	101.3	9,059	98.3	-1.4
Vir	358	604	1,072	199.4	3,000	737.9	179.8
Olib	1,195	1,495	914	-23.5	140	-88.2	-84.7
Silba	1,559	1,100	514	-67.0	292	-81.3	-43.2
Premuda	577	446	320	-44.5	64	-88.9	-80.0
İst	342	455	552	61.4	182	-46.8	-67.1
Molat	662	893	977	47.6	197	-70.3	-79.8
Rivanj	35	70	99	182.9	31	-11.4	-68.7
Sestrunj	126	212	382	203.2	48	-61.9	-87.4
Zverinac	67	107	158	135.8	43	-35.8	-72.8
Dugi otok	2,173	3,730	4,670	114.9	1,652	-24.0	-64.6
ĺž	1,126	2,129	2,182	93.8	615	-45.4	-71.8
Rava	173	400	411	137.6	117	-32.4	-71.5
Ugljan	4,459	7,989	10,552	136.6	6,049	35.6	-42.7
Pašman	2,051	3,033	4,310	110.1	2,845	38.7	-34.0
Vrgada	271	413	538	98.5	249	-8.1	-53.7
Total	19,742	30,115	36,839	86.6	24,583	24.5	-33.3

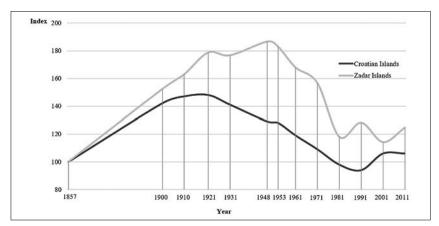


Figure 2 — Population of the Croatian Islands and Zadar islands, 1857—2011 (Index) (Source: Starc, 2015; www.dzs.hr)

The island of Babac in the Pašman Channel was not considered separately, as up to 2018 it belonged to the settlement of Turanj on the mainland, but since then has been an independent settlement in the municipality of Sv. Filip and Jakov. Data for the island of Ošljak are included in the figures for the island of Ugljan, because Ošljak belongs to the municipality of Preko on the island of Ugljan.

Although the decline in the number of inhabitants of the Croatian islands as a whole began after 1910 (Friganović, 1974), the Zadar archipelago as a whole experienced population growth up to 1948. In that census year, half the inhabited Zadar islands reached their highest levels of inhabitation (Pag, Dugi Otok, Pašman, Ugljan, Molat, Sestrunj, Ist and Vrgada) and 31,169 people lived on them (84.6% of total Zadar islands population).

The most drastic decline was seen on Olib, Premuda and Silba, as a consequence of a negative trend in the second half of the 19th century. Thus, the island of Olib had the highest inhabitation as far back as 1900, and Silba and Premuda even earlier, in 1857. Four small islands (Iž, Rivanj, Zverinac and Rava) recorded their highest levels in 1921. During the entire census period from 1857 to 2011, only the island of Vir showed a mostly positive trend and the highest number of inhabitants in 2011. The positive change on Vir for the whole period was 737.9%. The island of Ugljan had its highest population in 1948 (10,552) and the highest population density (210 pop/km²). In the same year, Vir, Iž, Silba, Vrgada and Rava had over 100 pop/km². From the 1960s on, the archipelago experienced rapid depopulation due to complex demographic, social and economic processes on the islands themselves, but also in the region and country as a whole and even further afield. The islands became peripheral and lost their demographic and economic resources. The consequences were emigration (particularly by younger people) and unfavourable biodynamics. Negative natural trends

were noted over the longest periods on the small Zadar islands (with the exceptions of Vir and Vrgada). Between 1948 and 2011, only the population of Vir showed a positive change (179.8%), while the biggest "losers" were still Olib and Premuda, now joined by Sestrunj. The 1991 census recorded lower populations than earlier censuses on all the Zadar islands.

The age and gender structure of the population (the ratio of males to females and young to old) contributes to the cause and effect relationship. By 1971, the population of the Zadar islands was getting older (deep old age), and by 2001, it was elderly (extremely deep old age). This is particularly unfavourable in terms of the age and gender structure. Not a single settlement had the characteristics of a young population. The most difficult situations were in the settlements on Molat (Brgulje, Molat and Zapuntel), Rivanj, Zverinac, part of Dugi Otok (Dragove, Savar) and Ošljak. They had no inhabitants in the youngest age group (up to 19 years of age), which was an indication that their populations might die out entirely. The populations of Premuda, Silba, Olib, Ist, Molat, Sestrunj, Rivanj, Zverinac, Iž, Rava, Dugi Otok and Vrgada were "extremely elderly", and only those of Pag, Vir, Pašman and Ugljan were "very elderly" (Nejašmić, 1992; Faričić, 2012). An analysis of a series of demographic indicators for the Zadar islands in the period up to 2001 (Graovac, 2004) revealed the following order, from worst to best: Sestrunj, Rivanj, Molat, Olib, Iž, Premuda, Zverinac, Rava, Ist, Dugi otok, Silba, Vrgada, Ugljan, Pašman, Pag, Vir.

Since the independence of the Republic of Croatia, more intensive care for the islands has been launched in several ways. The relevant legislation has been passed: the National Programme for Island Development (1997), the Islands Act (1999), the New Islands Act (2018) and the spatial organisation plans of the counties and island units of self-government within them. Traffic links between towns on the coast to and between the islands have improved, along with the island infrastructure (roads, docks, water supply, telephone network, waste disposal, etc.). However, it seems that pro-natal and redistribution policies have not been sufficiently affirmed. It is obvious that the change in population numbers between 1991 and 2011 was still negative on most (11) of the Zadar islands (Table 3). Of these, four still had negative changes, but the rate was slowing (Iž, Pašman, Premuda and Rava), so it is assumed that positive changes have begun.

Table 3 — Population changes on the Zadar islands, 1991-2011 (Source: Milić, 2018; www.dzs.hr)

Island	1991	2001	2011	Change (%) 2001/1991	Change (%) 2011/1991
Pag	7,969	8,398	9,059	5.4	13.6
Vir	860	1,608	3,000	87.0	248.8
Olib	714	147	140	-79.5	-80.4
Silba	221	265	292	19.9	32.1

Premuda	73	58	64	-20.5	-12.4
İst	237	202	182	-14.8	-23.3
Molat	222	207	197	-6.8	-11.3
Rivanj	20	22	31	10.0	55.0
Sestrunj	123	48	48	-61.0	-61.0
Zverinac	59	48	43	-18.6	-27.2
Dugi otok	2,873	1,772	1,652	-38.3	-42.5
ĺž	657	557	615	-15.2	-6.4
Rava	120	98	117	-18.3	-2.5
Ugljan	7,583	6,182	6,049	-18.5	-20.3
Pašman	3,349	2,711	2,845	-19.1	-15.1
Vrgada	236	242	249	2.5	5.5
Total	25,316	22,565	24,583	-10.9	-2.9

In the observed period, Rava, Iž, Molat, Premuda and Pašman had population declines of up to 20% (-2.5% to -15.1%), while for the Zadar islands as a whole it was -2.9%. Population declines of between 20% and 50% were recorded for Ugljan, Ist, Zverinac and Dugi Otok (-20.3% to -42.5%). The islands of Sestrunj and Olib remained in the most difficult situation (-61.0% and -80.4%).

Minimum or moderate growth was recorded for Vrgada and Pag (5.5% and 13.6%) and more significant growth for only Silba and Rivanj (32.1% and 55.0%). The highest growth was recorded for the island of Vir (248.8%). With a joint population of 12,631, these five islands with positive trends accounted for 51.4% of the population of the Zadar archipelago in 2011. If we include the population numbers from the 2001 census in the analysis, there was an obvious decline in the last decade of the 20<sup>th</sup> century and a slow recovery on four more islands after 2001. These are Pašman, Premuda, Iž and Rava (from 4.9% on Pašman to 19.3% on Rava).

Thus, of the 16 inhabited Zadar islands (with surface areas of more than 1 km²), only 31.3% achieved population growth in the entire period from the independence and sovereignty of the Republic of Croatia to the 2011 census. The lowest rate was on Vrgada and the highest on Vir. According to the proportion of the island population on the islands in 2011, the first three places were occupied by Pag, Ugljan and Vir.

More recent official reports testify to demographic and economic growth on the island of Vir in the post-census period too. According to residence records held by the Zadar Police Administration, on 31 March 2019 the island of Vir had 4,780 inhabitants, which was an increase of 454.5% compared to the 1991 census. This is not only the highest rate of increase in all the Zadar islands, but in the entire Republic of Croatia. The cause is intensive immigration (Zadarski.hr) stimulated by a successful management policy after decentralization in Croatia and the establishment of its own municipality.

A hint of a positive shift on islands which still have poor statistical indicators can be gleaned from a report by Morović, the mayor of the municipality of Sali (Dugi Otok),

published in 2020. He writes, "The municipality of Sali is investing a great deal in pronatal policies, a kindergarten is being built (Zadar County is investing HRK 450,000), children receive free textbooks, and students receive scholarships. A grant of HRK 60,000 (HRK 10,000 annually for 6 years) is given for each new-born child, as long as the family permanently resides on the island. Therefore, the current situation is better than it was earlier, there are more young families on the island, and the social community is trying to improve conditions for them. However, it is difficult to improve the demographic picture when around two thirds of the population are elderly" (Zadarski.hr).

### TRENDS IN PRIMARY SCHOOL STUDENT NUMBERS ON THE ZADAR ISLANDS

Although the central interest of this study is the situation regarding schools and student numbers in the contemporary period on the Zadar islands, it is worth considering a short historical review for the sake of comparison. Systematic literacy of the population began to be kept on the islands in the 19th century: in 1808 on Pag, in the 1840s in Sali, Preko, Silba, Božava, Veli Rat and Mali Iž, and in 1944 on Rivanj (Faričić, 2012, 249).

According to the 1864 Dalmatian Governorship Decree, a series of regular schools (Preko, Kukljica, Sutomišćica s Poljanom, Ugljan, Pag, Novalja, Sali, Iž Veli, Silba) and auxiliary schools (Lukoran, Dobropoljana, Lun, Iž Mali, Ist, Olib, Premuda, Ždrelac, Banj, Pašman) were established by 1870, and a little later, Kali, Povljana, Neviđane, Tkon, Vrgada, Rava, Veli Rat, Molat, Božava, Zapuntel, Gorica, Kolan, Dinjiška, Vlašići and Vir also acquired schools. The schools were mostly for boys: a girls' school is mentioned only on Pag. From 1871 on, compulsory education lasted 6 years, with another two years of "repetition" (Ljubičić, 2010). Of course, there were considerably more schools (and students) on the islands 150 years ago than there are today. For example, in 1867, 70 boys attended school on Sundays on Silba, while in the school year 2019/2020, the branch school on Silba had a total of 7 students in all lower and upper classes. The branch school in Lun (on the island of Pag) had 24 students in 1867, eight in 1995/1996, and only two in 2019. In 1930, the primary school in Sestrunj had 96 students, but in 1980 it was closed due to the lack of children (Magaš, Filipi, 1983). The number of students in individual schools in the 19th century is not a reliable indicator of the number of school-age children on the islands. For example, nine regular schools had attendance rolls with the names of 1,023 students (obligatory), but only 443 attended classes regularly, and 99 were "Sunday" students.

During the 20<sup>th</sup> century and early years of the 21<sup>st</sup> century, unfavourable demographic trends (emigration by younger people, aging of the island population, the century-old itinerant tradition, lifestyle) (Akrap & Čipin, 2015) in the Croatian population resulted in the closure of a large number of island schools and a drastic decline in the number of students in those which managed to remain.

Island	1919	1985	1990	1995	2005	2010	201 <i>7</i> /18	2019/20
Pag	1,190	771	737	721	744	582	602	606
Vir	115	44	38	43	66	68	96	175
Dugi Otok	503	154	131	140	93	82	58	60
Ugljan	1,510	391	329	543	361	321	305	318
Pašman	377	-	-	250	180	152	131	105
Vrgada	87	26	14	13	11	13	]	3
Olib*	215	5	7	14	5	Closed i	n 2010	
Silba*	96	4	13	30	7	4	8	7
Premuda*	73	8	2	Closed in	ı 1995	1		
lst*	68	22	12	12	1	Closed i	n 2010	
Molat*	148	Closed i	n 1985		3			
Sestrunj**	96	Closed i	n 1980					
ĬŽ*	389	24	12	32	27	17	8	6
Zverinac* od	ccasional	Closed i	n 1990					
Rivanj Closed	in 1959							
Rava	63	12	Closed	in 1986				
"Zadar Islands"								
School	-	63	46	88	44	21	16	13
Zadar Islands								
Total	4,930	1,461	1,295	1,798	1,499	1,239	1,209	1,280

**Table 4** — Student Number Trends in Primary Schools on The Zadar Islands, 1919-2019 (Sources: Faričić, 2012, 35; National Programme for Island Development, 1997, 39-41; skole.hr)

The National Programme for Island Development (1997, 39-41) mentions that the schools in the following island settlements had ceased to operate: on the island of Pag (Kustići, Mandre, Stara Novalja), on Dugi otok (Zaglav, Žman, Luka, Savar, Dragove, Soline, Veli Rat), on the island of Pašman (Kraj, Pašman, Banj, Ždrelac), on Molat (Brgulje, Molat, Zapuntel), on Iž (Mali Iž), and the schools in Premuda, Rava, Rivanj, Sestrunj, Zverinac and Ošljak.

According to the 1991 census, there were 517 residents living in three settlements with closed schools on the island of Pag, 1,258 in seven settlements on Dugi Otok, and 1,256 in four settlements on the island of Pašman. On these three islands, therefore, 3,031 residents were living in places without schools. Clearly, the closure of primary schools that happened mostly in 1970s and 1980s was another reason for people to leave the islands, and the emigration of young families thus contributed to the demographic decline.

The rise in the number of schoolchildren in 1995/1996 on most of the Zadar islands was not the result of demographic renewal, but of the fact that the islands bec-

<sup>\*</sup> From 1985, the schools on Olib, Silba, Premuda, Ist, Molat, Iž and Zverinac became part of the "Zadar Islands School" which was administered from the City of Zadar. \*\*1930.

ame a refuge for the mainland population fleeing war-torn Zadar and the region during the great-Serbian military aggression against Croatia (1991—1995) (Skračić, 1994, 488).

In terms of student numbers, the island of Pašman still show no signs of recovery. The total number of pupils in the Vladimir Nazor Primary School continues to fall unexpectedly (Table 3). In the school year 2019/2020, only 42% are in the lower four classes, and 58% in the upper four classes, which indicates that student numbers will continue to fall in the coming years. The lower four classes each have 8 or 9 students, while the upper four classes each have between 14 and 16 students.

The island of Ugljan had 1510 primary school students a century ago, but in the last two decades, the number has remained steady between 300 and 360. In this case too there is an unfavourable ratio of students in the lower classes to those in the upper classes (150:168), but there are signs of potential improvement in the future, since there are 44 students in the first year, 39 in the second year, 38 in the third year, and 29 in the fourth year. The branch school in Kali which is a self-contained administrative municipality has 55 students (13+15+18+9) while the home school in Preko has only 30 students in the first four years. The mayor of Kali, Marko Kolega, explains the positive demographic indicators as due to progress in economic and social measures. Kali is heavily oriented towards fishing and mariculture. Between 30 and 40 fishing vessels employ around 400 people. "Kali Tuna" is a leading company in the sphere of Croatian mariculture, and there is also a "Cromaris" fishing industry farm in Kali's waters. Tourism is a secondary economic activity. The unemployment rate was less than half the national average in December 2017, at 5.8%. Grants for new-born babies (ranging from HRK 5,000 to HRK 30,000) and student scholarships have encouraged young people to stay in Kali. Although the natural population trend is still negative, the fifteen or so babies born every year raise hopes for a better tomorrow on the island (Morski.hr).

Dugi Otok has the saddest story in the Zadar archipelago. Its 114 km² and relatively favourable natural base are home to only 14 people per km² and there are only 60 students in the primary school. All the demographic indicators are unfavourable and mostly negative. The number of students in the last thirty years has more than halved (from 131 to 60). Schools in most island settlements have closed, (Zaglav, Žman, Luka, Brbinj, Savar, Dragove, Soline and Veli Rat). Only the "Petar Lorini" main school in Sali and the "Božava" branch school remain operational. According to data from their curriculum for 2019/2020 it is evident that the total number of students is two more that it was two years earlier, with 60% in the lower years and 40% in the upper years (35:25). There is a hint of optimism in the fact that the first year in the home school in Sali has the highest number of pupils (13), and from the numbers of children attending kindergarten, it is expected that intakes in the coming years will be ten or more (osplorini-sali.skole.hr).

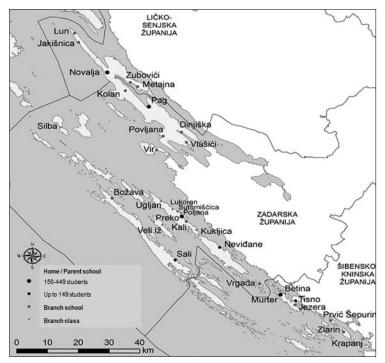


Figure 3 — Location and Size of Primary Schools on The Zadar Islands (2018) (Source: Magaš, K., 2018)

Since the independence of the Republic of Croatia, the island of Pag has increased its population by 13.6%, mostly by immigration and returnees. At the same time, the number of primary school students on the island has stagnated or decreased. Between 1990 and 2019, it has fallen by 17.8% (from 737 to 606). The "J. Dalmatinac" home school in Pag, with the branch schools in Povljana, Dinjiška and Vlašići, had 237 pupils in 18 classes in 2019/2020. There were slightly more students in the upper years (35+19+37+30) than in the lower classes (15+22+20+19), which points to the continuing tendency for student numbers to fall. "A. G. Matoš" school in Novalja had 369 pupils in 2019/2020 in 22 classes (15 in the main school and 7 in branch schools in Kolan, Metajna, Jakišnica and Zubovići). This were 3.9% more than two years earlier (355), but no significant positive trends can be expected just yet, as the ratio of students in the lower and upper years is almost equal (183:186).

The island of Vir has the most positive indicators in overall population trends. However, although it is a self-contained administrative municipality, the island has only one branch school for students in the lower years. Those in the upper years have to travel to the home school in Privlaka. In 2019, there were 86 students in the lower years in the school in Vir, and 89 in the upper years in the parent school in Privlaka, giving a total of 175 students on the entire island (the Vir students made up 58.5% of

the students in Privlaka) (Vučetić, 2018). Accordingly, the process for preparing to build a new school in Vir for all eight lower and upper years has been launched, with a capacity of 300. Construction work should begin in 2021. The demographic and renewal policies of the municipality of Vir include a detailed social programme aimed at children, young people and families. The material indicators of these policies are expressed in significant financial support for parents of new-born infants, complete financing of kindergarten costs, schoolbooks and transport to school, and student scholarships with prizes for high achievements and opportunities for internships. Between 2011 and 2018, the number of primary school students on the island of Vir grew by 28.7%, which is the highest rate in Croatia according to the Croatian Bureau of Statistics (URL 9).

The small Zadar islands, with the exception of Vir, still display extremely negative demographic indicators. Schools which gradually lost all their students from the 1980s on remain closed, though some school buildings have been renovated. A slight improvement is expected on the island of Olib in 2020/2021, as two students have been enrolled in the first class. There are also three children on Silba and two in Iž Veli in kindergarten, who will likely move on to primary school in 2021/2022 (Nekić, 2020).

#### EARLY LEARNING AND PRESCHOOL INSTITUTIONS AS INDICA-TORS OF THE SITUATION ON THE ISLANDS

There are ten early learning and preschool institutions on the Zadar islands (with five branch facilities) (Table 5). They are all on the most populated or largest islands: Pag (3 + 1), Ugljan (3 + 3), Pašman (2), Dugi Otok (1 + 1) and Vir (1). They were mostly set up fairly recently, and their founder was the Republic of Croatia through units of local self-government, administrative towns and municipalities. Only kindergartens 'Paški mališani' in Pag (1980, renovated in 2017), 'Caric' in Novalja (1998, renovated in 2010) and 'Srdelica' in Kali (1971, renovated and extended in 2018) are older. Given the age of the children who attend, most have nursery and kindergarten groups and preschool education, with the choice of half-day or full-day programmes.

The construction and renovation of preschool facilities is co-financed to a considerable degree by the Ministry of Demographics, Family, Youth and Social Policy and the Ministry for Regional Development and EU funds of the Republic of Croatia, Zadar County, and the municipalities and towns themselves. Renovations have been carried out according to the most up-to-date pedagogical standards and in line with the National Pedagogical Standard for Preschool Education. Intensive work on ordering, reordering, extending and equipping the preschool institutions in Zadar County took place during 2018 and 2019 (http://zupan.hr/vijesti/zadarska-zupanija-za-gradnju-dogradnju-ili-poboljsanje-uvjeta-rada-vrtica-na-raspolaganju-bespovratnih-62-6-milijuna-kuna).

**Table 5** — Some Basic Indicators Regarding Early Learning and Preschool Institutions on The Zadar Islands

(Sources: Towns of Pag and Novalja, Municipalities of Preko, Kali, Kukljica, Pašman, Tkon, Sali and Vir)

Island	Kindergarten	Y	ear of opening/	Children/	
	(Branch facility)	Founder	renovation	Capacity	Activities
Pag	"Paški mališani" (Branch facility Povljana)	Town of Pag	1980/2017	125/130 25	Nursery, kindergarten, preschool no nursery in Povljana
	"Povljanski tići"	Municipality of Povljana	2005	28	Kindergarten, preschool
	"Carić" Novalja	Town of Novalja	1998/2010	105	Nursery, kindergarten, preschool
Ugljan	"Lastavica" Preko (Sutomišćica, Lukoran, Ugljan)	Municipality of Preko	2019	55	Nursery, kindergarten, preschool
	"Srdelica" Kali	Municipality of Kali	1971/2018	48	Nursery, kindergarten, preschool
	"Manulica" Kukljica	Municipality of Kukljica	2005/2019	9/20	Kindergarten, preschool
Pašman	"Otok Pašman" Dobropoljana	Municipality of Pašman	2018	39	Nursery, kindergarten, preschool
	"Ćok" Tkon	Municipality of Tkon	2003/2019	32	Kindergarten, preschool
Dugi otok	"Orkulice" Sali (Žman)	Municipality of Sall	2003	31	Kindergarten, preschool
Vir	"Smješko" Vir	Municipality of Vir	2006	83	Nursery, kindergarten, preschool

The total capacity of these ten institutions is around 600 children per year, ranging from the highest capacity on Pag (288) followed by Ugljan (123), Vir (83), Pašman (71) and Dugi Otok (31). The construction and organisation of institutions for childcare and preschool education makes a significant contribution to improving life on the islands.

The small and sparsely inhabited islands of the Zadar archipelago (Olib, Silba, Premuda, Molat, Ist, Rivanj, Sestrunj, Zverinac, Iž, Rava, Vrgada) have no children of preschool age, or so few that at the moment, no investments in building for this purpose are planned.

#### CONCIUSION

The Zadar islands (the islands which are developing in connectivity with Zadar) are many, fragmented and attractive to tourists. They were densely populated in the past, but in more recent times have been divided into those where revitalisation has begun, and those which have been suffering from gradual depopulation for over a century, or where the population has completely died out. There are no large urban or economic

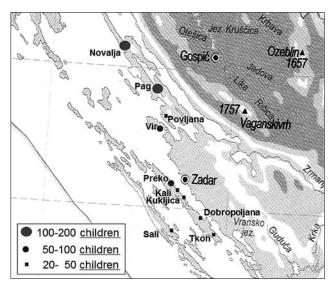


Figure 4 — Early and Preschool Education Institutions on Zadar Islands (2020)

hubs on the islands, so they are oriented towards Zadar in economic, functional and traffic terms.

According to their population levels, the bridged islands of Pag and Vir enjoy the best situation, while Silba, Rivanj and Vrgada have seen growth in numbers since 1991 (probably due to older people retiring to the islands for a quieter life). But, the situation on these three small islands is serious, with only 9 school-age children on them. Immigration to a greater extent has only been noted on Pag and Vir, partly from neighbouring Bosnia and Herzegovina.

The group of islands which has seen at least minimal demographic renewal, but only since 2001, comprises of Pašman, Premuda and Iž. However, there is little room for optimism, as the number of schoolchildren on Pašman continue to fall. Iž has only one branch school with 6 students, while the school on Premuda has been closed since 1995.

According to demographic indicators, the most difficult situation is on Dugi Otok and some small, remote islands (Molat, Ist, Olib, Zverinac and Sestrunj), where the average age of the inhabitants is rising and there are no school age children. On Dugi Otok, the number of school-age children declined up to 2019/2020. The current population and economic policies of the municipality of Sali may produce more favourable outcomes. The island of Ugljan also belongs to this group in terms of population trends. In the late 1940s and early 1950s, it had over 10,000 inhabitants and recorded the highest number of primary school children in 1919.

The ongoing, comprehensive concern and advocacy of the central state bodies and local socio-political communities are necessary if the remaining island population

is to be maintained, emigrants encouraged to return, and new, active working residents attracted. Zadar County is gradually implementing at least some measures for revitalising the islands. Among these are improvements to the traffic connectivity of the islands with Zadar (more moorings, separating passenger and freight transport), strengthening nautical tourism and mariculture, organising and financing educational institutions, even for minimum numbers of children, building and equipping preschool institutions in synergy between the state administration and units of local self-government, and so on.

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## FROM THE MEDITERRANEAN TO "LA PLATA" RIVER

The State of the Question about Migratory Processes between Croatia and Argentina

#### Abstract

The migratory processes between the Mediterranean and the Río de la Plata constitute an event of crucial importance for the development of the societies involved. Since the end of the 19th century, the physiognomy of the towns and cities involved in these processes has been directly affected by these migrations. In the study of these migratory flows, two characteristics have been highlighted: the primacy of historical and factological approaches and the fragmentation between the research carried out in the countries of origin and those carried out in the receiving societies. In recent years, however, more totalizing efforts have begun to be developed to address the migration phenomenon in a more integrated way, which entails a more thorough analysis of the factors of expulsion and attraction, that is, of the complex historical, economic processes, social, political and cultural that are at the base of these migratory phenomena. Within this perspective, the objective of the present work is to present the state of the question about the migratory processes between Croatia and Argentina, putting the focus on sociological and anthropological investigations that interrogate new aspects of those migratory processes. In this regard, the question of 'identity definition' as a central articulator of the human experience in modern societies is particularly interesting, in relation to the national identity narratives built by the States throughout the twentieth century and its modifications at the beginning of the century XXI. From a comprehensive paradigm, the methodology used will be the critical-interpretative analysis of the existing bibliography and, especially, the discernment about the analytical variables constructed in the investigations to account for the identity phenomenon in these migratory processes between the aforementioned countries.

Keywords: migration, identity, Croatia, Argentina

### COMPLEMENTARITY BETWEEN THE MEDITERRANEAN AND "LA PLATA" RIVER

Between Croatia and Argentina there is a complementarity both about the migratory dynamics that since the end of the 19th century have had these countries as protagonists and in relation to the scientific production that has questioned and studied various aspects of it. Regarding the first of these dimensions, suffice to say that the territory of present-day Croatia has been the scene of significant migratory processes throug-

hout its history, as a result of which, almost the same number of Croats currently live in that country as outside the country. Taking this relationship into account, the Croatian diaspora is considered one of the largest in the world (Čapo, Hornstein Tomić & Jurčević, 2014). A fundamental chapter of these processes is the transoceanic migrations of the late nineteenth century, at which time Argentina joined the international division of labor as a producer of raw materials and a recipient of foreign capital and labor, becoming the second largest receiving country of European immigrants, mainly Italians and Spanish, but also French, Polish, Russian and German (Lattes & Oteiza, 1987). Between 1857 and 1956, almost 7 million Europeans arrived in Argentina (Radovich, 2016), among which the Yugoslav community (mainly Croatian) was the seventh in importance (Caruso, 2016, p. 82).

Regarding the second of the dimensions of complementarity indicated, we can identify three great moments in scientific inquiry. In the mid-1970s, the lack of studies on the migratory processes from Yugoslavia to South America was noted (Dahl, 1974; Mrša, 1976 in Čizmić, Jončić, Klemenčić, Rotković & Telišman, 1978). Towards the 90s, historical investigations were developed explaining the causes, effects and characteristics of the migratory processes that began in Croatia (Perić Kaselj, Vukić & Luchetti, 2017). The last few years have seen a series of works focused on destinations not consecrated in the literature flourish, such as Latin America, carried out from broader analytical perspectives that complement and deepen historical knowledge. Similarly, in the last 30 years, a solid field of migratory studies has been consolidated in Argentina with an axis on international or transoceanic migrations that, after the predominance of historical analysis on the reception of large migratory flows, has given place in recent years to the appearance of various investigations focused on other migrant groups. Within this process, new generations of researchers have begun to focus on the study of the Croatian diaspora in South America, providing new perspectives for analysis in both countries.

In order to provide an overview of the research background, first, a descriptive analysis of the most significant historical research works will be made, highlighting the main contributions of each of them to give way, in a second moment, to the systematization of the historical information derived from them. Finally, the most innovative contributions from the socio-anthropological analytical perspective and the open lines and challenges that still lie ahead will be presented.

#### HISTORICAL PERSPECTIVE

As we mentioned, the works carried out from this analytical perspective were the first to address the issue raised. However, most of them were not specifically devoted to the study of Croatian migration to Argentina, but South America in general. For this reason, these works tend to address Croatian migration in a global way and then focus

on some of its particularities in the destination countries. Argentina has received considerable attention in them, since it represents, together with Chile, one of the places with the highest reception of Croats in South America.

One of the first and most important is the work of Holjevac (1967). It explains the causes and characteristics of Croatian emigration to South America, the economic-social position reached by migrants in the receiving societies, and the political, social, cultural and journalistic activities carried out by them. As an update and direct continuation of this work, Čizmić, Sopta and Šakić (2005) present a synthetic monographic work that attempts to cover all aspects of the Croatian migration problem from a long-term perspective. Among others, the role of the Catholic missions in the protection of the population and the preservation of the Croatian identity stands out.

Apart from these works, the undisputed classic reference on migration in South America is the series of investigations carried out by Ljubomir Antić (Perić Kaselj, Vukić & Luchetti, 2017). Within the framework of our inquiry, it is particularly interesting to highlight some of his works, but without losing sight of the vastness of his work. In the first place, an article in which he contextualizes the problem within the framework of history, demographic evolution and politics in Argentina. It analyzes the composition of migrants, their social and journalistic activities, their degree of integration and assimilation, as well as their link with the society of origin (Antić, 1990). In other publications he carries out an analysis of the documentary collection of JNO, giving an account of the role played by the Croatian diaspora in South America during the First World War (Antic, 1987) and he provides an analysis of the South American countries in the mid-19th century, the socio-economic and demographic structure of immigrants, the conformations of the first colonies, the ties with Croatia and the impact of political conflicts within migrant organizations (Antić, 1988). His second book, in addition to describing the migratory process to South America, analyzes identity issues based on the newspapers, the names of migrant associations and the systematization of various archival materials (Antić, 1991). Continuing with this work, Antić (1992) presents a review of the history of Croatian-American relations, with special attention to the period prior to mass migration and provides the first synthesis of Croatian history on the South American continent.

Outside of these, it is worth mentioning two investigations that, already in the 80s of the last century, focused on the analysis of migrations originating in the Dalmatia region, which provided the bulk of migrants arriving in Río de la Plata. Derado and Čizmić (1982) analyze statistical data on the migration of the inhabitants of the island of Brač and Mirošević (1988) analyzes the causes of emigration after World War I and the migratory process throughout the 1920s, the decade in which came the greatest number of arrivals to Argentina.

The aforementioned authors are the most important referents on the subject at hand and the most widely read and cited in historical research produced in Croatia. On

the contrary, the investigations carried out in Argentina are practically unknown in Croatia. They take up a good part of the arguments and explanations of the Croatian authors, but they have the particularity of approaching these migratory processes, emphasizing the characteristics and dynamics of Argentine society. In this way, they constitute a valuable complement to the analytical perspective situated in the society of origin (Croatian) in order to focus on the recipient, both at national and local level.

One of the first non-Croatian academic investigations analyzes the Yugoslav presence as an important component of European migrations, paying special attention to the processes of assimilation or preservation of Croatian identity in connection with the politicization of migrant societies and events in the land of origin (Dahl, 1974). Another proposes a historical review of the diaspora, highlighting the importance of political factors as a cause of migration. In the Argentine case, it mentions the existence of an active diaspora prior to 1945 that was rejuvenated with the incorporation of exiles in the second postwar period, but that would be in the process of disappearance as a result of the assimilation experienced over time (Prpić, 1987). This idea can be discussed from a new series of studies that, as we will see, help us to question the idea of the disappearance of this diaspora and the loss of its identity traits.

In recent years, Croatian migration in Argentina has been approached from local perspectives or as partial components of broader investigations. Thus, in Córdoba's case we have the works of Šprljan (2004 [2002], 2011, 2020). The author reviews the history of the Croatian nation and its immigration to Argentina and analyzes the Croatian community in the province of Córdoba, as well as the host society. In addition to the province of Córdoba, other Argentine towns and localities received the Croatian migratory contribution, without these processes having yet been adequately investigated. We have exploratory or incipient studies for Chaco's cases (Beck, 2004), Bahía Blanca (Suarez, 2006) and Comodoro Rivadavia (Ahlin, 2018). For his part, Caruso (2016) analyzes the business strategies deployed by Nikola Mihanović within which the Croatian community acquire special relevance.<sup>2</sup> As we have seen, one of the fundamental contributions of the historical research reviewed is the identification of migratory phases with specific characteristics. The other is the attempt to determine the number of Croatians emigrated to Argentina, as well as their numerical weight today. We will refer to these aspects below.

<sup>&</sup>lt;sup>1</sup> In 1960, with the founding of the Croatian Latin American Institute of Culture and the edition of the magazine *Studia Croatica* by a group of Croatian intellectuals corresponding to the so-called political migration, the largest political-journalistic experience in the language was launched. Castilian of the Croatian diaspora. The magazine has published several essays on Croatian migration and its contributions to the host society. Unfortunately, we cannot elaborate on this due to space restrictions.

<sup>&</sup>lt;sup>2</sup> In addition to this research, there is a large amount of non-scientific work carried out that constitute valuable sources of information as well as indicators of analysis topics to deepen future research. Unfortunately, we do not have enough space to refer to them.

### MAKE THE AMERICAS. PHASES AND CHARACTERISTICS OF THE MIGRATORY PROCESSES

The migratory phenomenon studied is framed in four well differentiated stages. The first corresponds to the so-called early migrations, which take place from the middle of the 15th century to the end of the 19th century. These are sporadic, individual, mostly male migrations, fundamentally motivated by economic (search for enrichment) or cultural (evangelization) variables. It is the stage of the pioneers.

The second phase corresponds to mass migrations and goes from the end of the 19th century to the beginning of the 20th century. It is explained by a combination of structural and circumstantial, economic and political factors. Its modality is chain migration, resulting in geographically dispersed settlements, mainly in Buenos Aires and Santa Fe. They worked in agricultural, maritime, commercial and construction activities. Forty organizations were formed and about fifteen newspapers were published in whose development the impact of the political-ideological conflicts of the society of origin is appreciated.

The third stage corresponds to the interwar period and, due to its existence, massive migrations are divided into two sub-periods: 1880-1914 and 1918-1938. The difference between them is given by a fundamental change in global migration dynamics, since after the First World War, Latin America became the most recurrent destination of Croatian migration. The main reason for this modification is immigration restriction in the United States.

The last stage corresponds to political migrations and is located from the end of World War II until the 1960s. It is a migratory process different from the previous one, motivated centrally by political causes that were combined with the development project of *Peronism* in need of skilled labor. The settlements occurred in all provinces of the country, both in rural and urban areas. It was a process characterized by a high degree of development of national consciousness and by the ideological political dimension in identity perception (Šprljan, 2004; Misteich & Dujovne, 2003; Ahlin, 2018).

### WE COME FROM THE BOATS.3 STATISTICAL APPROXIMATIONS ON THE NUMBER OF CROATS

Although some works and official estimates postulate the existence of some 250,000 Croats and descendants (Luchetti, Perić Kaselj & Ružić, 2020), all authors agree on the difficulty inherent in this quantitative determination. In this sense, one of the main elements of the work promoted from Argentina is its attempt to specify that number. 4 As

<sup>3</sup> Argentine popular saying which the European ancestry of a large part of population refers. For decades it nurtured the myth that Argentine population came almost exclusively from that continent and that Argentine national identity was the result of a melting pot of races. Currently, various investigations question the veracity of these beliefs and statements.

part of these efforts, Šprljan (2020) carried out a statistical analysis of the Croatian community in Argentina based on a survey of records of arrivals to the port of Buenos Aires that occurred between 1880 and 1950, which allowed him to identify almost 3,000 Croatian surnames and 13,376 people. Returning to the statistical data analyzed by Holievac (1967), according to which 39,900 Croats entered Argentina alone in the period between 1923 and 1933, Šprljan maintains that between 1880 and 1950 some 65,000 Croats entered Argentina. Following national population censuses, Dahl (1974) affirms the existence of 29,164 Yugoslav residents in 1947 and of 36,661 in 1960, but also refers to the existence of 100,000 members of the Croatian community at the end of 1955. In turn, this figure is indicated by Prpić (1987) and Radovich (2016) to account for the number of Croatians who lived in Argentina in 1939. For his part, Vrljicak (2013) released a database of Croatian surnames built from the records contained in the Argentine Electoral Register. There he identified 14,200 Croatian surnames corresponding to 116,000 people. On that basis, and taking into account population growth and the loss of the maternal Croatian surname, he made an estimate that allows him to affirm the existence of between 325,000 and 422,500 Croats and descendants in all the country's provinces. Some other data in this direction are those reviewed by Radovich (2016), according to which at the end of the 1970s it was estimated that there were 250,000 Yugoslavs in South America and that the majority lived in Argentina. In turn, it was estimated that between 130,000 and 162,500 people were Croatian or of Croatian descent (Dahl, 1974; Mrša, 1976 in Čizmić et al. 1978). On the other hand, data prepared by himself from secondary sources contained in the National Directorate of Migration, establish that in the period 1920-1949, 72,883 Yugoslavs arrived in Argentina and 29,926 returned, giving a positive migratory balance of 42,957 people (Radovich, 2016). Despite the difficulty in establishing definitive values, it is estimated that currently between 250,000 and 400,000 Croats and their descendants live in Argentina. The main estimates mentioned can be seen in summary in Table 1.

#### SOCIO-ANTHROPOLOGICAL PERSPECTIVE

As we have mentioned, in recent years academic production has been renewed with the emergence of new perspectives and research topics in both sides of the Atlantic. These works, conceived mainly from Anthropology and Sociology, are the product of two interrelated phenomena: the disintegration of the former Yugoslavia and the construction of the Croatian State at the end of the 20th century and the (re) emergence

<sup>&</sup>lt;sup>4</sup> When writing this paper, the analysis of data obtained through the First Digital Census of Croats and their descendants is in process, promoted by researcher Šprljan under the auspices of the Croatian Embassy in the Argentine Republic and the Council of the Croatian Government in Argentina and carried out in the course of 2020. It presents a voluntary virtual registration project of Croats and their descendants in Argentina. The project is currently underway, having completed the data collection stage (voluntary online registration) on December 28, 2020.

	Estimation of the	amount o	f income to Argentina	according	to vario	ous authors	
Period	Yugoslavs	Period	Croats	Period	Croats	Period	Croats
1929- 1949	72.883 (income) 29.926 (returns) 42.957 (migratory balance)	1923-1933	39.900 (income) 10.300 (returns) 29.600 (migratory balance)	1880-1950	65.000	1945-1960	10.000 to 35.000
Sources: Radovich, 1982		Sources: Holjevac, 1967; Sprljan, 2002; Čizmić, 1996		Sources: Sprtjan, 2011		Sources: estimated numbers (in various authors)	
Es	timation of the numb	er of Croa	atian habitants in Arg	entina acco	ording to	various au	thors
Period	Croats	Period	Croats	Period	Croats	Period	Croats
1889 1910 1916	15.000 (Bs. As) 40.000 (ARG)* 30.000 (ARG)	1914	50.000 (Santa Fe)	1939	150.000 (ARG)	1970	100.000 to 170.000* 200.000**
Sources: A	ntić, 1991; "Holjevac, 1967	Sources: Čiz	mić, Sopta, Šakić, 2005	Sources: Holje Čizmić, Sopta,		Sources: *Rade ** Holjevac, 196	

**Table 1** — Estimation of The Amount of Income to And the Number of Croatian Habitants In Argentina

of a feeling of belonging linked to "the Croatian" among the new generations of descendants. An element to be highlighted is that in most of these investigations, identity does not appear as a given element, but rather it is considered as a result of processes of self-ascription, within the framework of various historical, economic, social, political and cultural contexts in which migrants are situated.

One of the most important investigations is undertaken by the researcher Marina Perić Kaselj, who has published countless works. In her doctoral thesis she proposes a new approach to the study of transoceanic migrations and promotes the need for interdisciplinary approaches. It carries out a comparative analysis of the Croatian identity in Argentina and in Chile, as a result of the dynamic process of interaction of four social spaces: society of origin, host society, migrant space, trans migrant space. She highlights the lack of academic interest in the discussion about the identity of Croatian immigrants in South America, as well as a comparative analysis including sociological and anthropological perspectives on the matter and it maintains that there are no serious investigations into the Croats who migrated to Argentina before World War II (Perić Kaselj, 2010). Her other works, also focused on the definition of the problem of identity, analyze the influence of communication technologies in the identity construction of virtual migrant communities in Argentina and Chile (Perić Kaselj, 2014a, 2014b), focuses on the relationship between the religious and the national to analyze the community Croatian ethnicity in Argentina (Perić Kaselj & Vukić, 2015) and shows the importance of geopolitical events around the First World War in the collective identification and strategies developed by migrants (Perić Kaselj, 2016).

Although, written a decade ago, Perić Kaselj's diagnosis is still an indicator of the current state of knowledge and possible next steps. In this sense, it is interesting to review and relate local production to that made from Argentina. Rosan's (2002) work is one of the first and most interesting investigations produced there. Through an ethno-

graphic work, she analyzes the practices and representations of the Croatian diaspora in Buenos Aires, highlighting low visibility of the community of migrants who arrived in the first decades of the century and the variability of identity ascription during the different migratory stages. She studies the role and uses of the past and the narrative of a national memory of the community which feature in the processes of identity self-ascription. Also focused on the study of the diaspora, the work of Misetich and Dujovne (2003) complements in a certain sense that of Rosan, since analyzes of the Croatian diaspora settled in Buenos Aires and its constitution in the largest and most institutionalized community in Argentina, with the founding of 25 institutions and the development of multiple community activities, integration and identity preservation. Focusing the second postwar's exiles period and their intellectual work in connection with the independence of Croatia, it shows how it was active migration that expressed ethnicity as a political and cultural project of resistance and liberation and managed to hegemonize the discourse of the Croatian nation (Misetich, 2006).

In contrast to the work referred to above, in Santa Fe, the second Argentine province with the largest Croatian presence, it is not so easy to verify the primacy of identity definitions promoted by the most recent migration. In this sense, Solian (2016, 2020) analyzes the processes of identity formation between the migrants and their descendants in Rosario and localities of the humid pampas and identifies two central modes of identity self-ascription that are linked to that of the interviewees to the "first" or "second" migration and to the putting into play of various political-ideological belongings. Oštrec (2014), also, questions whether they can be considered part of the Croatian diaspora, since interviewed identify themselves as Argentines and throughout history their self-ascriptions have changed, recognizing themselves as Croats after the independence of the former YU, the feeling of national belonging did not play an important role, but the feeling of regional belonging.

Rajković and Gadze (2016), in turn, provide new elements in the study of the identity conformations of Croats in the cities of Buenos Aires and Santa Fe. They analyze ways of preserving cultural identity in the public and private spheres, highlighting the existence of a hybrid identity with the presence of intercontinental trans-locality features. As part of the analysis of the cultural practices developed by the Croatian community in those cities, Gadze (2020) points out the importance of three radio programs in the configuration and transmission of ethnic and cultural identity. From a similar analytical perspective, Luchetti, Perić Kaselj and Ružić, (2020) identify the existence of two types of identity configuration as a function of descendants' life experiences and their participation in migrant associations in a physical or virtual way: as something given or as a process of discovery (Luchetti, Perić Kaselj and Ružić, 2020).

Finally, we are interested in systematizing some of the theoretical and methodological propositions proposed by Radovich based on the results obtained in his research (Radovich, 2016, 2020), as important elements to take into account in future research

rch: a) heterogeneity; geographical, linguistic and cultural, of the migratory contingents and their (changing) perception of statehood, in relation to the various impositions of statehood suffered; b) the dynamic and adaptive character of identity, in connection with changes in historical, socioeconomic, cultural, political contexts and so forth; c) the character of the exterior constitutive of identity that causes, when contacting the "otherness", feelings of belonging that are awakened that were, until then, unknown (latent or not perceived as their own); d) the existence of a process of partial ethnic description over the years and of re-ethnicization after the independence of Croatia, which is currently in the process of renewal and innovation; e) the theoretical-methodological difficulty of studying small migrant groups and the connection of micro processes with the structural historical aspects that condition them.

# CONCLUSIONS AND GOALS

We hope to have demonstrated the complementarities between the countries whose migratory processes we have linked throughout these pages constitute a historical reality and an objective condition of the scientific and academic production in which we work. The existence of separate fields of study due to an insurmountable language barrier is in the process of incipient reconfiguration as a result of the personal and institutional efforts undertaken in recent years by several of the researchers mentioned in this work. As a result of these, crystallized academic exchange spaces have been generated in tables in Spanish in three congresses held since 2018 that aspire to have continuity and guarantee bilingual publications in the future. From this reality emerges the need to integrate the various research efforts by building a network of researchers and creating international and interdisciplinary projects, as well as the need for articulation of archives and other institutions to facilitate access to research sources.

On the other hand, existence of an incipient academic production that provides knowledge from various anthropological, sociological, political and communication approaches along with new research topics, such as: return migration, politics of memory and uses of the past, associationism, identity reconfigurations in the 21st century, political organization of the diaspora, its political-economic influence and its importance in Croatian independence, among others, many of which have not been detailed due to space restrictions and the objective formulated at the beginning with respect to focusing the inquiry on anthropological and sociological perspectives and especially on identity shaping processes, given their relevance in the articulation of experience in modern societies.

In relation to this objective, it has been possible to specify the contributions that the revised analytical perspectives provide for the investigation of identity conformations in the migratory processes between Croatia and Argentina. In this sense, a relatively variable theoretical-methodological treatment of identity has been shown, highlighting the anthropological perspective of identity self-ascription and the relational conception with which sociology approaches the phenomena of the social world. Specifically, it is interesting to highlight the heterogeneous, hybrid, dynamic, contextual and adaptive nature of this phenomenon that we call identity, as well as the importance that the various social relations in which migrants find themselves in this process and their various positions in relation to the other social actors (people or institutions) play, in the various areas that make up their daily lives. All of this influences the (changing) perceptions that migrants have of themselves, as well as of statehood, all of which results in possible "appearances" and "disappearances" of feelings of belonging and identity traits.

Another fundamental conclusion that can be drawn from the analysis carried out is the importance of oral history and local and regional analyses, especially given the precariousness or lack of institutional documentation. These perspectives will help to gain a better understanding of migratory experiences in many cities, towns, and localities where the Croatian presence is more important than that at the national level. Knowing the dispersion of Croatian settlements throughout the vast Argentine territory, we can affirm that there is still much to be investigated about the migratory processes between the Mediterranean and the Rio de la Plata.

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# SUSTAINABLE DEVELOPMENT RENEWABLE ENERGY SOURCES AGRICULTURE AND FISHERIES



Lucija Ramljak: From the other side

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# SUBJECTIVE WELL-BEING DURING THE LIFESPAN IN THE MEDITERRANEAN: U-SHAPED, DECLINING OR NO CHANGE?

### Abstract

This study aimed to examine the relationship between age and subjective well-being in Mediterranean countries with and without controlling for relevant covariates and to compare these relationships in Mediterranean and non-Mediterranean Europe. The data from the European Quality of Life Survey — EQLS (round 4) were used for the analysis. The survey was conducted during 2016 and 2017 on representative samples of the adult population within 28 EU countries including Albania, FYR of Macedonia, Montenegro, Serbia and Turkey. The sample included 15,791 respondents living in 11 Mediterranean countries and 18,505 respondents from 22 non-Mediterranean countries. The respondents were equally distributed by gender (51.6% women), with the age range between 18 and 95 years (M = 48.14, SD = 18.08). For the lifespan comparison, we used five age groups (18-24, 25-34, 35-49, 50-64 and 65+). Cross-national population weights were applied to ensure representativeness of group comparisons. The results showed that happiness and life satisfaction are generally lower in the Mediterranean in comparison to non-Mediterranean countries and that it generally declines by age, showing a slight increase in the non-Mediterranean countries in the older age groups. After controlling for income and financial deprivation, no systematic decline in wellbeing by age in Mediterranean countries was observed.

Keywords: quality of life, subjective well-being, Mediterranean, age, lifespan

In the EU context of rapidly ageing societies, the well-being of different age groups becomes an important topic of public policies. In the past few decades, there is an ongoing debate in the literature about the relationship between age and subjective well-being (SWB). While several researchers have identified a U-shaped relationship between age and SWB, where young generations feel the most satisfied and happy, middle-aged individuals feel the least satisfied, and the level rises again in later life (Blanchflower & Oswald, 2004, 2008, 2009, 2019), there is also a body of research showing different patterns of this relationship. Surveys are showing no relationships bet-

ween age and well-being, the decline in well-being with age (Deaton, 2008) or a mixture of stability up to late adulthood and a sharp decline afterwards (Hansen & Slagsvold, 2012). It was also found that the relationship between age and SWB vary according to the wealth of the country. Several studies showed that the decline in SWB with age is the greatest in the middle-income bracket (Deaton, 2008) and transition countries (Guriev & Zhuravskaya, 2009; Kaliterna & Burušić, 2014), while in richer countries a U-shaped relationship was found. Knowing that household incomes in Mediterranean countries are significantly lower than in northern Europe, the primary focus of this survey is to examine the effect that age has on SWB in the Mediterranean countries.

The recent Eurofound (2019) research on SWB in Europe delivered two important findings related to the age differences in SWB measures. Firstly, there are substantial differences in quality of life across age groups in Europe. An east-west and a north-south divide are apparent in these differences. The older generations, in general, enjoy a better quality of life than younger age groups in Western Europe, while the younger generations are better off in Eastern Europe. Secondly, life satisfaction markedly and significantly declined for older people in the Mediterranean, Central and Eastern, Baltic and Balkan clusters between 2011 and 2016. The traditional U-shape curve over the life course — which indicates falling life satisfaction until middle age, when it rises again — flattened at older ages.

Another debate about the patterns of the relationship between age and SWB is going on regarding whether researchers should use confounding factors in their analyses. The U-shape relationship was mainly found after controlling for many confounding factors such are income, marriage, job status, commonly employed in analyses. Glenn (2009) criticizes such methodology and argues that the appearance of this U-shape is the result of the use of inappropriate and questionable control variables. Most authors consider that certain controls are required, such as income, education and a series of other personal characteristics (Lelkes 2006). Blanchflower and Oswald (2019) and Stone et al. (2010) showed that the usual sets of control variables neither create nor eliminate the prevalence of a U-shape in their data samples. The use of controls can be justified following the arguments by Lelkes (2008) "It is not ageing as such, which results in declining happiness, but rather the circumstances associated with ageing.« Following this argument, Helliwell and Wang (2018) demonstrated that the social context matters in estimating the age effect on SWB. They have found that a U-shape relationship between age and SWB is significantly shallower, and raises more in the older age groups for those with the most supportive workplaces, families, neighbourhoods, and cities. Taking into account that Mediterranean EU countries differ from non-Mediterranean countries mostly by GDP, personal income, and the functioning of public services, controlling for such covariates could flatten out the expected U-shape curve, especially in Mediterranean countries.

# THE AIM OF THE STUDY

The study has two particular aims. The first was to examine the effect that age has on SWB in Mediterranean countries with and without controlling for relevant covariates. The second was to compare the effects of age on SWB in the Mediterranean and non-Mediterranean Europe.

# METHODOLOGY

The data from the European Quality of Life Survey — EQLS (round 4) were used in this research<sup>1</sup>. The EQLS is a survey of the adult population (18+) living in private households, based on a statistical sample and covering a cross-section of society. Depending on the country size and national arrangements, the round 4 samples ranged from 1,000 to 2,000 people per country. The EQLS was carried out as face-to-face interviews in people's homes using computer-assisted personal interviewing (CAPI) and covered a comprehensive list of questions regarding their quality of life. The EQLS round 4 was carried out from September 2016 to March 2017 in all EU Member States and the five candidate countries (Albania, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey). High standards of quality assurance were applied to all stages of the survey's implementation (Eurofound, 2017).

### PARTICIPANTS

The representative samples of the adult population within the countries were used. For this study, the cross-national population weights were applied for combining two specific country subgroupings (the Mediterranean vs. non-Mediterranean countries). After the weighting procedure, the total final sample included 34,296 participants, from which 18,505 participants were from Non-Mediterranean countries and 15,791 respondents were from Mediterranean countries. Non-Mediterranean countries included: Austria, Belgium, Bulgaria, Czech Republic, Germany, Denmark, Estonia, Finland, Hungary, Ireland, Lithuania, Luxembourg, Latvia, Netherlands, Poland, Portugal, Romania, Sweden, Slovakia, United Kingdom, FYR of Macedonia and Serbia. Mediterranean countries included: Cyprus, Greece, Spain, France, Croatia, Italy, Malta, Slovenia, Albania, Montenegro, and Turkey. The age of respondents vary from 18 to 95 with an average of 48 years (M = 48.14, SD = 18.08). The respondents were equally distributed by gender (51.6% female).

<sup>&</sup>lt;sup>1</sup> European Foundation for the Improvement of Living and Working Conditions, EQLS Integrated Trend Data File, 2003-2016 [SPSS file: EQLS trend dataset — 4 waves — all countries]. Colchester, Essex: UK Data Archive [distributor], March 2018. SN: 7348.

# **MFASURFS**

'Subjective well-being' was measured by two single-item scales. Single items scales asked people to rate their global life satisfaction ("All things considered, how satisfied would you say you are with your life these days?"), and general happiness ("Taking all things into account, how happy would you say you are?"), on 10-point end-defined response scales, ranging from 1 (very dissatisfied/very unhappy) to 10 (very satisfied/very happy).

The age of participants was operationalized by age grouping over the lifespan comparison. We used five age groups (18-24, 25-34, 35-49, 50-64 and 65+ years of age)

# **COVARIATES**

The deprivation index measures the average number of items a household cannot afford. This index is calculated as the average number of items that a respondent's household cannot afford if they wanted to buy them, from the following list: a) keeping your home adequately warm; b) paying for a week's annual holiday away from home (not staying with relatives); c) replacing any worn-out furniture; d) a meal with meat, chicken, fish every second day if wanted; e) buying new, rather than second-hand, clothes; and f) having friends or family for a drink or meal at least once a month. The index value can range from zero to six, where a larger number indicates higher material deprivation of the household.

The Public Services Index is the overall measure of satisfaction with public services within the country. It covers six types of public services: education, healthcare, public transport, childcare, cares for the elderly and the pension systems. Respondents rate these types of public services on a 10-point scale, with 1 denoting the lowest rating and 10 the highest. The Public Service Index is calculated as an average rating given by a respondent on these six items. Both of the indices were proved to be valid and reliable measures of financial deprivation and satisfaction with public services, which is reported in other studies based on EQLS results (e.g. Rose & Newton, 2010; Eurofound, 2014).

Equalised monthly household income in PPP euros was used as a comparable relative measure of available monthly economic resources of respondents in this study. The equalised household income is an indicator of the economic resources available to each member of a household. It is the total income of a household, after tax and other deductions, which is available for spending or saving, divided by the number of household members converted into equalised adults. The household members are equalised or made equivalent by weighting each according to their age, using the OECD equivalence scale. For comparisons across geographical areas in the same period, income data should also be adjusted by the differences in price levels by country. Thus, purchasing power parities (PPPs) is a measure of the relative prices of goods and

services that are likely to be purchased for consumption. PPPs are regularly compiled by OECD and Eurostat statistics.

# STATISTICAL PROCEDURES

The participants that had missing results in particular variables were excluded from analysis using listwise deletion. To illustrate the relationship between age and SWB, we graphically presented the mean scores of life satisfaction and happiness scales by five age groups and interpolated the second-order polynomial trendline that should correspond to the expected U-shaped curve. To examine the fit of the second-order polynomial curve to actual data, we calculated the R<sup>2</sup> value. This procedure was performed separately for the raw data of life satisfaction and happiness, and life satisfaction and happiness data residuals after controlling for covariates. The calculations and figures were done using Excel.

The two-way ANOVA and ANCOVA procedures were used to determine the exact difference in the quality of life between the different age groups of respondents and the respondents living in Mediterranean and non-Mediterranean countries, before and after the control for covariates, respectively. Furthermore, we have also tested the interaction effect of age and region of residence in ANOVA/ANCOVA models to examine the possible regional difference in age-SWB relation. Before running the analysis the assumptions for ANOVA/ANCOVA were checked. There were no significant outliers, the distributions of the dependent variables in respected groups were approximately normal and the conditions of homogeneity of variances between the groups were met. We applied the significance level of .01 to test each hypothesis due to the large sample size. Statistical software SPSS v23 was used for this data analysis.

# **RESULTS**

Figures 1 and 2 represent the variations in life satisfaction and happiness by age in the Mediterranean and non-Mediterranean countries. Firstly, the presented data revealed that there is a noticeable difference in SWB between Mediterranean and non-Mediterranean countries, where the citizens of non-Mediterranean countries are more satisfied with life and happier than those from the Mediterranean. Moreover, these differences are stable by age indicating that citizens living in non-Mediterranean countries have higher SWB than those from the Mediterranean in all age cohorts. Further, as it can be seen from the figures, the SWB generally falls by age (with some rise in the oldest cohort in non-Mediterranean counties), and could be well fitted by the U shaped curve.  $R^2$  values that capture the fit of the second-order polynomial curve to raw SWB data are all high ( $R^2 > .83$ ). However, these U shape curves fit the data better in non-Mediterranean than Mediterranean countries, mostly because of the increase of SWB in the oldest cohort of respondents in non-Mediterranean countries which is not the case in

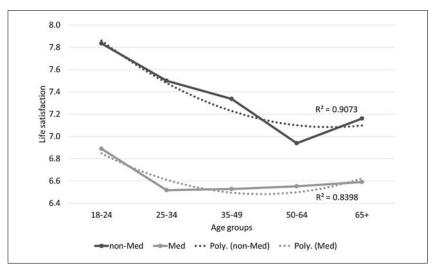


Figure 1 — Life Satisfaction by Age in Mediterranean and Non-Mediterranean Countries

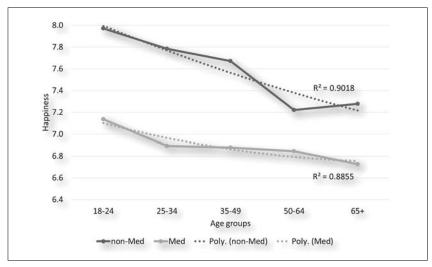
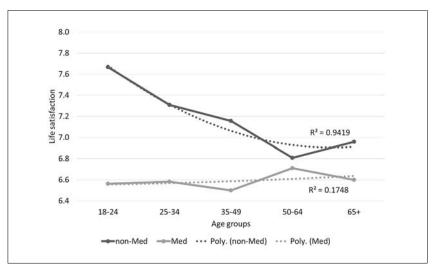


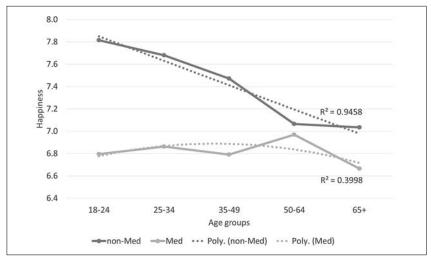
Figure 2 — Happiness by Age in Mediterranean And Non-Mediterranean Countries

the Mediterranean. Moreover, it was found that the change in SWB in Mediterranean countries is not that much affected by age, comparing to non-Mediterranean countries. The trend-lines in Mediterranean countries flatten indicating less change in SWB by age.

Figures 3 and 4 represent the age variations in life satisfaction and happiness in Mediterranean and non-Mediterranean countries after controlling the effect of covariates on SWB measures. The controlled variables were: Deprivation Index (the average number of items a household cannot afford), Public Services Index (the overall measurements)



**Figure 3** — Life Satisfaction by Age in Mediterranean and Non-Mediterranean Countries After Controlling for Covariates



**Figure 4** — Happiness by Age in Mediterranean and Non-Mediterranean Countries After Controlling for Covariates

re of satisfaction with public services within the country) and House income (equalised monthly household income in PPP euros). As it can be seen from the figures, the controlling for these covariates affected much more the age-SWB relation in Mediterranean than non-Mediterranean countries. The U curve shape of this relationship was no longer presented in Mediterranean countries either for Life satisfaction ( $R^2$  = .17) or for Happiness ( $R^2$  = .17). The change of SWB by age in Mediterranean countries after controlling for covariates becomes smaller and unsystematic. In non-Mediterranean countries

tries the U-shaped curve of these relationships is still present regardless of covariates control — the SWB falls by age until the age of 50-64 years and then rises (life satisfaction) or stagnate (happiness). An additional interesting feature of age-SWB relation in Mediterranean and non-Mediterranean countries is the closure of the gap in SWB between the Mediterranean and non-Mediterranean countries in the age group 50-64 years. It seems that, after controlling for socioeconomic variables, the lowest age point of SWB in non-Mediterranean countries is the highest age point in the Mediterranean (age group 50-64 years).

The results of another statistical approach examining age effects on SWB in Mediterranean and non-Mediterranean countries are presented in Table 1. By the two-way ANOVA, we tested the age and regional difference in SWB measures (raw data) and by ANCOVA, the same differences after controlling for covariates. In both analyses, all effects were statistically significant (p> .001) — mostly due to the large sample size. However, the effects sizes were small: Age explains less than 1% of SWB differences, Region explains up to 3% of SWB differences, Age-Region interaction — the differences in age effects on SWB by region (differences in curves) are smaller than 1%. It could be also observed that the main effects of age and region are somewhat smaller after controlling for covariates (smaller Fs and  $\eta^2 s$ ), indicating that socioeconomic variables partially explain some of the age and regional differences in SWB. Contrary, the interaction effects — the differences in age effects on SWB by region (differences in curves) — are somewhat bigger after controlling for covariates. This corresponds with the previous conclusion derived from graphical representations that in Mediterranean counties the curve becomes flattened after controlling for covariates. It seems that controlling for socioeconomic variables reduce age and regional differences in SWB, mostly by reducing age differences in SWB in Mediterranean countries.

Table 1 — Testing for Age and Region Effects on SWB Without and With Controlling for Covariates

	Raw data						Controllin	ng for cova				
	Life satisfaction		Happiness		Life satisfaction		Happiness					
	F	р	η2	F	р	η2	F	р	η2	F	р	η2
Age	63.47	.00	.007	<i>7</i> 9.61	.00	.009	14.36	.00	.003	31.87	.00	.007
Region (Med. vs. non-Med.)	1037.58	.00	.029	1024.24	.00	.029	369.76	.00	.021	410.03	.00	.024
Age x Region	26.09	.00	.003	22.97	.00	.003	29.66	.00	.007	32.19	.00	.008

# DISCUSSION

Several researchers have found that SWB is generally higher in the North of Europe and lower in the South (Clark et al., 2020; Eurofound, 2019) as also our previous (Babarović et al., 2019) and present study. In this study, we were interested primarily in the age differences in SWB between Mediterranean and non-Mediterranean European

countries and showed that these differences are stable by age indicating that citizens living in non-Mediterranean countries have higher SWB than those from the Mediterranean in all age cohorts.

Concerning the pattern of relationships between age and SWB, our results showed that the U-shape relationship fit the data better in non-Mediterranean than Mediterranean countries (Figures 1 and 2). In non-Mediterranean countries, there is a decrease in both measures of SWB (life satisfaction and happiness) between the years 18 and 50, with 50-64 olds having the lowest SWB, followed by an increase in older age. However, this is not the case in Mediterranean countries. The trend lines in Mediterranean countries are flattening indicating less pronounced changes in SWB by age.

After controlling the covariates, that is, variables mostly indicating the relative wealth of citizens (deprivation index, household income, quality of public services), the relationship between age and SWB changed more in Mediterranean than non-Mediterranean countries (Figures 3 and 4). In non-Mediterranean countries, the U-shaped relationship was still present regardless of covariates control, that is, the SWB falls by age until the age of 50-64 years and then rises (life satisfaction) or stagnates (happiness). However, in Mediterranean countries, the change of SWB by age after controlling for covariates becomes smaller and unsystematic with almost no change in SWB by age. It seems that controlling for covariates affected mostly the youngest age cohort (18-24 years) in Mediterranean countries which showed no decrease in SWB in comparison to a pronounced fall in SWB without control for covariates. This absence of a decrease in SWB from young to middle age flattened the expected trend-line of the U-shape relationship.

Besides the fact that the U-shaped relationship between SWB and age remains controversial, some authors argue also about its significance, that is, the size of the age effect on SWB. Our analyses showed that the effects sizes were small: age explains less than 1% of SWB differences, region (Mediterranean, non-Mediterranean) up to 3% and age-region interaction — the differences in age effects on SWB by region are lower than 1%. Jebb et al. (2019) argue that even if the differences across age are statistically significant, the effect sizes are so small that it is truly trivial and lacks practical significance and that in terms of the scale 1-10 (as was in our study), the differences bellow 1.00 should be considered quite small. Our results showed that in Mediterranean countries the differences between the highest and lowest SWB in the particular age group is about 0.5 and about 0.8 in non-Mediterranean countries. However, some researchers argue the opposite, that even if the size of the dip is statistically tiny, it is not trivial (Blanchflower & Oswald, 2019). According to them, the size of the drop in wellbeing from the highest (youth) to the lowest point (mid-life) is equivalent in magnitude to the influence of a major life event like unemployment or marital separation and could be highly consequential.

Without going deeper into discussions and controversies regarding the practical importance and shape of the relationship between age and SWB, we can conclude that our study showed that the citizens of non-Mediterranean countries showed higher levels of SWB in terms of life satisfaction and happiness than those in Mediterranean in all age groups. Also, we demonstrated that age differences in SWB are more pronounced in non-Mediterranean than in Mediterranean European countries, especially after controlling for socioeconomic variables.

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# OBSERVANCE OF ARCHITECTURAL HERITAGE IN URBAN-ARCHITECTURAL AND LEGAL-ECONOMIC SUSTAINABLE DEVELOPMENT OF TOURIST CITIES

### Abstract

An insight into the urban and architectural heritage of many Croatian cities shows a huge number of abandoned, neglected and devastated buildings as a result of emigration, migration to bigger cities or abroad, long-standing unresolved property relations, insufficiently defined and regulated ownership obligations, but also as a result of the fear of investment in old buildings. The end result is the frequent occurrence of abandoned homes in the heart of cities, which creates not only an ugly picture of the city but also unhygienic conditions and the potential for a collapse. Often, the same owners invest in new buildings, more modern, with even more financial resources, contributing with such behaviour to an increased percentage of construction, but also moving away from the need to do something about their old buildings. Architectural heritage is a particularly sensitive issue in urban areas of all cities, especially of the ones of the Adriatic islands, where it is necessary to establish guidelines for sustainable development that would ensure the resolution of property relations, as well as the ownership obligation to maintain buildings, invest and bring to use, with the aim of implementing sustainable development in tourist cities. An interdisciplinary approach within the framework of integrated legal-economic and urban-architectural guidelines begins by addressing the legal segment of ownership and obligations arising from real estate ownership and extends through the economic aspect of the relationship invested/obtained. Sustainable urban planning and design based on quality and the actual recording of the existing state, as well as sustainable architectural design, aims for revitalization of existing buildings, which also includes conservation observations, recommendations and commitments, analysed and regulated with a developed moral code of architects that starts with knowing and respecting the architectural heritage.

Keywords: architecture, economic potential, building heritage, sustainable development, tourist city, urbanism, property relations

The town of Vis is the heir of the ancient *polis* of Issa, which was built by Greek colonists from Syracuse in Sicily at the beginning of the 4th century BC. The city itself was the cradle of an urban civilization on the east coast of the Adriatic, marking the beginnings of the use of money as a means of payment, as well as literacy, cadastral land management and art. The remains of Hellenistic necropolises, residential architecture and streets, ancient theatre and Roman baths testify to the high civilizational and cultural development of this Adriatic polis.

Extremely diverse urban and architectural solutions found in Vis and Komiža, ingeniously adapted to the local topography, include a number of anthological examples of architectural and historical heritage. The facades of many a stone building originated from seabed life and represent an exceptional geo-architectural attraction.

The distance of the island of Vis from the mainland, its perceived isolation, taking a boat trip to the port of Vis and landing on the island, is in itself a unique experience of the island's remoteness, both geographically and time-wise. A walk through the town is just a continuation of the distinctive flair attributed to the island and the town of Vis; a sense of belonging to a civilization that existed long before us, leaving behind a rich legacy of the architectural kind, among other things. However, the historical route have left a mark on the architectural heritage. One cannot escape the impression that despite many efforts and investments made, the town of Vis has another side to it — one that demonstrates a lack of investment in the renovation of buildings, leaving neglected parts of the streets, with dilapidated buildings. This leads one to conclude that the owners are negligent and simply do not care, while the problems seem unsolvable by the local communities. Upon looking closer at the problem, unresolved property and legal relations emerge, mostly from the time of the mass emigration of the inhabitants of Vis in search of a better life. For many years now, the legislation has not been addressing the issue of unresolved relations, nor in any other way motivating families to resolve the issues themselves or the new owner(s) to take responsibility for the maintenance, renovation and reconstruction of buildings. After all, ownership should be binding!

# OBJECTIVE, METHODS AND HYPOTHESIS

The aim of this research is twofold: on the one hand, it is to offer an insight into the current condition of buildings within the historic centre of Vis in terms of their restoration and attained function, or to detect and register abandoned, neglected and dilapidated buildings, and analyse the spatial plan of the town and the protected areas in the centre. On the other hand, this is a parallel study of the existing legal framework within which the problem of the owners' lack of responsibility in relation to the fulfilment of obligations arising from ownership can be addressed.

The methods that are used to examine the above include: the method of direct observation, analysis of the current situation and spatial plans, analysis of the causes of and reasons for inadequate maintenance and investment in specific buildings, analysis of theoretical and empirical literature, and studying the legislation to find specific parts that regulate rights and obligations as well as the possibilities of financial support. The following hypothesis is assumed: "In the historic centre of Vis, there are neglected, abandoned and dilapidated buildings that need to be restored and made functional. There is also a legal framework for addressing the issue of ownership and the obliga-







**Figure 2** — Orange Tree (Source: Blog — thor — einar — leichhar)

tion of investing in such buildings, but also offering a solution in the form of sequestration, which would temporarily take away the right to manage the property in order to protect the interests of preserving the architectural heritage to ensure the necessary restoration."

# IFGAI FRAMFWORK

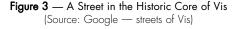
The legal framework which analyses the possibilities of solving the existing problems in relation to protecting the architectural heritage of the historic core of the town as well as the specific buildings within the considered core, pertains to the study of the Spatial Plan of Vis, (*OG of the Town of Vis 2010; 2017*), Conservation Basis for Spatial Development Plans of the Towns of Vis and Komiža (*MCRC, 2003*), Islands Act (*OG 2018; 2020*), Decree on the Regulation and Safeguarding of the Protected Coastal Areas (*OG, 2004*), Act on the Protection and Preservation of Cultural Goods (*OG, 1999*), which includes the Monument Annuity, and Act on Ownership and Other Real Rights (*OG, 1996*).

# URBAN TISSUE OF THE TOWN OF VIS

The soul of the city is reflected in its urban tissue (Figures 1 and 2), which speaks through shapes, colours, structures, smells and tastes. It speaks of its history by living in the present, at the same time looking into the future. What all visitors, and of course tourists, feel, is the "spirit of the place" (Lat. *genius loci*), which comes from the overall impression regarding its heritage, preservation of tradition and historical features, investment in restoration and revitalization, but also all intangible heritage. In this context, the urban tissue is a strong factor in attracting and bringing back all the visitors and tourists.

Stone buildings, narrow streets, street lighting, deep shadows, small windows with shutters and terraced parts often vegetated with the eye-catching wild Mediterranean plants provide the visual identity and fragrant atmosphere.







**Figure 4** — Urban Street of Vis (Source: Blog — thor — einar — leichhardt)

"Arrival in Vis... I stand here and admire nature. An orange tree growing in the middle of an abandoned house in the town of Vis. Nature always renews itself." (Leichhard, 2018).

Unlike buildings, which one has to renovate.

# A PRESERVED HISTORICAL ROVV OF BUILDINGS IN THE CENTRE OF VIS

The historical core of the town of Vis is a wonderful combination of small narrow Dalmatian streets (Figures 3 and 4), which, together with their rows of stone buildings, do not leave the impression of abandonment and lifelessness. The typical urban tissue of the historical core is dominated by narrow alleys with stone houses leading to the waterfront. Fortunately, over the years, the town, as well as the island, owing to the distance from the mainland and probably the strivings of the locals to preserve the spirit of the place, have not been affected by the aesthetics known as 'zimmer frei' — the construction of concrete multi-storey buildings with distasteful and tawdry balconies, so uncharacteristic of local architecture.

Vis became an urban settlement in the 16th and 17th centuries. In the period between the 18th and 19th centuries, and in the beginning of this century, the construction of urban houses began.







Figure 5 — Neglected and Derelict Houses (Source: Google — Ruined houses of Vis)

# DERELICT BUILDINGS IN THE URBAN TISSUE OF THE TOWN OF VIS

In some places, and not infrequently, the street line is interrupted by a building from the era of urbanism of the second half of the last century, when the awareness of architectural heritage had not yet been massively awoken. The latter depended on the commitment and enthusiasm of the architectural profession, which had no legal framework to start from. The number of abandoned, devastated, almost dilapidated buildings that speak of the owners' carelessness, as shown in the collage of Figure 5.

At first glance, this may not seem fair to the owners and may be too binding, but the preservation of architectural heritage cannot be left to individuals but must be a regulated system to which the individual must adapt and act accordingly. Vis became an urban settlement in the 16th and 17th centuries. In the period between the 18th and 19th centuries, and in the beginning of this century, the construction of urban houses began.

Figure 6. shows two orthopanic images of human teeth. Just as it is possible to reconstruct, upgrade, renovate, replace and rebuild the structure of the tissue in the second orthopan, it is possible to arrange the urban tissue of a city in a functional, constructive and aesthetic way. Both require willingness, knowledge, financial capability, time, sacrifice — but above all, desire.





Figure 6 — Orthopanic Images (Source: Documentation from private archives, submitted to the author for use.)

The first image shows the correct functional and constructive sequence of all 32 components, which results in an aesthetically acceptable condition. The second image shows a truncated structure, with several defective parts not having been replaced by new ones, which results in non-functional and non-constructive tissue, with a very poor aesthetic condition. In order for a desire to lead to realization, additional incentives and motives are often needed. Every man and every city must find their way to reaching a goal. The neglect of urban tissue is a mirror of the city and its inhabitants, just as an individual's dental status reflects their health. This comparison is given here because both the city and the smile comprise the common components of function, construction and aesthetics. Just as it is nice to see a healthy smile, it is also nice to see an orderly urban structure and tissue of a city. However, not everything is about aesthetics either — every lack of tissue entails problems in terms of construction and function, and it is necessary to observe the lack of maintenance of certain buildings from that aspect as well.

# reconstruction and renovation of derelict houses

In spite of the above-mentioned, of all the Adriatic islands, the island of Vis is one such place where the most interesting and highest-quality reconstructions and renovations







Figure 7 — A Renovated 400-Year-Old Stone House, the Town of Vis (Source: Google — Villa Artemis)

of old buildings have taken place in recent years. Guided by the vision of investors, the expertise of architects, following spatial plans and special conservation conditions, and with the use of indigenous materials, some houses that are several hundred years old have been renovated and turned into genuine villas in traditional style, with a completely modern purpose (the collage in Figure 7.).

Artemis Villa is located in one of the quietest parts of Vis. For years it had stood neglected and abandoned until it recently got its new owners, who completely restored it under the watchful eye of the restorers for the protection of cultural heritage, returning to its long-lost beauty and splendour. During the renovation, attention was paid to every detail in order to preserve the original structure, but also the spirit of the island of Vis (source: jutarnji.hr). Today, many buildings continue to decay due to costly renovations and unresolved property issues. But this does not have to be the case — positive examples are an incentive for future reconstructions, and the offer of old, often very neglected houses on the island of Vis is increasing. Online real estate adds prove that the problems of property relations are being resolved more and more successfully.

# CONSERVATION CONDITIONS AND RECOMMENDATIONS EN-TAILED IN THE SPATIAL PLAN OF THE CITY OF VIS

Houses several hundred years old are often found in a decrepit condition, with only a 'skeleton' of the outer walls and a ruined roof remaining. Therefore, in such cases, a complete renovation is needed, and we have to respect the traditional construction and preserve it both in the exterior and the interior. By intertwining the authentic and the contemporary, it is possible to achieve a superior work of architecture and satisfy even investors with the most refined taste. Traditional materials, can be combined with modern ones while the houses retain the spirit of the time in which they were created, adapting to the needs of a modern user. Each construction must be well planned and designed, which can be achieved through specific spatial plan conditions as well as special conservation conditions.

Article 34 of the Spatial Plan of the Town of Vis stipulates that the horizontal and vertical dimensions of buildings and openings on them, the design of facades and roofings, as well as the building materials used, must comply with the townscape values of the environment, aligned with measures for the protection of cultural and historical sites and conservation guidelines, as well as be in accordance with the latest knowledge and achievements in the use of building products. The preservation of the specific image of the settlement is regulated by Article 92, which stipulates that the architectural design of buildings must be adapted to the existing environment and that buildings should be designed using recent or traditional architectural solutions to fit into existing settlements. The architectural building design should be harmonized with the landscape, as well as with the size and the image of the settlement. In other words, the horizontal and vertical dimensions of buildings, facade design, roof coverings and slopes, building materials and facade colours, especially within historic urban and rural units or building complexes, must be in harmony with the surrounding buildings, whether recent or traditional architectural solutions have been used. Articles 95 and 96 define urban units, and it can be construed that the only urban unit in the area covered by the Spatial Plan is the urban unit of the town of Vis. Being entered into the Register of Cultural Goods of the Republic of Croatia, under number Z-5093, it has the status of a cultural good and its boundaries have thereby been established. It is necessary to obtain the legally prescribed consents from the competent institution — the Ministry of Culture, Directorate for the Protection of Cultural Heritage — Conservation Department in Split. (OG Vis 2010; 2017)

The above-mentioned competent institution of the Ministry of Culture has prepared the Conservation Basis for the Spatial Plans of the Towns of Vis and Komiža, 2003, which define the system of measures for the protection of urban units of the towns of Vis and Komiža:

"These zones correspond to the regime of complete conservation protection of historical urban structure, landscape features and individual buildings, within which it is necessary to preserve all important features of the spatial and building structure, determined by topography and historical building substance, as well as with the diversity of purposes and contents."

This document has been used for the elaboration of guidelines for the development of spatial plans and the definition of protection measures and provisions for implementation: rehabilitation and maintenance in the historical continuity of preserved urban matrices, size and image of settlements, historical architectural structures, rehabilitation and maintenance of any building that has preserved its original architectural features; restoration of any building that has, through inappropriate interventions, largely or completely lost the features of a particularly valuable cultural property; maintenance and arrangement of undeveloped areas and their urban equipment, taking into account its authentic elements, such as public lighting, horticultural solutions, landscaping and front yard gardening; preservation of the characteristic roofing solutions and prevention of significant changes in dimensions and design, since they are all part of an authentic architectural solution and relevant as the fifth facade in the characteristic image of the settlement; for all interventions it is necessary to obtain special conditions and prior approval of the competent body for the protection of cultural property, regardless of the existence or non-existence of a certificate of registration or preventive protection of an individual cultural property (source: spasimobisevo.org).

It is necessary to involve both the Ministry of Culture and the local community, and to consider the possibility of co-financing and supporting investors in a part that may go beyond the usual reconstruction procedures. Through the island's development policy, it is certainly possible to reach a much more favourable aspect of investing in the protection of architectural heritage, that is, in 'filling holes' in the urban tissue of protected areas.

# LAW REGULATIONS

In order for certain recommendations and conditions to be respected, it is necessary to have an established legal framework.

Islands Act (OG 2018; 2020)

Given the interest of the Republic of Croatia in the specific protection of its islands, this Act regulates the manner in which island assets can be used and exploited, and in which the development policy can be directed towards overcoming the restrictions to which islands, as areas with development specifics, are subjected (Articles 3 and 4). In order to plan, coordinate and implement the island development policy more effectively, island urban areas are being established (cities on islands that according to the

latest census have more than 2,000 inhabitants<sup>1</sup> and/or are defined as subregional, that is, regional and local centres according to the spatial planning system). Strategic goals for the development of island urban areas are incorporated into the Island Development Plan (Article 11). The Ministry continuously monitors the development of the islands and evaluates their development at least once every three years (Article 12). Sustainable development of the island presupposes the achievement of general goals: stable economic development of the island, fair distribution of social opportunities for all islanders, protection of the environment and increasing resilience to climate change. The investment on islands in competitive and innovative sectors that are environmentally, spatially, economically, technologically and socially sustainable is to be encouraged (Article 20). Of significant importance for the topic of this work is Article 22, which refers to the regulation of the cadastre and land registers — with the aim of the sustainable development of the islands. The regulation and adjustment of the cadastre and land registers on the islands is considered a priority and of strategic importance, while its implementation is taken over by the competent state administration body in accordance with special regulations. The Ministry, in cooperation with the Ministry of Justice and the State Geodetic Administration, will prepare and adopt the State Programme for the Regulation and Adjustment of Cadastres and Land Registers on the Islands.

Decree on the Regulation and Safeguarding of the Protected Coastal Areas (OG, 2004)

Given the particularly valuable and protected area of the island, it is necessary to be guided by guidelines and a legislative framework that regulates the construction of the island's surface in a way that minimizes new construction. In this context, the renovation of the existing buildings is certainly a priority, since it allows the development of the area without additional burdening of the environment. In addition, the only logical and sustainable policy of urban management is the use of existing resources in all areas of development, including construction. Thanks to such regulation, as well as to sustainable thinking, many old and ruined buildings, even those within the urban tissue, will find a faster path to restoration.

Within the context of safeguarding the protected coastal area, it is necessary to preserve the natural, cultural, historical and traditional values of the coastal and hinterland landscape; to rehabilitate valuable and endangered areas of natural, cultural and historical heritage; to not plan new construction areas of settlements or their interconnection; to restrict construction in the existing construction areas of the settlement and

<sup>1</sup> Small urban areas — according to Article 14, paragraph 6 of the Act on Regional Development (OG 2014; 2017), small urban areas are cities with fewer than 35,000 inhabitants, while their central settlements have more than 10,000 inhabitants. Since there are areas on the islands that demonstrate, apart from the size, the required urban characteristics, the borders of the island's urban areas are adjusted to the island's development conditions per 2,000 inhabitants.

the remote unbuilt construction areas (outside the settlement) along the seashore; to plan residential, commercial and other buildings so that the purpose, position, size and design respect the existing spatial values and characteristics.

Act on the Protection and Preservation of Cultural Goods (OG, 1999)

Numerous abandoned houses that make up the wealth of urban and architectural heritage are the ones that could deservedly, but only on the basis of professional evaluation of the Ministry of Culture, be on the list of the Register of Cultural Goods of the Republic of Croatia (Articles 12 and 14). In that way, the owners of such buildings would be legally obliged to handle such properties with due care, especially to preserve and regularly maintain them, implement protection measures and fulfil the obligations set by law, as well as to immediately inform the competent authorities about any changes, possible damage and destruction, disappearance and/or theft, to allow various investigations, recordings and technical protection measures on such goods and to make them available to the public (Article 20). Such a high level of conservation protection significantly binds (but sometimes limits) the owner, but certainly seeks to ensure the protection and preservation of valuable buildings or urban tissue.

Funds for the maintenance and preservation of cultural property must be provided by the owner. However, given the status of the building and the position within the protected area, the Republic of Croatia provides numerous exemptions and privileges, thus trying to compensate for the additional liability and limitations imposed on the present owner in relation to the usage of their proprietary goods. However, precisely because of that, the Republic of Croatia has the right to deny them an apology for not fulfilling their obligations (Article 108).

In order to assure protection against not seeing the importance of smaller local communities, the Act leaves an additional possibility for the goods not characterized as culturally protected at national level, to be declared as a particularly valuable and protected area by a local representative body (county, city, municipality), thus giving the local government the authority to assess first-hand the justification and deserved status of the goods that are of local importance (Article 17). The above-mentioned legal status of cultural properties, and especially the properties of local importance, ensures the regulatory background which is needed for the realization of the idea of sustainability, the maintenance and survival of the purpose and protection of neglected urban tissue in tourist areas of the Croatian coast, and definitely represents a valuable idea and opportunity to protect architectural heritage.

# Act on Ownership and Other Real Rights (OG, 1996)

Looking at a purely legal definition and notion of property rights, this pertains to "the right that authorizes its holder to do with their property and benefits thereof as they choose and to exclude anyone else from it, if it is not contrary to other people's rights or legal restrictions." The owner has, among other things, the right to own, use and dis-

pose of their property (Article 30). It is obvious that the owner has almost absolute power and broad authority over their property, so it is all the more necessary to point out the other side of such an idealized authority, which refers to the obligations arising from the said ownership.

Every owner, in exercising their right, is obliged to contribute to the common good and to act with regard to general and other people's interests that are not contrary to their right (Article 31). Also, the right of ownership may — as already pointed out within the context of the protection of cultural property — be limited by special laws declaring things of interest to the Republic of Croatia, and for which a special way of use and exploitation is prescribed by their owners and holders of other rights to them, with appropriate compensation for the restrictions thus imposed (Article 32, Paragraph 2).

From the perspective of the protection of urban treasures from the negligence of their owners, it is worth mentioning the legal institute of sequestration<sup>2</sup>. When in order to protect the interests and security of the state, nature, cultural monuments, human environment or human health, it is determined that the owner is obliged by law to do something about their own property, and they cannot be forced to do so, the mayor or the prefect is authorized to establish temporary management of the property by applying in an appropriate manner the rules on temporary custody of the estate in case the heirs are unknown or of unknown residence.

Practically speaking, the property that is the subject of sequestration can be leased and the rent is used only for the maintenance of the property or for the fulfilment of another assigned commitment (which the owner has not been fulfilling). As the property is leased for a certain period of time, the owner still has the right to return the possession of their property even before the expiration of the term, if they pay in full the invested funds or fulfil their obligation due to which the property has been "taken away". (Article 32, Paragraphs 3, 4, 5, 6, 7). Perhaps sequestration is the legal solution we are looking for as well as a powerful weapon to preserve heritage when it comes to neglect by inaccessible or negligent owners, most often as a result of unresolved property relations, or due to a financial inability to invest.

# MONUMENT ANNUITY

In order to provide funds for investment in the restoration of cultural heritage, as well as to preserve its permanence, the obligation to pay a monument annuity<sup>3</sup> has been

**<sup>2</sup>** Sequestration (late Latin *sequestratio*) — a temporary seizure of property management; separation. In law, a temporary measure, the establishment of the management of a particular thing in order to protect the interests and security of the state, nature, cultural monuments, human environment or human health. (*source: enciklopedija.hr*)

<sup>3</sup> Monument annuity — a form of income from direct or indirect economic exploitation of architectural heritage that is collected for the purpose of investing in the restoration of cultural heritage for the permanent preservation and protection of its monumental characteristics. (source: gov.hr)

introduced. The amount of annuity is determined by decisions of cities and municipalities in the Republic of Croatia, and annuity payers are such legal and natural persons (payers of income tax and profit tax) who perform some economic activity in an individually protected immovable cultural property or in the area of a cultural and historical unit, as well as those who perform any of the activities within the National Classification. This is yet another way of giving special status to valuable assets, thereby additionally charging for their use for business purposes in order to create funds for their maintenance and restoration. (OG, 1999)

In tourist places on the Adriatic coast, a combination of business and tourist activities located in the historically important core of the city is commonly observed, often within protected cultural and architectural heritage sites. In business terms, these are often impressive and beautifully renovated office buildings that certainly attract extra attention. That is why it is necessary to emphasize the importance of their maintenance and increased protection, which requires additional financial investments.

However, due to the impressiveness of the building and its location, doing business in buildings in the protected core of the city certainly provides extra profits, from which the collection of monument annuity is expected. The role of resources collected in the form of monument annuity should be used strictly for the purpose intended and in a controlled manner, in accordance with the needs of the entire protected area. This could be of help to those buildings that are without investors, or whose owners have no interest or possibility of additionally investing in rescuing their old valuable buildings from decay. Thus, the role of society is to work together to ensure the preservation of architectural heritage by regulating the possibility of helping and co-financing those who are unable to invest.

# CONCLUSION

The challenges faced by the specific market of buildings within cultural and historical units relate to the fact that many protected buildings around us are deteriorating because they have no purpose whatsoever, while another basic problem is the lack of financial resources. However, when it comes to the buildings of historic significance, it is not just a matter of business opportunity but there is also a social mission to be considered: the preservation of our cultural heritage for generations to come. The ultimate function and purpose we want to give to a historic building is of great importance and can act as a business driver that can attract private and public sources of funding. The key importance of the building lies in its own historic value; it increases its reputation and value in the real estate market.

Reconstruction projects require the partaking of all participants involved, or in other words, an interdisciplinary approach, including a green building consultant. Historic buildings, complexes of buildings, cultural and historical units, and landscapes are

protected as immovable cultural goods by the Act on the Protection and Preservation of Cultural Goods. Regardless of the legal status of building protection, before preparing any documentation, it is necessary to contact the local conservation department, which issues special conditions of protection as well as guidelines for restoration. Once a year, the Ministry of Culture announces a Call to Finance Public Needs in Culture, both in the media and on its website. The aim is to finance programmes for the protection, preservation, restoration, presentation and maintenance of cultural heritage.

In addition to the state budget, funds for the renovation of historical buildings are also provided within the budgets of local and regional self-government units.

Finally, the hypothesis has been proven: In the historic centre of Vis, there are neglected, abandoned and dilapidated buildings that need to be restored and made functional. There is also a legal framework for addressing the issue of ownership and the obligation of investing in such buildings, but also offering a solution in the form of sequestration, which would temporarily take away the right to manage the property in order to protect the interests of preserving the architectural heritage to ensure the necessary restoration.

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# BEARDED FIREWORM

### Abstract

The bearded fireworm (lat. Hermodice carunculata) is a Polychaeta, a predator that lives at the sea rocky bottom, between the surface and depth of 60 meters. It eats sea urchins, starfish and corals. In 2018, the area of the Vis archipelago was declared a geopark as a part of UNESCO World Geoparks network. On its steep sea beds, a colorful coralligenous biocenosis has developed, inhabited by gorgonians, stone corals, plate starfish and numerous other organisms. As the bearded fireworm feeds on these organisms, and it has no known natural enemy, there is the danger of not being able to preserve the biodiversity of coral biocenosis. The intention of the paper was to investigate the spread of the bearded fireworm population in Vis waters and to study its negative impact on other marine organisms, especially on starfish and sea urchins. The research was conducted by studying the available literature with the aim of being acquainted with the number of bearded fireworms, eating habits, life cycle and ecology of the behavior. A survey has been conducted with the local island people, local fishermen and divers were interviewed. The locations were marked at places where these marine organisms were observed, then a map of its habitats was made as well as areas where the number of sea urchins has decreased and finally, areas where starfish were discovered as defected. The population expansion is the result of an accelerated process of climate change that led to increased sea temperature. It has been concluded that there are not known adequate predators that would decrease the number of fireworms and keep the entire population under control. Following that data, a four parts cause — effect diagram was made with observed relationships. The diagram showed numerous variables contributing its increasing representation and leading the disturbance of numerous animal species, for some their disappearance in the areas of the Vis archipelago.

Keywords: Bearded fireworm, global warming, marine ecosystem, predation

Hermodice carunculata (Pallas, 1766) bearded fireworm is a polychaeta from the group of ring worms distributed in the Atlantic Ocean, the Gulf of Mexico, the Caribbean Sea, the Red Sea, the Mediterranean and more recently, in the Adriatic Sea. In the warmer seas, it lives on coral reefs while in Croatia it lives at the rocky bottom. It can grow up to 35 cm, although it is usually 15 to 20 cm long. Its body consists of numerous bluepink rings and a thin light yellow line separates them from each other. Red or brown gills are visible on the hips, and white bristles protrude below them (Šafranek, 2018). The fireworm Hermodice carunculata is an active predator of many benthic organisms from coral reefs (De Assis, Dias, Christoffersen, 2017). The fireworm is a predator that feeds with small organisms such as crabs, starfish and sea urchins (Simonini, Righi, Maletti, Fai, & Prevedelli, 2017). Nevertheless, it is also a carnivore, so it feeds with the

dead remains of fish and other organisms and is common in places where fishermen discard their unwanted catch. H. carunculata is an active predator of healthy holothurians or an opportunistic feeder of previously injured sea cucumbers (Barroso, Filgueiras, Contins, & Kudenov, 2017).

The bearded fireworm is a slow organism and it is not considered a threat to humans; however, if it senses danger it spreads its bristles and lifts them upwards into a defensive position. The bristles are very thin and strong like needles and carry poison on them. The sting can also lead to nausea and dizziness, and the feeling of painful tingling can last up to several hours.

The key variable causing an increasing number of bearded fireworms is global warming. Global warming is the gradual warming of the Earth's surface and the lowest layers of the atmosphere caused by the greenhouse effect, which also leads to global climate change. The climate has also changed in the Earth's past, but it is believed that the current cause of it is a significant increase in the concentration of greenhouse gases in the atmosphere, primarily carbon monoxide. Most of it is absorbed by the oceans and a smaller part by the forests while the rest accumulates in the atmosphere. The effects of climate change are being felt in all parts of the world (Srebočan, 2011). Due to the melting of the ice, the sea level is slowly rising and the ice cover areas are shrinking. Extreme weather and rain are increasingly common in some regions, while heat waves and droughts occur in others. The temperature of marine ecosystems is rising, especially in shallow coastal areas. Climate change is happening very fast and many plants and animals are having a hard time adapting (Damijanić, 2019). If average temperatures continue to rise uncontrollably, some plant and animal species will be at an increased risk of extinction. Furthermore, the rise in temperature damages the heart, lungs, skin and all other organs.

The island of Vis is the largest remote island in the group of central Dalmatian islands. The area of the Vis archipelago includes the islands of Palagruža, Biševo, Sv. Andrija, Budihovac, Jabuka, Brusnik and others. The island of Vis belongs to the Adriatic type of Mediterranean climate of hot and dry summers and mild and humid winters. The most common winds are "bura" and "jugo" in winter and "maestral" in summer.

The tertiary occupation that brings the most income to the islanders is tourism. There is a two-way impact on tourism: tourism causes climate change, but at the same time climate change encourages a growth in the number of tourists. An increase in temperature will cause the sea temperature and its level to rise. The higher the temperature during the year resulting in more warm days affects the extension of the tourist season. More tourists are causing more pollution and the beaches are increasingly covered with plastic and glass.

In the area of the Vis archipelago, an increasing presence of bearded fireworms has been noticed recently due to the frequent unpleasant experiences of bathers with this marine organism. The question is: "What is the cause of the increasing prevalence of bearded fireworms? The main problem is the connection between the increased

number of bearded fireworms and global warming and its negative impact on sea urchins and starfish. Finally, the paper will discuss the question of whether the greater number of bearded fireworms is the result of irresponsible human behavior towards the environment.

## MATERIALS AND METHODS OF WORK

Several work methods have been used. The first is the study of literature. Worms' basic biological features and characteristics were researched and several research papers that study the impact of the bearded fireworm on individual marine organisms were found. With their help, the final conclusion about all its negative effects came. The second part of the work included a conversational part in which a couple of local fishermen and divers were chosen and talked to about the problem of the bearded fireworm itself. They were given the island of Vis map where they marked all the locations they spotted this marine organism at, as well as identifying the reduced number of sea urchins and starfish. The third part was compiling a survey, with the intention of finding out how familiar individual islanders are with its increasing occurrence, but with the cause of the increase in the number of individuals over the years. The last part involved fieldwork. The sea and air temperature were measured which helped to compare the previous temperatures with the current ones. The type of substrate on which they are located was determined to draw a conclusion regarding which habitat suits them the best.

## THE RESULTS

Using these methods — studying the literature, conducting surveys and talking to divers and fishermen, a wide range of variables was found that potentially influenced the positive and negative development of an increasing number of bearded fireworms. Upon further analysis, some of them were dismissed as irrelevant, as those that had too little impact to be worth mentioning or one whose action could not be established. After this process, the following relative variables were established which, according to research, could influence the development process of the spread of this marine organism. The possible variables include: sea temperature, air temperature, salinity, sandy surface, stone base, number of sea urchins, number of starfish, number of starfish with damaged arms, the number of bearded fireworms, the presence of a natural enemy of the bearded fireworm, nautical tourism, marine pollution, air pollutio, the presence of fish farms, fireworm activity time, the number of tourists, and people's awareness. A closer study of the variables, their interrelationships and their impact on the ever-faster, visible development of the bearded fireworm established that some of them could be reduced to a common denominator because they had similar effects.

Furthermore, four diagrams were made to present the issue simpler and clearer. Then, the key variables and their interrelationships were selected, as well as their effect on the population over the years. It was determined how the diagram would look

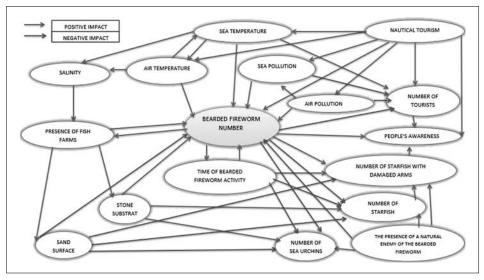


Figure 1 — The Diagram System Author: Dina Vojković

like and that the blue arrows in it would indicate a positive relation and the red arrows a negative one. By observing the relations between the possible variables, the nine main variables were identified. They interact with secondary variables, but also with each other. The main variables include: bearded fireworm abundance, the presence of the bearded fireworm's natural enemy, nautical tourism, number of tourists, sea temperature, sea pollution, urchin abundance, starfish population and starfish damage.

Figure 1 shows a diagram of the system with all possible variables that had an impact on the distribution of the bearded fireworm. It is easy to determine that all variables are well related to each other. For example, the main variable can be taken — the prevalence of bearded fireworms, which negatively affects the population of sea urchins and the number of starfish with damaged legs. On the other hand, the increase in the number of bearded fireworms has resulted in people increasingly coming into unpleasant contact with it and becoming aware of its presence.

## SOLUTION TO THE PROBLEM

After studying the results of the survey and all the variables and talking to local fishermen and divers, it was realized in which direction solving our problem should go. It is necessary to organize education and workshops for primary and secondary school students and the local population on the consequences of climate change that have caused an increase in bearded fireworms in the Vis archipelago. Following this, it would be beneficial to encourage the cooperation of high school students with the Vis Archipelago Geopark. The last and most interesting way to potentially solve the problem is

to make and distribute brochures or leaflets about the importance of preserving the sea to tourists visiting the island of Vis.

## CONCLUSION

In this paper, the increase of the number of bearded fireworms has been investigated, the cause of that increase and the impact of this marine organism on other organisms in the sea.

Based on the research it can be concluded:

- variables that have the greatest impact on the spread of the bearded fireworm population: fireworm numbers, presence of the natural enemy of the fireworm, nautical tourism, number of tourists, sea temperature, sea pollution, sea urchin numbers, starfish numbers and starfish damage.
- conducted survey aroused insufficient interest from the islanders
- residents are not sufficiently aware of the growing number of bearded fireworms
- residents are not familiar with the reason for its increasing presence
- local fishermen and divers noticed an increasing number of bearded fireworms, but did not know the reason for the increase
- the bearded fireworm has no natural enemy
- the bearded fireworm is resistant to the negative consequences of climate change
- the bearded fireworm destroys populations of sea urchins and starfish

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# ISLANDS — PROTECTED OASES AS A RESULT OF QUALITY WASTE MANAGEMENT

#### Abstract

Given their geographical position, islands are destined to be "isolated". Nevertheless, the isolation itself represents great potential for maintaining autonomy in every aspect, including waste management. Small islands are sometimes densely populated on the one hand, with large expanses of untouched nature on the other. Because of this, sustainable development can be very wellorganized and waste management is considered one of the key factors which can greatly contribute to that. Still, islands are places where uncontrolled accumulation of waste could occur in a relatively small area. Therefore, the attitude towards waste on islands is very specific, challenging and undisturbed by any kind of external influences. This is primarily due to the specific economic and political situation maintained by local officials whose careful consideration and planning can help the islands stand out as examples to other communities. As a dominant industry, tourism can be a liability and a source of additional concern given that, during the tourist season, it often brings enormous amounts of waste. The latter is related to the pollution of air and sea. The pollution is primarily a result of accumulating solid waste, whose volume, unpleasant odour and the problem of organized removal from the island can significantly burden the settlements. In this regard, local selfprotection measures are of immense importance. Islanders have a unique opportunity to set strictly controlled conditions for any kind of waste management within the limits of their geographical position, thus protecting their islands from pollution. In this context, the interdisciplinary approach should also rely on urbanism through quality spatial planning which considers sustainable development and design that would foresee economic zones for waste management. In general, islands are potential oases of unpolluted Earth. Being isolated, they can oppose and reject the usual unsustainable methods and become the prototype of quality waste management.

Keywords: geographical isolation, island, pollution, tourism, urban planning and design, waste management

# ISLANDS — PROTECTED OASES

Islands differ greatly in their socio-economic and physical characteristics, but they all have one thing in common — they are physically separated from other land masses. This physical barrier can restrict the flow of materials, organisms or information, but it also represents the island's ability to solve some of its problems on its own, such as, waste. At a time when the industry was not as yet developed as it is today, waste management on islands posed far fewer problems than it does today. This is especially

true for agricultural islands that have used integrated practices such as the reuse of nutrients from human, animal and agricultural waste in the past. With the advent of synthetic materials such as plastics, it has greatly led to an increase in the amount of waste that requires treatment and disposal.

Achieving high quotas for municipal solid waste recycling on the Mediterranean islands is undoubtedly characterized by several specific problems that become especially visible during the summer when tourism increases the population and thus the amount of mixed municipal waste. The idea of traditional municipal waste management, which mainly relies on the disposal of waste in landfills, is at odds with the limited availability of island space and is not a solution to the problem in a sustainable way. On small islands, municipal waste is mainly collected and recycled separately, as is the case with plastics, metals, glass and other fractions, while huge amounts of waste are transported to larger settlements, mainly on the mainland.

European Union legislation, including that relating to waste management, such as the Waste Framework Directive and the Landfill Directive, explicitly recognizes the challenge of trying to apply the same strict standards to small islands as to the mainland, in which case they often apply exceptions or derogations. The possibility of applying exemptions or derogations for small islands should not be construed as a "license" or permission to any local authority to adopt standards and implement practices on the islands that could create significant environmental damage. Given the efforts of many small islands to maintain the environment for the purpose of supporting tourism or local agriculture, this would be counterproductive.

## WASTF MANAGEMENT

In the past, there have been many examples of inappropriate waste management on small or remote islands, with very few attempts to adopt a sustainable approach that protects the local environment. On many small remote islands across Europe and around the world, indiscriminate waste disposal has often been common and resolved in an open combustion manner, and sometimes by collecting debris in a remote corner of the island. For example, for many years on the Greek island of Santorini, waste was thrown over a high cliff. However, this is no longer practiced, and many steps have been taken in many Greek islands to address these issues.

# Examples of Negative Waste Management

Islands have their own specificity in relation to the mainland in terms of the possibility of waste disposal. There are many negative examples of popular destinations that did not know or could not fight against huge amounts of waste, but also against the attitude that tourists had towards nature, that it was not their home. An extreme example of poor waste management that was described in the world press in 2012 as "apocalyptic" and "floating toxic bomb" is the island of Thilafushi in the Maldives. The Mal-

dives archipelago is considered one of the most beautiful holiday destinations in the world. Of the 1,200 islands in the group, 200 are inhabited, and half of them are marked as resorts. As a result, the pressure on the environment is enormous, and waste management is simply not adequately planned. The result is an open landfill with over 300 tons of rotting waste every day and an island that is increasingly threatened by rising sea levels, which is an obvious sign that something needs to be done. The relatively small permanent population and the potential impact of the temporary tourist population can put considerable pressure on local governments in terms of financing waste management services. Most remote island communities can only afford the most basic waste management systems without external funding, simply because they do not have the capacity to collect local taxes to finance the full range of infrastructure needed to address issues such as electricity generation and supply, water supply and wastewater treatment, solid waste management in accordance with modern standards (https://ejatlas.org/conflict/thalifushi-landfill-a-toxic-bomb-in-the-ocean-maldives; Maletestal, Schmidt di Fiedberg, Pecorelli, Di Pietro & Cajiao, 2015).

# Examples of Positive Waste Management

There are examples of larger islands in Europe that have the capacity to develop modern facilities and attract the investment needed to do so. Two examples include Isle of Man (83,000 inhabitants) and Jersey Island (108,000 inhabitants) in the United Kingdom, both of which are among the islands with state-of-the-art power plants (Isle of Man Waste Strategy GD No 0042/18). A third example is the Western Isles (26,000 inhabitants) off the north-west coast of Scotland where a new waste treatment plant has recently been integrated (Menzies, Dimambro & Aspray, 2019). The West Isle Waste Management Plant was the first in the UK to use anaerobic digestion to treat organic waste separated from energy sources.

Islands with a much smaller population simply could not support the development of this type of facility without external funding from the central government or through grants. A current example of this is the Scilly Islands — one of the most beautiful island archipelagos in Europe — but with a very small indigenous population of only 2,200 inhabitants. Without the UK government's current commitment to provide significant funding to rehabilitate, the local island council would simply not be able to address the urgent need to replace the existing but old waste incinerator with a modern waste-to-waste power plant and remediate the on-site soil remediation which waste management has had a direct impact in the last fifty years.

# Iceland — A European Island Nation with Developed Sustainable Waste Management

Iceland is a Nordic country in the North Atlantic, with 364,134 inhabitants and an area of 103,000 km<sup>2</sup>, making it the most sparsely populated country in Europe. Waste ma-

nagement in Iceland is organized in such a way that local authorities determine how domestic and industrial waste is collected in their community and adopt regional waste management plans. The Ministry for the Environment and Natural Resources determines the national policy on waste management and waste prevention for the state as a whole, while the Environment Agency is responsible for the implementation of the law on waste management.

Waste treatment in Iceland aims to minimize its production and optimal use of resources through waste prevention measures, reuse of everything possible, recycling of waste materials, use of waste for energy production and final disposal in a way where other ways of waste disposal are not possible. Waste treatment charges, imposed in various types of products, aim to ensure that waste producers pay in full for its disposal (polluter pays principle). The Icelandic Recycling Fund manages the administrative part and the allocation of waste treatment fees.

Iceland was the first country to introduce a recycling cost collection system for all disposable beverage packaging, such as plastic bottles. The fee is charged on your disposable beverage packaging to encourage its recycling by returning the fee to consumers who return the packaging themselves. For this purpose, the company Recycling Ltd. was established (Icelandic: Endurvinnslan flöskumóttaka) which deals with the receipt of beverage packaging by paying recycling fees for their return, preparation of their export and sale for recycling (https://www.government.is/topics/environment-climate-and-nature-protection/waste-treatment-/; http://endurvinnslan.is/english/). Recycling Ltd. has 60 return facilities all over Iceland where consumers can sell their packaging. In return facilities in Knarravogur, Ananaust, Breidhella, Dalvegur, Hraunbér, Reykjanes and Akurevri it is not necessary to sort or count bottles and cans if they are undamaged, while in other return facilities it is necessary to sort and count them in order to recover the fee for the deposit of packaging. The recycling rate for beverage containers in Iceland in the past was approximately 85%, while in 2011 and 2012 it was 87%, and in 2014 it was 90%. It is important to note here that the rate has been declining in recent years due to an increase in the number of tourists unfamiliar with the established system (http://endurvinnslan.is/english/).

# JAPAN — TECHNOLOGICAL ADVANCES CAPABLE OF CONDUCTING A DIALOGUE WITH WASTE

Japan is an island nation that manages its waste comprehensively with the use of advanced technologies. Of the nearly 44 million tonnes of waste per year, only 1% is disposed of in landfills. The rest is recycled or converted into energy in state-of-the-art waste facilities. Japan's effective solid waste management practices can be largely attributed to effective cooperation between its national and local governments. Central and

city public bodies coordinate through several levels, from data collection to funding (Kaza, Yao, Bhada-Tata, & Van Woerden, 2018).

Waste collection is carried out at the "municipal level", which means that each city and city district has its own completely different system. For example, as many as twenty-three administrative districts of Tokyo have a different system and principle of waste management. The reason Japan has such an organized waste management system lies in the fact that the country has faced a number of specific challenges in the past when it comes to waste management, the biggest of which was the lack of land suitable for building a landfill. In the 1960s it became clear that Japan, with its population growth, would have to find a solution to its waste. According to the World Bank, Japan produced 43,981,000 tons of mixed municipal waste in 2015 (approximately 356 tons per capita), which ranks it 8th in the world (Kaza, Yao, Bhada-Tata, Van Woerden, 2018). Unlike larger countries like the United States, China or Russia, Japan was simply forced to find another solution which was based on thoroughly separating and incinerating most of the municipal waste collected. In contrast to western countries, where in most cases waste is taken for recycling, in Japan only 20.8% of waste is recycled, while all other waste is incinerated, mostly with the help of a fluidized bed incinerator.

#### SUSTAINABLE DEVELOPMENT ON THE ADRIATIC ISLANDS

Sustainable development is easiest to plan and implement if there are conditions to control all actions. In reality this is extremely difficult to achieve due to the fast pace of life, mobility of people and goods, mixing of various activities and rapid flow of information. Islands are an ideal place that with its separation, conditionally speaking isolation and control of entrances and exits can significantly affect many factors and create a positive atmosphere of healthy and natural life in accordance with a sustainable way of thinking.

#### The Island of Vis

The COAST project was developed with the support of the UN Development Program (UNDP1), in cooperation with ministries, and with the support of the Fund for Environmental Protection and Energy Efficiency. As a demonstration area, due to its exceptional biological and landscape value, Vis and the Vis waters have been recognized. The most important goal of the project is to explore and recommend models of development for Croatian coastal areas, which will not affect biological and landscape diversity, reduction of natural and cultural identity thus trying to primarily influence spatial planning and sectors ensured for the development of activities on the one hand and protecting landscape values on the other. The island of Vis is dominated by two settlements in which 93% of the total population of the island live. As part of the project,

the spatial plan for Split-Dalmatia county and the plans of the towns of Vis and Komiža were analysed, together with the purpose and uses of the areas so that the pressures on the environment can be identified with its consequences. The analysis covers the load on the environment by road and sea structures, fishing ports, water supply system, buildings and defence complexes, sports and recreation centres, heliports, small airports, nautical tourism ports (marinas), sewage systems and landfills.

In the area of the sewerage system, the need for investment in improvement was noticed to ensure purification and drainage in a satisfactory manner. Regarding waste management, the inadequate and unacceptable condition of the current landfill was pointed out, together with the planning of a single sanitary landfill for the whole island, with the fact that all waste, except construction waste, will be transported to the mainland (COAST Project, p. 23).

In line with sustainable development, it is unacceptable to think in a way that waste is simply planned to be taken "to the neighbor". Islanders should think sustainably — think about how they will deal with the waste problem and solve it within their borders. The generation of waste as a problem is a fact and must result in the intention of its significant reduction and not only the disposal of what is inevitably classified as waste. Islanders acknowledge and recognize opportunities at the local level and precisely because they understand that they have to take care of the waste themselves, they use them (the opportunities) to regulate and determine how much and what types of waste will be brought to the island.

Measures to protect areas and parts of the endangered environment include stopping further pollution of the coastal sea, solving the problem of large waste in the form of recycling at the primary source, remediation of illegal landfills and existing landfills, providing sanitary landfills on the island of Vis. The spatial plans of municipalities and cities in the coverage area plan the construction of new tourist settlements. The degree of environmental impact depends on the type of tourists, the type of activity and the intensity of the use of the location. Daily, seasonal, transit tourists — each type carries with it different environmental burdens (COAST Project, p.86).

"Tourists can damage or endanger ecosystems by leaving waste — such impacts are small but cumulative — thousands of tourists can continuously cause significant damage over a large area over time. Leaving waste contributes to changing the local composition of the soil, interferes with photosynthesis by covering plants, and can cause the opportunistic habituation of fauna to biological waste as food, as well as the habituation of fauna to human presence." (COAST Project, pp. 88, 89)

Tourism, as a very high-risk industry in terms of waste generation, must certainly think sustainably. Absolute control of landfill waste disposal and discharge into the sea should be regulated by instructions, obligations and sanctions. These would be the basic instructions every tourist must be familiar with before arriving on the island. Tou-

rists come to Vis precisely because of its beauty and purity of natural resources. Because of that they need to protect the area where they stay and they have no right to disturb it.

#### The Island of Zlarin — The First Croatian Island Without Plastic Waste

The usual one-day tourist trip to the island of Zlarin reveals at first sight the cruelty of the islanders towards tourists but in the background one can see concern for one's island, nature and health. After the initial surprise, the tourist realizes that he has learned a "life lesson", not just tourists' manners. Immediately upon arriving on the island, tourists receive information, instructions, and expectations from their hosts. This is the result of the 2018 initiative "For Zlarin — without plastic" launched by the Association "La Revolution Albatros", supported by the entire island community and with the aim to make Zlarin the first Croatian island without disposable plastic. Composting and life with less waste are promoted through banning disposable plastics, purchasing home composters and converting organic waste into food for gardens, reduction of household waste by as much as 60%, going shopping with one's own bag, purchasing local and seasonal products from small producers, selecting products in bulk or without plastic packaging, collecting garbage encountered in nature, discussing the problem and solutions of plastic pollution with family, friends and colleagues.

A pleasant walk around the island begins and ends with a plastic bottle in hand because you have nowhere to throw it as there are no trash cans! And why would you? Take with you the waste that you brought to the island! Very simple, practical, and sustainable for the islanders and their little paradise. It's actually a simplified whole story about keeping the island from waste.

# WASTE MANAGEMENT PLANNING

In the modern world, waste has become a great burden for man and nature. Through waste management planning, which has been carried out for decades, efforts are being made to control waste pollution of all kinds, so the selection or separation of household waste actually represents the beginnings of sustainable development in terms of sustainable management and thinking, which could not be achieved without good planning and organizing. Desire, willingness, and initiative alone cannot provide a complete view and implementation of waste care; therefore, a legal framework has been established. Islands, because of their isolation and possibility of controlled implementation of necessary measures, are protected oases which can develop a prototype of behaviour and waste management on all social and natural levels and lead by example.

# The Islands Act (NN RH 116/18, 73/20)

The Islands Act (Official Gazette, 116/18, 73/20) regulates the manner of managing the development of Croatian islands, the protection of islands and islets in the Adriatic Sea.

Through the system of evaluating the development of islands based on island development indicators, the Ministry continuously monitors the development of islands at least once every three years (Articles 1 and 2). The Islands Act encourages and supports the sustainable development of islands through projects implemented in accordance with the guidelines of the Smart Island, which in point 6 of Article 22 refers to the creation of areas without waste disposal by promoting a circular economy and point 7 of Article 22 on preservation of the characteristic natural and cultural heritage of the island. Projects implemented in accordance with these guidelines are considered a priority for funding in tenders conducted by the Ministry but must be harmonized with spatial planning documents and spatial plans. (Articles 20, 22).

The Environmental Protection and Energy Efficiency Fund co-finances the eligible costs of transporting waste from the island to the mainland in the amount of funds determined by general acts. It also co-finances eligible costs for the construction and equipping of waste management facilities on islands that are in the system of waste management centers (transshipment stations) and which are of local or regional interest; recycling yards, sorting plants, remediation of landfills and so forth (Art. 40). Municipalities are responsible for providing public service of municipal waste collection, establishing recycling yards and implementing measures to prevent waste disposal in the environment and disposal of discarded waste, giving consent for waste collection actions, planning of locations for buildings of local importance, the implementation of educational and informative activities and the implementation of measures and obligations prescribed by the Waste Management Plan.

Spatial Plan of the City of Vis ("Official Gazette of the City of Vis", No. 1/10 and 2/17)

The spatial development plan of the town of Vis also includes the issue of waste management. In the first place, the Spatial Plan envisages the construction (partly reconstruction) of the sewerage system of the City of Vis with treatment devices and submarine outlets (Article 86). The city is obliged to ensure the conditions and implementation of the Act on Sustainable Waste Management (Official Gazette, 94/13, 73/17, 14/19, 98/19) that prescribes measures for municipal waste management with the basic goal of avoiding and reducing waste generation and reducing the hazardous properties of waste whose occurrence cannot be prevented; waste disposal at a regulated landfill; utilization of valuable properties of waste for material and energy purposes and its treatment before disposal; prevention of uncontrolled waste management; remediation of waste contaminated areas; prevention of dangers to human health, flora and fauna; prevention of environmental pollution: water, sea, soil, air above the prescribed limit values; prevention of uncontrolled disposal and incineration and remediation of all illegal dumps in the City. The final solution of waste treatment and disposal (mixed municipal and non-hazardous production waste) from the area of the City of Vis is envi-

saged at the County Center for Waste Management. In the area of the town of Vis it is planned to build a transshipment station and a recycling yard with an area of 0.6 ha and recycling yards that can be operated in other parts of the city. The final cessation of work and rehabilitation of the existing municipal waste landfill is also planned (which is possible by landscaping). The City of Vis is obliged to ensure the implementation of legally prescribed measures for separate waste collection and to act in accordance with the Waste Management Plan.

#### Declaration on Smart Islands

The Declaration on Smart Islands was signed in March 2017 at the International Conference on Sustainable Development of European Islands held in Brussels. The concept of smart islands includes new guidelines for European islands (smart, inclusive, and successful island communities for an innovative and sustainable Europe) and has been signed by more than 200 European islands, from the Baltic and North Sea to the Mediterranean. Representatives of Croatian islands also signed the Declaration, expressing their commitment to building energy-efficient, environmentally sustainable and digitally connected communities.

"Islands are the wealth of every country, and Croatia has great potential in that sense. It is therefore important to make our islands examples of good governance that includes smart waste management, organic farming and production, the development of sustainable tourism and good connectivity throughout the year." (Hrvatski otoci, 2017, para. 2)

# Act on Sustainable Waste Management

The Act on Sustainable Waste Management (Official Gazette, 94/13, 73/17, 14/19, 98/19) is the umbrella law of the Republic of Croatia which determines measures to prevent or reduce the harmful effects of waste on human health and the environment by reducing the amount of waste. It also regulates waste management without the use of risky procedures for human health and the environment, by using valuable properties of waste. In order to achieve this, the law in question includes the order of priority of waste management, principles, goals and the manner of waste management, strategic and program documents in waste management, competencies and obligations in waste management, locations and buildings for waste management, waste management activities, cross-border traffic waste, waste management information system and administrative and inspection supervision of waste management. The most important thing for the purposes of this paper is to point out that the responsible stakeholders under this law are local self-government units (municipalities and cities) which are obliged by the Waste Management Plan to achieve measures necessary to achieve waste reduction or prevention goals with including and conducting educational and informative activities in its field and at its own expense, and in particular the organization of public forums, informative publications on waste management and the publication of specialized articles in media such as television or radio. Local governments are also required to establish and maintain a website with information on waste management in their area and report on the implementation of training and information activities within the annual report on the implementation of its current waste management plan.

# WASTE MANAGEMENT PLAN OF THE REPUBLIC OF CROATIA 2017—2022

The Waste Management Plan in the Republic of Croatia (Official Gazette, 03/17) is the basic document on waste management in the Republic of Croatia for the period 2017—2022, prepared based on the Sustainable Waste Management Act (Official Gazette, 94/13, 73/17, 14/19, 98/19). The framework represents the Waste management strategy of the Republic of Croatia and the existing legal regulations and guidelines of the European Union. According to the said Plan, a slight increase in the amount of municipal waste is expected by 2030. With the current 1,650,000 t / year, in 2030 the production of about 2,000,000 tons of municipal waste is projected. However, in order to stop the growth of the generated municipal waste, to increase the degree of separate collection and recycling and to reduce the share of landfilled biodegradable waste it is necessary to establish a municipal waste management system that encourages waste prevention, on-site waste separation and contains infrastructure to meet targets and waste management in accordance with the order of priority of waste management, waste prevention, reuse preparation, recycling and other recovery procedures, for example, energy recovery and waste disposal.

According to Figure 1, the first step in the entire system is to ensure the implementation of waste prevention measures by establishing Centers for reuse and providing the necessary equipment for home composting. Furthermore, the focus in the municipal waste management system should be on the system of separate collection of municipal waste through the provision of the necessary infrastructure for municipal waste separation: at the waste generation site, through recycling yards, in public areas and through the implementation of regulations for special waste categories. Separately collected biowaste is transported for material recovery to plants for biological treatment of separately collected biowaste for the purpose of the production of compost or digestate and biogas. Separately collected paper, cardboard, metal, glass and plastic are transported to plants for sorting separately collected waste (sorting plants) in order to increase the value or quality of separately collected waste and prepare waste for recycling. After sorting, the separately collected waste is taken to authorized companies for recycling or processing. Mixed municipal waste is collected within the public service of the collection of mixed municipal waste.

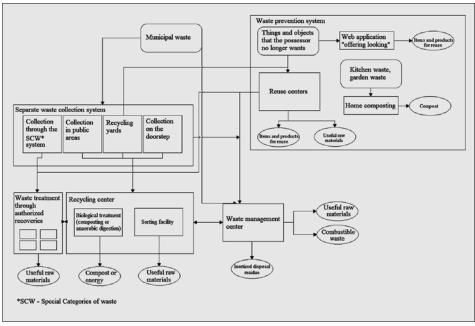


Figure 1 — Scheme of Municipal Waste Management System (Source: The Waste Management Plan of the Republic of Croatia 2017-2022.)

# Circular Economy

The scarcity of natural resources and the negative environmental impacts caused by their consumption require the improvement of existing and the discovery of new models for their sustainable use. Therefore, one of the basic goals of the EU, through a number of financial instruments and strategies, is to encourage the improvement of the economic system in terms of more efficient use of resources and energy. The transition to a circular economy requires changes in the entire value chain, from efficient resource management, product design, new business and market models, new ways of converting waste into resources to new models of consumer behavior. This implies a complete change of the existing economic system and innovation, not only in technology, but also in organization, society, financing methods and policies. In order to encourage the implementation of waste prevention activities, all EU member states, including the Republic of Croatia, are obliged to develop a Waste Prevention Plan.

Waste prevention reduces waste quantities and toxicity before any other recovery or disposal process becomes an option at all. (Waste Management Plan of the Republic of Croatia 2017-2022)

The circular economy represents a development path from raw material to recycled raw material, where the entire process of production and use, reuse and repair is achieved along the way, with minimal residual waste. It is a path of the right attitude

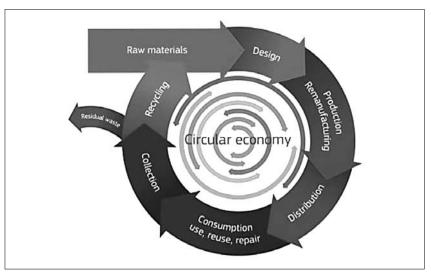


Figure 2 — Circular Economy Model (Source: Waste Management Plan of the Republic of Croatia 2017-2022.)

towards waste, which significantly reduces the amount and burden of waste and behaves in accordance with sustainable development.

## CONCLUSION

The impact that waste from tourism has can be particularly problematic in the surrounding areas near small islands and is widely recognized as an environmental problem (Menzies, Dimambro & Aspray, 2019). The amount of waste on islands is very often greater than what the island can process, due to the limited availability of land for disposal and insufficient financial resources (Deschenes & Chertow, 2004). As a result, solid waste on small islands is still typically managed worldwide by open land and water disposal and incineration in pits with recycling in some locations (Deschenes & Chertow, 2004). Waste generation results in broad environmental, social and economic impacts on communities. For the remote island community, the limiting characteristics of the territories greatly hinder waste collection, transport, storage, treatment and disposal activities and imply high waste management costs due to the need to transfer waste to remote areas.

Separate waste collection or primary site selection is a method that has the ultimate goal of recovering all types of waste. The various materials contained in municipal waste can potentially have a high economic value as a secondary raw material. Locals need to understand the importance of recycling, their role in the overall waste management system and in health and the environment in general. The primary selection program must be easy to understand and accessible and include promotions, educa-

tion and continuous dialogue with representatives of public authorities and utility companies that are concessionaires of waste collection in an area.

Islands, separated from the mainland and independent, can significantly influence the generation of municipal waste primarily through the adoption of new life habits, and in line with sustainable development. By their example, they can show that it is possible to significantly reduce the amount of "real" waste and then it is easier to deal with disposal. Waste management is the basis of upbringing, education and worldview, which should be instilled in every human being. It is necessary to start education from an early preschool age, through the education system, but also with positive examples from home education. The essence of waste management is primarily to reduce the amount of waste. By learning and adopting sustainable behavior and management, islanders can very easily transfer to all economic branches of the island, especially tourism. Islands, as a result of quality waste management, can be protected oases — to their pride and to others as an example.

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# SOCIOLOGICAL ASPECTS OF LIFE ON THE ISLAND — AN EXAMPLE OF ACTIVISM THROUGH THE COMMUNITY PLATFORM 'POKRET OTOKA'

#### Abstract

Island Movement (Pokret otoka) was created in 2015 as a citizens' initiative, primarily focused on expressing dissatisfaction with the proposed Law on Concessions, particularly emphasizing concession of the maritime domain, the coast (beach). In order to better coordinate activists and volunteers in the various Adriatic islands, Island Movement became a "community platform". On the official website, Island Movement is described as "a self-sustaining and solidarity network of islanders and island lovers who, through connecting individuals, organizations and ideas, builds a responsible and sustainable society." Initially, activists and volunteers from seven islands were active within the platform, while today this number is 32 Adriatic islands. With sixty official members it has an extensive and numerous network of volunteers and activists, and it is particularly important to emphasize that their representatives are actively involved in island-related processes at the European Commission. This kind of community platform is a multi-faceted phenomenon that goes beyond the scope of nongovernmental organizations and is positioned as a holistic platform for the development of Croatian islands and for improving the living conditions of all islanders. A total of ten semistructured interviews were conducted with members of the Island Movement, island residents, as well as respondents who occasionally visit one of the Adriatic islands. The complexity of the studied phenomenon and the scope of the research make it impossible to explore all aspects of activism and the organizational structure of the Island Movement. Within this text, we have focused on several basic aspects of the Island Movement and the islands themselves as specific communities, namely identity issues and symbolic aspects of island life; to the various institutional levels through which the Island Movement operates.

Keywords: Island Movement, platform, activism, islands, life on the island

Within the borders of Croatia there are 1244 islands which are divided into 78 islands, 524 islets and 642 cliffs (peaks above sea level) or reefs (peaks below sea level) (Ministry of Regional Development and EU Funds). According to these figures, the islands occupy 5.8% of the Croatian mainland, and according to the 2011 census, they have 132,443 inhabitants in 344 settlements (on 50 permanently inhabited islands). When

discussing the administrative division of territories, Croatian islands are part of 7 coastal-island counties, 51 island towns / municipalities, while several small islands fall under the jurisdiction of 7 coastal towns (Ministry of the Sea, Transport and Infrastructure). By definition, an island is a part of the mainland territory surrounded by water or the sea (Faričić, 2006; according to Marinković, 2016). The very definition of the island indicates the spatial and social uniqueness of the island. Podgorelec and Bogadi (2013) in their study of Croatian islands state that the "isolation" of the island determines everyday life and makes the rhythm of life calmer than what happens in the city's noise. Furthermore, the authors point out that some elements of the island's everyday life can be a challenge for individuals achieving a fulfilled and rich (emotional, material and social) life in conditions of limited natural, human and economic resources, in which they can prove their strength, resourcefulness and independence (Podgorelec & Bogadi, 2013). Right at the very beginning of trying to make sense of the islands and the island way of life, it is important to point out the contradictions observed by the authors who have dealt with island issues in their research. On the one hand, there is a romanticized notion of the island, according to which it is a small sunny place with one settlement, a small population, a small square (market) where fish is sold, vegetation usually made of mulberry or church, and in the shade of trees always sit the same faces who know everything that happens on the island (Babić, Lajić & Podgorelec, 2004). On the other hand, Šimunović (1994) notes that living on an island means living with a sense of dependence and insecurity, primarily thinking of an island environment in which it is never possible to have everything a person needs, while insecurity stems from isolation that determines fear of impossible economic and social realizations of the individual. The duality of the perception of the island and the real life on the island indicate the existence of a very specific microenvironment, so Božanić (1996) states that the island is a tiny world on its own, a planet with its own gravity.

The idea for this paper arose out of interest in researching the specific and unque social structure on islands as well as the specificity of the everyday context that differs greatly from life on the land, and especially from life on the land in larger urban areas. Since everyday life on the islands is filled with major or minor functional problems, its inhabitants live in a constant discrepancy between the proclaimed public policy regarding island development and the real situation "on the ground". This "development" is often not manifested through the practical improvement of life on the islands but mostly through increasing the exploitation component — tourism. In their study of the smaller Croatian islands, Faričić, Graovac and Čuka (2009) refer to the text of the Constitution (Article 52) according to which the islands, the sea and the sea coast are guaranteed special protection from the Republic of Croatia (Constitution of the Republic of Croatia). The definition of the national interest of Croatian islands is specifically determined by Article 1 of the Islands Act: Islands, as Croatian natural wealth, and real estate on islands of special national, historical, economic and ecological significance, are

of interest to the Republic of Croatia and have their own special protection (Islands Act). Their observation based on constitutional and legal regulations will introduce us to the very core of the subject of our research — activities of the Island Movement as an initiative for the development and preservation of Croatian islands. The authors state that it is interesting that the introduction of the Island Act does not mention islanders at all, however it especially emphasizes real estate. Isn't this actually the perception of a part of the political elite about the role of islands in the contemporary spatial development of Croatia? (Faričić, Graovac & Čuka, 2009).

As mentioned in the previous paragraph, the aim of this paper is to present research pertaining to the Island Movement. According to its members, the Island Movement is a platform that aims to help in connecting, preserving and developing Croatian islands — preserving their uniqueness, but also solving everyday problems plaguing the islanders. At the very beginning of the paper, we will present the specific problems of Croatian islands and problematize the issue of island identity and life on the island, and then offer a description of the Island Movement as a phenomenon that has gone from an activist group to a link between different institutional levels and islanders.

## **METHODOLOGY**

In researching the Island Movement, primarily qualitative methodological tools were used. During the research, a number of semi-structured interviews were conducted with direct actors within the Movement, and several interviews have been conducted with islanders who are not part of the Movement but live or have lived on one of the Croatian islands. Interviews were also conducted with occasional visitors to the island. The snowball method was used to select the respondents. A total of 10 interviews were conducted, with the shortest interview lasting 40 minutes and the longest 80 minutes. Interview transcripts were processed in the computer program for qualitative analysis Nvivo 12. All respondents in the text are marked with pseudonyms in order to protect their privacy.

# ISLANDS — TO LIVE ON AN ISLAND AND TO LIVE WITH AN ISLAND

In the introductory part of this paper, we indicated some of the specifics contained on the island and island life, and now we will present, in more detail, the elements of island life with special emphasis on several concepts derived from the analysis of island perception from our respondents. At the outset, we will highlight those aspects of our respondents' narratives that relate to life on the island or better said to the quality of life on the island. Consulting the literature, we noticed that quality of life is one of the most inconsistently used terms in the humanities and social sciences (Lučev & Tadinac, 2008). Therefore, for the purposes of this paper, we will operationalize quality of life

by analyzing the statements made by respondents related to the presence or absence of content that they consider important for life on the island. We will briefly look at the phenomenon of island migration and show the possibility of using the concept of duality of island life. At the end of this section, we will highlight the findings which allow inferences to be drawn about the values on the island by adapting the theory used by Čaldarović (2006) when discussing about aspects valorization of nature.

## LIFE ON AN ISLAND AND THE DUALITY OF LIVING THERE

Earlier we mentioned the definition of an island that indicates physical separation by a natural barrier (sea or water). When we examine in detail the phenomenon of this separation, we can problematize the implications of this barrier, not only on a spatial level of separation but also regarding the social isolation of the island's population. The microenvironment, mentioned by Božanić (1996), signifies the existence of a specific social system that possesses certain social and symbolic specifics. Through interviews with the respondents, we gained the impression that their perception of the island and island life starts from emphasizing the specifics of island communities. In support of this fact, we will highlight narratives of three respondents, one of whom is an indigenous islander, the other one is newly settled and the third who is occasionally visiting the island.

"If you need something, you know all the people and you can easily get it. People on the island can live much more peacefully, most things are close to them and they don't waste time on what takes much longer in the city. Equally, you have your free time just for yourself in peace." (Sara)

"The relationship is closer because your neighbour depends on you and you on him... on the other hand, the connection of the island with the mainland is quite bad, you have to do everything in the city (on the mainland). There is not much work, there are more and more newly constructed buildings due to the development of tourism. I think that women are at a great disadvantage because there is a very narrow circle of potential jobs for them." (Mirna)

"The storm locks all the people in their houses in winter, you can walk down the street and not even meet a cat. One boy once described it very well when he said if someone dies in the market the question is would anyone find him. That's what winter looks like." (Laura)

Several times in the interviews, a narrative regarding the difference between certain seasons on the island occured, so Sven points out the difference that comes with the change of summer and winter.

"When you look from the outside, it seems that life on the island is easy, but life on the island is difficult, you have no culture, you have nothing... I have lived on the island for 6 months and on the mainland for 6 months. I am on the island when tourism is already starting in the spring, other months are harder (only a few families and construction workers remain on the island" (Sven)

In addition to the changing weather conditions that affect the daily lives of people on the islands, there is also the problem of the drastically reduced number of different events at the end of the tourist season. Several respondents pointed to this problem, emphasizing not only a lack of cultural, entertainment and similar content, but also the reduction in the number of boat lines, restaurants and caffes that were opened during the summer months. It is clear from Boris' sentence how someone, who lives on the island all year round, experiences the difference between the summer and winter months.

"Everyone recognizes us in the summer months, no one knows us in the winter" (Boris).

Before we embark on an interpretation of the notion of duality that we hold to be applicable on multiple levels when we talk about life on the island, we will briefly point out another problem highlighted by our respondents, which relates to the process of emigration from the island. The phenomenon of emigration in recent years is an important social and political topic in Croatia. Pokos (2017) notes that in recent years the negative trends in Croatia's demographic development (overall depopulation, natural decline, intensive aging process, etc.) have reached dramatic proportions, which puts Croatia in the circle of European countries with the most unfavorable demographic processes. If we concentrate on the data on migration within Croatia in 2017, according to the Central Bureau of Statistics (2018), 71,580 people changed their place of residence. This total number becomes more analytically interesting if we add the fact that out of the total number of relocated population in 2017, most persons (42.5%) moved between counties, 38.1% of persons moved between cities, and between settlements of the same city 19.4%. In addition, we will point out that population migrations between cities of the same county in 2017 were the largest in the Split-Dalmatia County and the Primorje-Gorski Kotar County, while the largest inter-county population migration was in Zagreb and Zagreb County (Central Bureau of Statistics, 2018). The presented data serve exclusively to illustrate the figures of the phenomenon of internal migration, and not to derive a theoretical conclusion of interpretation from them. However, it is impossible not to notice that the largest number of internal migrations takes place in the counties in which the three largest Croatian cities are located (Zagreb, Split and Rijeka). In the context of the island, it is possible to talk about the emigration trend, which is not new, but represents an important segment of island life in the past, but also in the present. In the research of small Croatian islands, Faričić and Magaš (2004) point out the processes of depopulation and deagrarization as two processes that significantly disrupted the demographic and economic base of the island. Our respondents offered their interpretations of migration motives that are closely related to the impossibility of achieving certain life aspirations on the island, but also emphasized the connection with the island that did not stop once they relocated and presents capital for their later involvment in the development of their islands.

"Island life was great for me, considering that I was involved in everything, I had a job after college. I just got to the level that I might have outgrown that kind of life and I think it's better for me to move away and learn something new and then with that newer knowledge I can come back." (Ksenija)

"As much as I love the island, I don't like it, I like to be at home and there is no city crowdedness, but if you want an event, there are none on the island. If I had stayed on the island, I think I would not have been able to develop as a person and would have just stagnated. Although I am occasionally unhappy in the city because I am not there (on the island)." (Sara)

"If you have a job, a partner and a hobby, life on the island is top notch, but if you miss some of it you find yourself in trouble, it sounds a bit banal, but it is that way. It would be far better if there was less emigration and better connection, so that you could go to the mainland and come back easier. The environment is socially closed, but novelties and new people are needed. I don't look at blood cells, I love it when someone new comes to the island. We are sinking deeper and deeper..." (Boris)

We can conclude that the islands represent places of emigration, although some new trends, primarily the development of tourism and seasonal work affect the perception of the island as a place of temporary immigration. Bara (2013) writes about another aspect of island-related migration, and that is returnee retirement island immigration. The nature of island migrations, historically and recently, is not only economic, because respondents often cite elements of self-realization and inclusion in the flow of urban life. The topic of island migration is a complex research field that greatly exceeds the scope of our research and this paper, so the phenomenon of island migration certainly imposes itself as one of the potential guidelines in further dealing with the topic of islands.

After presenting certain aspects of the perception of the island and island life, we will try to systematize the findings through the concept of duality. We can conclude that in most narratives and in the consulted literature related to islands, a duality is noticeable in various elements of the island as an entity and the islanders everyday life. In the research of the Croatian islands, Babić, Lajić and Podgorelec (2004) talk about the island as a space of freedom, but also of limitations. Following their thesis, somewhat poetically, King (1993) calls the islands a symbol of the eternal struggle between land and sea, while Sanja Podgorelec (2008), researches the aging process on the island, identifing that the island is portrayed in literature as an imaginary place and as a

space with specific problems. Guided by the findings obtained through the interviews, we identified four key points that indicate the duality of the island:

- 1. Island in summer and island in winter diametrically opposed occurrences of the same place and way of life;
- Development of tourism on the one hand there is a desire for accelerated development driven by economic factors, but on the other hand there is a desire to preserve the current state of the island (primarily the natural resources);
- Physical separation from the mainland physical separation is a problem when discussing the functionality of certain aspects of life, but on the other hand creates a whole range of island features;
- 4. Availability / lack of content on the island on the one hand there is a desire for more content (cultural, entertainment, etc.), but on the other hand, it certainly affects the factor of peace, as opposed to the hustle and bustle in urban areas, which our respondents pointed out as an advantage of the island.

#### THE VAIUE OF THE ISLANDS

In the next part of the text, the notion of island value is examined. As we are of the opinion that the value of an individual space is not exclusively measurable within the framework of economic usability, but also in the context of symbolic and aesthetic value, we will adapt some concepts taken from the consideration of the value of nature. Cifrić (2002) discusses the intrinsic value of an entity — beings, species, landscapes and so forth, which means that it contains some benefit, has value in itself and that this value is independent of man. Reflecting on the entity involved in our research — the island, we can say that its very existence is a value in itself. Starting from the specifics conditioned by the sea environment, specific micro flora and fauna to aesthetically unique landscapes. Čaldarović (2006) writes about aspects of the use and non-use value of nature as such, and states the spectrum of possible valuations that extends from intangible aspects all the way to valuation in the material sense. We will concentrate on the part of systematization that deals with biodiversity, cultural and historical heritage, aesthetic values of nature, purity of the sea, the value of the built and transformed environment and the values of natural and inherited habitat. Most of the respondents mentioned terms such as peace, nature and comfort when describing the island, while Monika also mentioned the island as an escape. So, it was identified that there is a very tangible value of the island in itself mostly in the aesthetic and natural sense, but also in terms of valuing isolation. When considering the second set of possible factors of the use value of space, where the primary focus is on the realization of economically profitable activities such as tourism, our respondents tend to think about what tourism should be. There is a unanimous opinion that tourism is necessary, ultimately inevitable, but there is also a component of dissatisfaction with the current state of affairs.

"I am annoyed by nautical tourism, you see a lot of boats, tourists, it is lively and great, but you do not see the consequences of that, and you will see them very soon. Then it is forced as an ideal to strive for, and the ideal to strive for is what you already have, only that it is valued more by you as an islander and by the people who come." (Monika)

Mirna offered a kind of conclusion to the discussion on tourism and islands with her statement that "tourism must serve culture, instead of culture serving tourism."

# THE ISLAND MOVEMENT (POKRET OTOKA)

Structure and Development of the Island Movement

The beginnings of the Island Movement date back to 2015. From then until today, the Movement has undergone a development path that included organization that would later produce a stable structure, active work in various fields, appearing in the media and creating a recognizable public image (especially among the island population) and positioning within the wider social and political sphere. On the official website, the Movement is described as "a self-sustaining and solidary network of islanders and island lovers who, by connecting individuals, organizations and ideas, build a responsible and sustainable society" ('otoci.eu'). The island movement currently officially has 60 members, the age range of members is from 20 to 71 years, with most members between the ages of twenty-five and forty. A total of 32 islands are involved in the activities of the Movement. The Island Movement is organized through the structure of president, board and membership.

Through interviews with respondents who were directly involved in the process of the formation of the Movement, the bus they took to Brussels was often mentioned, citing the starting point of the initial idea of the Island Movement.

"A group of islanders was invited to Brussels with MEP Škrlec to some events and on the bus while they were driving they said that it would be good to merge into a legal entity, that they as a group of islanders can help other islanders by their example and commitment. For social engagement, some alternative culture scenes and the organization of events, but also in some basic things in life because the islands as such have their problems." (Mirna).

The beginning of the recognition of the Island Movement in the general public is undoubtedly a period of intensive actions related to concessions, that is, the concession of maritime property, with an emphasis on the coast (beaches).

"When you fence the beach, the islander can't come to what it is, let's say his... That's where we gained popularity. It started with the Zlatni rat (beach situated on the island of Brač), and the islanders from Bol called the Movement because of that concession. The movement said let's put management down to local government. That concession was annulled, and the Law on Concessions was put up for discussion" (Mirna).

This narrative depicts one of the basic ideas of the Island Movement, and that is the "lowering" of governance to local self-government, that is, to include the islanders themselves in decision-making and management processes. The term "translator" was repeated several times in interviews, primarily in the context of describing the situation in which the Movement assumes the role of a medium of communication between islanders and representatives at higher institutional levels where decisions related to islands and life on the islands are made.

Before moving on to the description of the elements of the platform in the structure of the Island Movement, as an example of a bottom-up approach we will cite the narrative related to the boat by which the Movement seeks to approach the islanders and position itself as an actor in the island community.

"Every year we had a launcher that sailed through one archipelago. The first trip was Split, in 2017 in the Zadar archipelago where we gathered a group of people who joined us on board, and on board we would have food and workshops... We would have events on the islands that we visited." (Mirna)

#### Island Movement as a Platform

The activities of the Island Movement are extremely dispersed, encompassing many dimensions of dealing with island issues, so it is already clear from the review of the official website of the Movement what the range of topics is that they want to encourage on the islands. The list of the interests of the Movement incorporate activities that include rural development, energy, culture, tourism, politics and society, and sports ('otoci.eu'). The actors of the movement pointed out the importance of the process of organizing work groups within the Movement and also creating a clear plan of action in a particular area.

"It all started spontaneously, full of heart, no one thought it would reach this scale. When it came to the concessions we didn't think we were going to solve the problems across the state as far as the islands were concerned. People recognized us as an adequate stakeholder in terms of the islands and coast and started asking us for support and for the contacts of people and we would redirect them." (Ksenija)

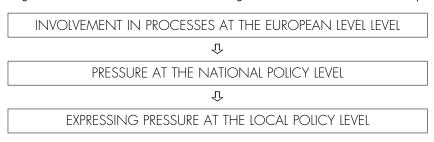
Since the situation that the respondents named the 'problem of concessions' happened at the time of the Movement's creation, it was then possible to talk about the activism of the Island Movement, its members and volunteers. Nevertheless, through the interviews we noticed a desire to omit the term activism and use the term platform. The structure of the Movement is such that the members are dispersed on different islands, so the activities are "moved" to the sphere of electronic communication and meetings through various Internet communication channels (Skype, Facebook, etc.).

There are several key aspects to why the Island Movement represents a platform and why actors insist on the term:

- 1. The island movement connects the islands and creates a "platform" association that acts together to solve problems;
- 2. Anyone can join the Island Movement, regardless of whether they are considered a legal or natural person, and is automatically connected with all actors within the Movement and participates in activities;
- The island movement aims to connect and create cooperation between different actors on the islands.

In conclusion, we will graphically show the activities of the Movement with regard to the institutional level of activity that determines the possibility of acting according to the 'lower' instance of problem solving.

Figure 1 — Activities of The Movement With Regard to The Institutional Level of Activity



#### CONCIUSION

A few conclusions can be made after researching the Island Movement and various aspects of island life. Initially, we will return to the first part of the text which refers to life on the island and the duality of island life and conclude that islands and island life contain a series of dualities that are in contradiction with each other. The duality of life on the island is a challenge for both islanders and institutional authorities because only by taking into account all the benefits of each aspect of life on the island, but also recognizing potential problems, we can establish a system that would contribute to the development of the islands and preserve their uniqueness. Furthermore, when evaluating islands, the existence of the value of the island by itself must be taken into account, but also the value measurable by economic parameters, primarily by relying on the sustainability and preservation of the ecosystem and the aesthetic image of the island landscape. The second set of conclusions of our research relates to the Island Movement and interviews with its members. The Island movement is an example of a group of activists who, through their engagement around a specific problem (conces-

sions), created the foundations for resolving various issues related to the problems regarding the island and life on the island. With a bottom-up approach, they started their work by creating a network that aimed to involve as many residents of different islands as possible in order to create a common infrastructure for action. Over time, the Island Movement has gone from an activist network to profiling itself as a platform that enables the connection and creation of cooperation between different social actors on the islands, but also serves as a medium of communication between different institutional levels and the islanders themselves. The activities of the Island Movement are extremely dispersed, striving to act holistically on the totality of various aspects of life on the islands, primarily by involving social actors from local communities, the inhabitants of the island themselves. It is important to emphasize that our research has limitations with regard to the method, which for objective, financial and temporal reasons, did not include field research of phenomena that would certainly contribute to a deeper insight into island reality and life on the islands. Further work on this topic would benefit from ethnographic research of island life and a variety of smaller investigations that would complete the mosaic of different aspects of the islands' everyday life.

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# THE USE OF SOLAR ENERGY FOR THE PRODUCTION OF ELECTRICAL ENERGY AND THE SUSTAINABLE DEVELOPMENT OF CROATIAN ISLANDS

#### Abstract

This paper discusses the possibility of using solar energy for the electricity supply of the Croatian islands, within the framework of sustainable development, by the means of intelligent electric grids. Croatia has more than 1000 islands, of which 68 are inhabited and are between 1 to 70 km away from the mainland. Many islands have problems with insecure power connection to the mainland and can hardly meet all requirements for the electrical consumption. The disadvantages of the electrical power supply network became obvious in the recent years due to two important reasons. The first reason is the rapid development of tourism on the islands, and thus an enormous increase in consumption of electric energy in summer, and the second reason is the requirement for the development of renewable energy sources for the sustainable development of the Croatian islands. In technical terms, the basic idea of this paper is to explore the possibility of using distributed solar screens on the island, according to the concept of Demand-Response, which could cover up to 100% of consumer demand. The new approach to local-level electricity management is proposed through the "Community Grid", which incorporates an infrastructure and software solution that enables energy and flexibility to be exchanged within a local closed network on the island, maintaining the necessary system stability. This solution also includes an "energy storage" (battery) system, which is designed to meet real needs and is important element of the network system. The focus is also on the implicit impact of "clean energy" in tourism development on the Adriatic islands. Traditionally, tourism has been one of the most important economic activities of the Croatian economy with the tendency of constant growth. Specific features of mild climate in Croatia, ensure many sunny days during the year that potentiate exploitation of solar energy to a great extent.

Keywords: Adriatic islands, sustainable energy, solar energy, smart grid, community grid, micro grid, energy storage

Croatia has more than 1000 islands, of which 68 are inhabited and are between 1 to 70 km away from the mainland. Traditionally, tourism has been one of the most important economic activities of the Croatian economy with the tendency of constant growth. Specific features of mild climate in Croatia, ensure many sunny days during the year

that potentiate exploitation of solar energy to a great extent. At the same time many islands have problems with insecure power connection to the mainland and can hardly meet all requirements to cater for the amount of electrical consumption. Distribution networks in Croatia consist of low voltage (LV) and medium voltage (MV) networks. LV networks are operated on 0.4 kV voltage level, and MV networks are operated on 10, 20 and 35 kV voltage levels. The disadvantages of the electrical power supply network became obvious in recent years due to two important reasons. The first reason is the rapid development of tourism on the islands, and thus an enormous increase in the consumption of electric energy during summer, and the second reason is the requirement for the development of renewable energy sources for the sustainable development of the Croatian islands.

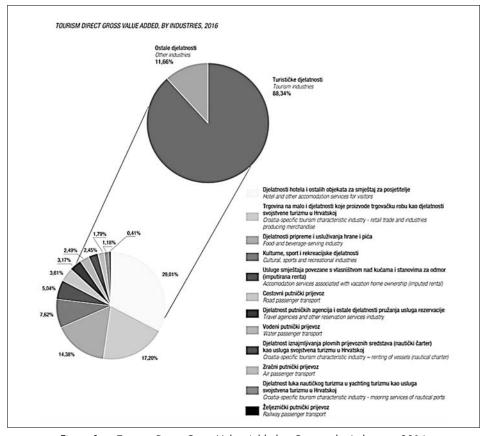
Driven by economic incentives, regulations, or an increased awareness combined with the cost of equipment that is getting lower, citizens are more and more starting to install energy supply systems based on renewable energy sources which are mainly solar systems for water heating or Photovoltaics (PV) as an electricity supply. Such a situation brings new challenges to the existing distribution system and requires careful planning. The basic problem faced by planners is the variability of a large part of the input data. In many cases, measurements of electrical parameters such as power, current, and voltage are either not available or are too scarce to form daily consumption curves. Furthermore, future loading points cannot be predicted and connection requests must be addressed on the spot. Sometimes this will result in the network being oversized, and in other cases the network will be too small. Therefore, the task of a distribution system planner is even more complex because it must determine not only an optimal but also a robust network expansion strategy in order to reduce future errors.

The total installed capacity of renewable energy sources in Croatia that are in the system of incentives, according to the data of the Croatian Energy Market Operator (HROTE) reached 939.87 MW¹. There is a total of 1351 such plants, which are also eligible producers of electricity. Of this number, most of 1230 are solar power plants, but their total capacity is only 53.43 MW (almost 10 times less than in neighbouring Slovenia). These are integrated built on the roofs of family houses and office buildings and on the roofs of buildings owned by cities and counties and non-integrated power plants, built on the land. On the other hand, wind farms have the largest total capacity, almost 637.8 MW, and there are currently 25 such plants. However, this is not the total number of wind farms in Croatia because some of them have left the incentives scheme.

# THE USE OF SOLAR ENERGY FOR THE DEVELOPMENT OF SUSTAINABLE TOURISM ON THE ISLANDS

Tourism has been one of the most important economic activities of the Croatian economy with a tendency of constant growth. When analysed through the Tourism Satel-

<sup>1</sup> Data from HROTE at May 5, 2020 ( https://www.hrote.hr/en).



**Figure 1** — Tourism Direct Gross Value Added in Croatia, by Industries, 2016 (Source: Ivandić, N. et, Tourism Satellite Account for the Republic of Croatia, 2016).

lite Account (TSA), the total contribution of tourism to Croatian GDP is almost 20% (Orsini & Ostojić, 2018). Comparing to the other Mediterranean countries (with exception of small island economies, such as Malta and Cyprus), Croatia has the largest share of tourism in the national GDP. Even during the last six years, when Croatian economic activity faced consecutive decline, tourism recorded a steady growth, which has become an important stimulant for economic growth (Ivandić & Šutalo, 2018). Considering that tourism involves a number of economic activities and connects different industries (see Figure 1), it is very important to invest in it, to preserve economic, environmental, cultural, historical, and other features.

Croatian specific features of mild climate and a unique "sea and sun" tourism model with relatively cheap accommodation, assure high tourist arrivals from mid-April to late September. The growth of the tourism industry in Croatia, together with an international reputation, brought the negative aspects of environmental pollution and resource degradation, as well. Some destinations, of which most are islands, have already fa-

ced the problem of over-tourism. The term of over-tourism is not only associated with overcrowded destinations and the low quality of tourists' experience, but it also extremely negatively impacts the life of locals (Martín et. al., 2018). Overcrowded destinations, especially islands, present an extreme problem for the environment, as the consumption and demand of all goods and services are above the reach. This mostly relies on the consumption of electrical energy. Studies showed that the number of people on islands (residents, tourists, and one day visitors), during the peak season (June to August), triples. This causes a great pressure on islands' electrical networks which often results in a weak electrical current, electricity shortages or even a collapse of the local electrical supply.

Hence, for the purposes of environmental protection and the development of sustainable tourism on the islands, Croatia should turn to renewable energy sources. Among many different sources, solar energy is the most suitable solution for undisturbed tourism activities. Moreover, considering that 30,82% of the total hours in a year are sunny, Croatia has a potential to completely replace the use of fossil fuels with solar energy (Delomez, 2012). This would allow complete independence of the islands from the mainland and ensure electrical autonomy and security. Furthermore, the abundance of socio-economic benefits would be achieved. This impacts on the high costs of air-conditioning, water heating, air heating, lightning, cleaning, and many other operations that are needed for accommodation facilities to work properly and to satisfy tourists' needs. With the use of solar energy these costs could be eliminated and revenue from tourism could be higher. That specifically refers to private accommodations, given that solar panels are very suitable for single house use. In addition, use of renewable energy sources gives a completely different outlook for Croatian tourist offerings. Allowing islands to use its potential and run completely green, is by far the greatest and the most efficient marketing that Croatian islands could have. With the production of clean electricity, islands would assure complete decarbonization, therefore, they could offer organic and clean tourism which is the latest trend in tourist offer.

A change in the electrical supply infrastructure could also encourage accommodation upgrades, such as construction of passive solar houses. Passive solar houses are independent of the urban supply network and use solar energy as their main resource. However, they provide the user with the greatest comfort with minimal environmental impact, while still retaining all the qualities and standards of a modern home. This type of accommodation could be ideal for summer tourism, but it would also encourage tourism during the winter period. Until now, winter tourism on the Adriatic islands has not been existent, only due to the high maintenance costs and extremely expensive electricity that is used for heating and the start-up of accommodation facilities. These costs exceed the revenue from the rent, so winter tourism proved to be completely economically inefficient. Therefore, the proposed solution of the use of solar energy could lower the costs of electricity and would allow Croatian islands to be promi-

nent all year around, which would bring islands back to life and increase the number of habitants. Moreover, it would support liquidity through investments and employment, but also a sustainable quality of life and improve the general well-being of individuals.

However, for Croatia to succeed to promote an image of the environmentally aware, sustainable tourist destination, certain gaps and barriers must be overcome. The main gap for the implementation of solar panels on the Croatian islands is the lack of knowledge and information on the local, but also on the national level. Given that Croatian accommodation for tourism purposes mostly consists of private accommodation, it is crucial to educate residents about the importance of green tourism for the purposes of the development of sustainable tourism. Taking into account that tourism in Croatia will continue at the same pace, certain changes are necessary to be done, and implementation of solar panels is one of the solutions which would grant relaxation and advancement on multiple levels.

The use of solar energy panels for the derivation of electricity could be applied in other Mediterranean countries as well. For Croatia, as a member of the European Union and country recognized for its natural uniqueness in the Mediterranean, it is important to lead with a good example and spread good practice to its neighbors. The importance of linking tourism development with the development of energy is inevitable in finding a solution for the required environmental protection. However, there is still scarce evidence of proposals on how to implement new technologies, that could be applied widely and at the same time help other industries grow. Previous research in large numbers focused on negative externalities from the tourism industry and very rarely tourism has been discussed in the terms of the transformation of the energy industry and efficiency. Further on, this paper explains in detail the technical realization of intelligent networks on the island using a demand-response intelligent approach. The wide use of photovoltaic systems, on the roof of each house, is supported by the European Union environmental directives for the coming decades and is also financed and supported by EU funds and the Croatian government. With the production of electricity from solar energy, we are taking a step further in terms of the intelligent management of such dispersive energy sources as well as consumer requirements.

# COMPARISON OF POWER FLOWS IN PASSIVE AND ACTIVE DISTRIBUTION NETWORKS

The traditional distribution network is designed for a one-way power flow from the generation source (HV/MV substation) to the consumer and is built to fulfill the requirements of the consumer load only. An example of a typical passive Croatian MV network operating at 20 kV and supplied with a 110/20 kV substation is shown in Figure 2.

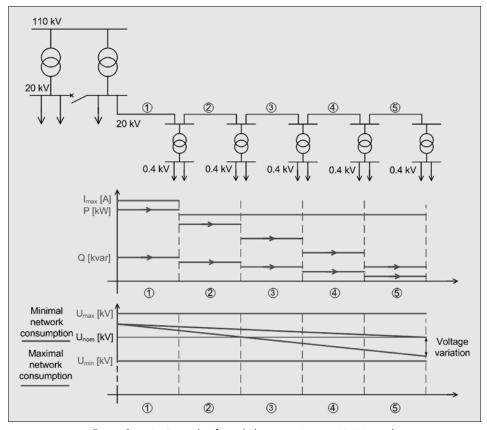


Figure 2 — An Example of Local Flows in a Passive MV Network (Source. Prenc et al. Planning of Active Distribution Networks in Croatia, *Tehnički vjesnik*, 2018)

On a passive distribution network, active and reactive power flowing over the cables and/or overhead lines decreases towards the end nodes of the feeder. As a result, the lines closer to the beginning of the feeder are heavily loaded and produce higher losses than the lines near the feeder's end. With the connection of a new load node in the MV distribution network comes an increase in the current from the HV / MV substation to all nodes of the network. Also, the increase in current is linked to a proportional voltage drop, which becomes larger towards the end nodes of such passive distribution networks.

With the connection of Distributed Generation (DG) units, the concept of planning and operation of the distribution network changes drastically. The DN loses its main characteristic of radial operation and one-way power flows. At the same time, the DG units cause higher loading of some network lines which transfer lower currents. According to the Croatian Grid Rules, the DG units with the output power <500 kW are connected to the LV network and the DG units with output power >500 kW and

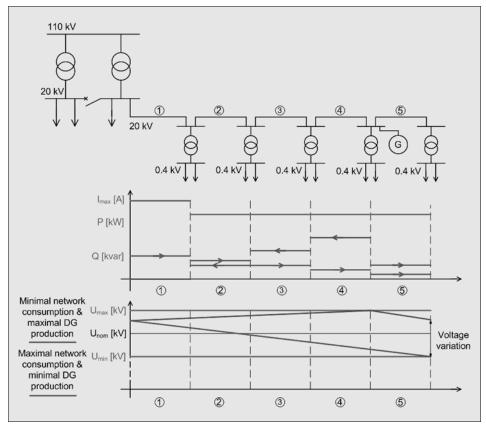


Figure 3 — An Example of Local Flows in an Active MV Network (Source. Prenc et al. Planning of Active Distribution Networks in Croatia, *Tehnički vjesnik*, 2018)

<10 MW are connected to the MV network. An example of an active MV network operated on 20 kV is shown in Figure 3.

In this situation, we can see that DG units produces active power for the whole feeder, and the reactive power still comes from the 110 kV network via the 110/20 kV transformer. The main limiting factor for connection of more DGs in Croatian networks is usually breaching of  $\pm$  10 % voltage constraints. In an active distribution network, the voltage goes up from the beginning of the feeder toward the Point of Common Coupling (PCC) of a connected DG. After the DG and towards the end of the feeder the voltage drops. Distribution networks in Croatia are radially operated. Every blackout lasting longer than 3 minutes is considered as a long-time supply interruption in Croatia. For now, this is not sanctioned but since Croatia is a member of EU and as such must follow all Directives about electrical energy market this will be probably changed soon. The topology that is mostly used in Croatian cities is a combination of the ring and interconnected system configuration (see Figure 4).

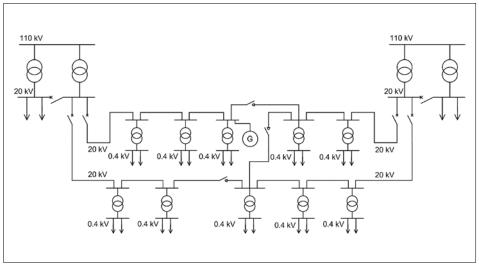


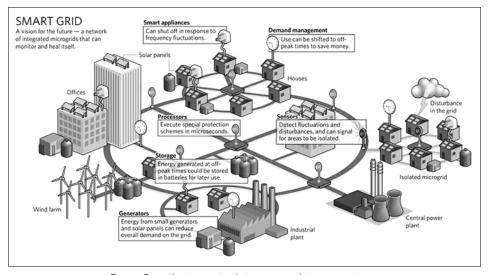
Figure 4 — An Example of A DN with Combined Ring and Interconnected System Configuration (Source. Prenc et al. Planning of Active Distribution Networks In Croatia, *Tehnički vjesnik*, 2018)

For proper planning, hourly consumption information is crucial because without a planner, a load flow analysis cannot be correctly performed for 24 hours. This is needed for quantification of the electrical losses in the grid. In passive distribution networks, load flow analyses with peak loads is sufficient, but in active networks it cannot be applied because the consumption and production do not necessarily coincide in time. The next necessary information for planning is the estimation of future load expansion and this is not an easy task for it must take into consideration the existing and future MV and LV consumers and producers. Estimation can be done by one of many forecasting tools which are mainly based on historical data and the prediction of economic growth in Croatia. With such a situation the only possible way is the installation of metering devices that will automatically provide necessary data along with the estimation of at least a daily consumption/production curve for future connections.

#### THE DEMAND RESPONSE AND COMMUNITY GRID

In the last ten years, the concept of smart grids has become the main concept for the development of the distribution system. Thanks to the rapid development of communication technology, smart grids are able to integrate the activities of consumers and producers in real time, while maintaining security and the efficiency of the supply, taking into account all power quality (PQ) parameters. The concept of the Smart Grid with the consisting parts and area of application is shown in Figure 5.

The idea of community based microgrid systems are also being well-accepted by community consumers. Such an approach acts as a tool to empower the energy active



**Figure 5** — The Smart Grid Concept and Consisting Parts (Source. Smart Grid Technology, https://www.ideaqu.com/co/technology/smart-grid-technology/)

citizens which is the key success of Demand Response. Researchers are proposing different structural solutions for the benefits (more focus on the economic sustainability) of community users. A community grid structure in the form of a virtual microgrid embedded in the distribution network. By facilitating the consumer transition to energy active citizens (prosumers) a community grid structure enables increase renewable energy usage giving them the ability to develop solutions using existing settings. The key objectives of the development of a community grid is to minimise the costs of electricity consumption from the transmission/distribution grid giving priority to self-sufficiency and sustainability. The solution is more focused on a high penetration of renewable energy from distributed and micro-generation systems ( $\mu$ Gen) without compromising the grid stability and to achieve the  $\mu$ Gen sustainability through the empowerment of prosumers. Figure 6 shows the proposed diagram of a community grid structure working in a low-voltage (LV) residential distribution network.

#### STABILITY OF THE ELECTRICITY GRID

A community grid model is built based on the current electricity system including energy sources and demands. The model is adaptable in a way to include different renewable energy systems and can be used to examine the utilisation of a digitised smart grid to provide flexibility and local power balancing. It is also possible to use a hybrid renewable energy source combining for example wave, wind and solar. In that case the system is able to determine the optimum mix of different energy sources for particular island scenarios.

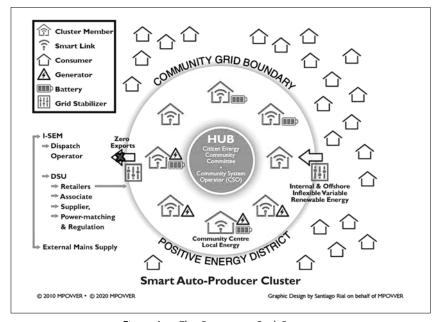


Figure 6 — The Community Grid Concept (Source. Tallaght Smart Grid, https://www.tallaghtsmartgrid.com/radical-new-solutions)

Many islands both on a large and small scale have lower grid inertia which makes it difficult to manage high penetration of intermittent renewable sources. The key to achieving disturbance neutrality is the integration of forecasting systems to the Smart Energy Model. Since the energy demand is changing in time and space, a deterministic aggregate representation might not be sufficient. The Monte Carlo simulation, moment matching, and other statistical methods can be utilized for the demand characterization. Island specific issues including the grid infrastructure, technology capabilities and costs, characteristics of energy need, available energy, ownership, flexibility, component aging and governmental incentives must be considered. Important results are technology choice and sizing together with operation strategies.

A disturbance neutral community grid solution involves installation of Smart Link units (SLU) which are used to balance any source of renewable energy (onshore and offshore) and to transmit data to the Smart Energy Model control. This allows testing and further deployment of high penetration levels of variable hybrid renewable energy, dissipating power into thermal uses and other energy storage systems through advanced digital technologies, while keeping the island grid stable and free of electrical disturbance.

Note that a smart prosumer-based community system can compensate for disturbances caused by producers within the community using traded flexibility (and power quality capacity) from other community members, be it consumers, other producers, or

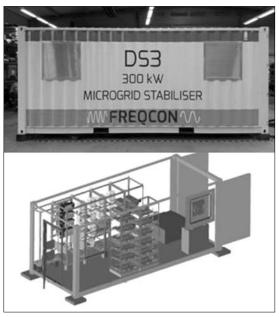


Figure 7 — Microgrid Stabiliser at Tallaght Smart Grid Test Bed in Dublin City (Source. Maxwell's Ultracapacitors Support Tallaght Smart Grid Testbed in Ireland, https://www.smartmpower.com/2015/10/16/maxwell/)

community owned assets such as storage or renewable energy sources. It is a 'Grid-Edge' system which requires (in the early days) minimum, if any, interaction with DSO (DNO). At the same time, it is 'Disturbance-Neutral', as seen from the DSO (under-pinned by the dedicated micro-grid stabiliser with a PMU System), which allows for more renewable electricity production within the community (e.g. power matching: communities consuming (in "real" time) all electricity produced within the community, can be used to avoid peak power flows).

An important part of the solution is the community grid stabilizer. In the event that contracted local market participants are unable to respond to the needs of a community grid, the community grid stabilizer provides real time balancing of supply and load. The stabilizer is also key component of MPOWER's enerXchange<sup>TM</sup> platform, the virtual platform that manages the local energy and flexibility markets in the community grid.

#### SECURITY IN ELECTRICAL GRIDS

Energy Security is defined as the power system's capability to withstand disturbances, that is, events or incidents producing abnormal system conditions — or contingencies — failures or outages of system components — with minimum acceptable service disruption. Within the energy system, the power system faces several security threats —

natural, accidental, malicious, as well as linked with emerging low-carbon systemic changes.

The threat of cyber-attacks is relatively new compared to long-known physical threats, but a cyberattack with operational consequences could occur and cause disruptions in the flow of power if malicious actors were able to hack into data overlays used in some electric generation, transmission and distribution infrastructure. Unlike traditional threats to electric grid reliability, such as extreme weather events, a cyberattack is less predictable in its timing and potentially more difficult to diagnose and address. A cyber-attack could come from many sources and target many potential vulnerabilities and it could also be combined with a more traditional physical attack to distract authorities and inflict further damage. Therefore, there is a need for cyber-physical security partnership and tailored cybersecurity protections in operational technology environments. As of 2018, two evolutions are taking place that could make it harder for utilities to defend from a cyber threat. First, hackers have become more sophisticated in their attempts to disrupt electric grids. Attacks are more targeted, including spear phishing efforts aimed at individuals, and are shifting from corporate networks to include industrial control systems. Second, the grid is becoming more and more distributed and connected. Electric power grids have heavily adopted information technology (IT) to perform real-time control, monitoring, and maintenance tasks. But the ongoing incorporation of "smart grid" technologies adds an additional layer of complexity to the system. While the addition of these technologies can generate several new efficiencies and other benefits, from a cybersecurity perspective, the transition from analog to digital controls creates new potential pathways into utility systems and thus new security challenges for utilities, system operators, and regulators. And like other new technologies, the smart grid also introduces new concerns about security. One of the key issues for electric grid security is that these ongoing improvements and modernizations have created more risk to the system. The grid's reliability can be impaired by cyberattacks on the IT and OT systems that support its operations. Cyber-attacks could result in widespread loss of electrical services including long-duration, large-scale blackouts. It also potentially jeopardizes the security of energy supply and the privacy of consumer data.

Although there is a comprehensive overall legal framework for cybersecurity, the energy sector presents certain particularities that require attention, such as real-time requirements — some energy systems need to react so fast that standard security measures such as authentication of a command or verification of a digital signature can simply not be introduced due to the delay these measures impose. Some of advanced cybersecurity procedures and practices that can be implemented include:

- comprehensive cybersecurity plans;
- emergency response and business continuity plans;
- full assessment of cybersecurity risks to the grid;

- periodic security audits;
- timely information sharing—between industry and government, within industry and across critical infrastructure sectors, and across government agencies and different levels of government—is an essential component of an effective cybersecurity strategy. It is also the primary way to identify, assess, and respond to threats in real time;
- supply chain controls, such as conducting background checks on contractors and encrypting sensitive data, will be used to enhance the security and availability of third-party systems.

Looking at the most vulnerable and critical equipment should be the foundation upon which cybersecurity is built in utility operations. The key to knowing how to protect something is what to protect, and its importance. In the case of electric grid operations, there is a myriad array of equipment, devices and networks that together comprise the vast interconnected electric power grids we know today. From power generation, to transmission, to distribution, this magnificent machine is the critical engine upon which any nation's economy and critical services are dependent. If a malicious actor compromised a critical operational network, control system or protection system, the compromise might lead to a loss of control or denial of control event related to the associated equipment and functions it supports. Thus, a cyber event could potentially translate to a physical event such as a large-scale power outage. Therefore, any physical security planning effort should encompass cybersecurity threats, vulnerabilities and capabilities as well, recognizing that physical security is highly automated, and the two domains are interdependent. This knowledge can lead to more effective and sustainable security measures, which can, while keeping the bad guys out, enhance grid reliability and resilience. No amount of cyber protections can overcome an adversary who has physical access to the object being targeted.

It should be noted that risks cannot be eliminated completely — this could only be achieved through entirely stopping all activities. Risks should rather be managed and reduced to an acceptable level. If attack occurs cyber-specific responses are required, such as the removal of malware. It would likely also require more traditional disaster response operations to deal with resulting threats to public health and safety. Efficient and ongoing communication will clearly be critical, along with effective coordination, a clear chain-of-command, and the ability to adapt quickly as new information emerges.

The implementation of blockchain technology offers the ability of OMB (Object Oriented Group) which is the foundation of the Data Distribution Service (DDS). A DDS is an Object Management Group (OMG) machine-to-machine standard (sometimes called middleware or connectivity framework) that aims to enable dependable,

high-performance, interoperable, real-time, scalable data exchanges using a publish-subscribe pattern.

#### CONCLUSION

Croatia's climate and geographic position for decades have assured great opportunities for prosperous tourism. However, the negative externalities which are the footprint of tourism, imposed discussion on the topic of potential development in the field of energy, particularly renewable solar energy. Within this perspective, solar energy systems constitute the main devices to meet energy demands in tourism and other sectors of national industries. The construction of solar power plants on Croatian islands would ensure sufficient energy needed to meet all requirements to achieve successful and sustainable tourism through the whole year. Solar systems give the full set of socio-economic advantages. They improve quality of life and reduce migration out of Croatia, create news job opportunities, and reduce social inequalities in the community. Hence, it also impacts national economic growth in a long-term period. Moreover, it is an alternative to mitigate the impacts of negative outcomes of overcrowding from excessive tourism and better spatial planning of the islands' area. Furthermore, the use of solar energy is convenient for each household and a solar system could be easily installed on each house.

Many islands suffer with unreliable connections to the mainland and huge energy costs, not to mention the vast fuel consumption of ferries, aviation and fishing fleets which often outstrips, by many multiples, the electrical and heating needs of the islands. However, land-based wind power, or indeed solar, of the size necessary to remove this high emission fuel consumption would, in the absence of Disturbance Neutral Community Grids, devastate the Island's grid stability and power quality. Practically, a system that prevents this disruption will mean real-time power balancing by matching energy production with energy consumption. In many islands, the emissions caused by various (liquid and gas) fuels are huge. The challenge is connecting large renewables to a tiny island grid. The key factor is to eliminate disturbance and always have the ability to divert unmanageable electrical power (disturbance) into electrical loads (e.g. thermal, long-term Power-to-Gas) instantaneously to maintain the stability of the island's electricity system and the primary supply of power to homes. The Community Grid concept which includes installation of smart infrastructure and citizens engagement is one of the smart grid solutions by which it is possible to achieve decarbonization of the electricity grid with no disturbance to the outer distribution network. This solution empowers consumers to become active participants and receive the benefits of sharing their own flexible assets with other members of the energy community. Smart infrastructure with smart metering will provide the necessary input data for power system analysis and distribution system planning. Like other new technologies, the smart grid also introduces new concerns about security. One of the key issues for electric grid security is that these ongoing improvements and modernizations have created more risks to the system that need special attention and careful assessment.

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## CRAFT-BEER SENSORY ACCEPTANCE AT MEDITERRANEAN SUMMER TEMPERATURES

#### Abstract

Craft beers are characterized by a specific regional aroma that originates from raw materials, yeast, and the fermentation process. They are most often produced by the top-fermentation process or even by spontaneous fermentation. In the last decade, craft beer production and sales in the Republic of Croatia has been increasing resulting in popular brands, especially among young consumers and the female population. The increase in their consumption has been recorded in the southern, Mediterranean area of Europe more as a reflection of global, world trends, which force a specific "local" taste. However, new varieties of hops are present in craft beers in various combinations, as well as other atypical spices, and equally important larger amounts of polyphenols that change the degree and profile of bitterness. In this study, we analysed the relationship between ambient temperature (summer and winter) and the participants' sensory preferences relating to each beer (consumers). Five different beer's styles were analysed according to their sensory profile, and preferences (Standard Light Beer (SLB), Pilsner (PSL), Weizen Ale (WSB), India Pale Ale (IPA) and Ale Citrus Flavoured Beer (CAB)). Regarding "preference", a panel of 40 untrained assessors was used. The most preferred style in summer was the classic PSL, and the least preferred was the CFB. Regarding the testing in the winter, the most preferred beer was also PSL, and the least preferred was a wheat ale (Weizen Ale). The most preferred style showed less bitterness and lower turbidity and polyphenol content. This study advances the understanding and complexity of the preference of different styles of craft beers in Mediterranean which has a warm climate.

Keywords: craft beer; consumers; preference; Mediterranean climate

Beer is the most consumed alcoholic beverage in the world, and the third most popular beverage after water and tea (Bleir, Callahan, Farmer, & Min, 2013). Beer is the oldest alcoholic beverage throughout human history and its impact on civilization is remarkable (for example: grains were fermented to produce beer even *ante* being fermented to produce bread). Beers can vary in alcohol content, bitterness, pH, turbidity, co-

lour, and most importantly, flavour (Barth, 2011). During the end of the 19th and through the 20th century, beer production in the world passed into the hands of huge multinational companies that established several dozen world-famous brands on the market, and whose sales accounted for up to 90% of total world beer sales. Because they are produced in a certain place and distributed all over the world, these beers are industrially processed in a way that they are practically microbiologically sterile and chemically highly colloidal stabilized (durability for two years and longer), which in a way created the image of them being plain and uniform. Therefore, in countries with a longtime brewing tradition (northern and western Europe, North America), this developed in almost a social movement, a return to "craft", "domestic" beer with a characteristic local taste. The simplest definition of craft beer is that it is a traditional, artisanal beer brewed in small family breweries. Very quickly, this trend spread to the Mediterranean countries, which resulted in the opening of numerous craft breweries, where production was greatly improvised, with inadequate and even incorrect application of technology in production. In recent years, there has been a big increase in the Croatian market for craft beer consumption and production. Craft beer is generally unfiltered, unpasteurized, and without additional nitrogen or carbon dioxide pressure added upon packaging. Unlike commercial beers, craft beers are mainly produced in microbreweries following the basic brewing principles and using specific recipes according to the preference of consumers. At the same time, like commercial beers, they can be brewed using different adjuncts and yeast types. It is well known that many compounds affect the sensory properties of craft beers, such as sugars, organic acids, hop bitter acids, polyphenols, and carbonyl compounds. The acceptability of these beers to consumers is greatly influenced by the outside temperature. This can be a problem when placing these beers in pubs along the coast during the hot summer months (during the tourist season) when, as a rule, the highest sales are expected. However, this somewhat amateur approach in production has often resulted in the uncritical acceptance of beer recipes that can originally be found online and mostly geographically cover countries with cold climates as already mentioned. This ultimately results in many of these beers having questionable microbiological safety, a very short shelf life and often too much bitterness and an increased polyphenol content making them problematic in cases when larger amounts (more than 0.5L) are consumed. In order to establish the sensory acceptability of craft beer, a test was performed in which participants consumed and evaluated five different types of beer: 1. standard light beer (SLB), 2. pilsner (PSL), 3. weizen ale, craft (WSB), 4 India Pale Ale, craft (IPA) and 5. ale citrus flavoured beer, craft (CAB).

#### MATERIAL AND METHODS

Descriptive sensory analysis (QDA) is traditionally conducted using a trained panel and has the purpose of developing the sensory profile of a product by evaluating the intensities of the main descriptors. This type of sensory analysis is usually used in new

product development and to assess the quality of the same formulation in different beer produced (Gonzalez Viejo, Torrico, Dunshea & Fuentes, 2019; Jardin et al., 2018). Quantitative descriptive analysis (QDA) — was performed for each beer style. For the ranking preference test, a hedonic panel test composed of 40 assessors who were not experienced and aged 20-56 years old was used. The selection criteria were availability and motivation to participate on all days of the experiments and the panelists being regular beer consumers. Initially, these participants answered questions about the habits of beer consumption, such as the frequency; the type, style, and brand consumed; factors that influence consumption (prize, packaging, place of consumption, etc.); sensory characteristics they appreciate the most in craft beers (aroma, flavour, colour, taste, foam, etc.); and food pairing with beers. The preference was evaluated by the Heiniken preference test. The test was carried out in individual cabins under white light. In each session, the beer samples were served at refrigeration temperature ranging from 8C° to 12C°. About 300 mL of each beer was served in transparent, glass cups without assessors having prior knowledge regarding the brand of the beer being evaluated. The samples were served randomly at the same time, and the assessors were requested to order the least preferred to the most preferred craft beers (by giving a grade score for the beers). The preference tests were carried out in four different sessions with intervals of at least eight hours between sessions to avoid creating sensory fatigue in the consumers. The results were submitted to the Friedman test at a significance level of 5% after which the least significant difference value between the sums of the scores obtained with all analyses was calculated. One-way analysis of variance (ANOVA) was performed to detect statistically significant differences among the beers for the sensory attributes and chemical composition.

#### RESULTS AND DISCUSSION

Beer samples were collected either in grocery markets or in specialized craft beer stores (Table 1), so they are not excluded from the craft breweries themselves. The minimum shelf life of all beers was taken into account. The results of the initial chemical analyses (Table 2) show a large difference between the composition and properties of industrial and craft beers. The clarity was crystal clear only in standard lager beer, pilsner beer was clear and all other beers were cloudy, because, according to Štefančić and Marić (1989), their clarity values exceeded 4 EBC. Craft beers had higher extract (residual dry matter) values when compared to SLB and PSL. Acidity expressed as acetic acid was very different in beers and ranged from low 1.52 (PSL) to high 2.19 (CFB) and 2.02 (WSB). The ethanol content was in the standard expected values for all beers (4.5-5.0 vol%). The bitterness for SLB, PSL and WSB was within the standard values for these types of beer (10-40 EBC u.) while for craft beers bitterness was high (IPA, BIPA) to very high (CFB).

**Table 1** — Characteristics of Each Craft Beer Sample Regarding Their Production and Packaging Type

	Туре	Color	Packaging volume (mL)	Purchase place
1 standard light lager (SLB)	lager	yellow	bottle / 1000	market
2 pilsner (PSL)	lager	yellow	bottle / 500	market
3 weizen ale (WSB)	ale	yellow	bottle / 1000	speciality store
4 India pale ale (IPA)	ale	red	bottle / 330	speciality store
5 citrus flavoured beer (CFB)	ale	red	bottle / 330	speciality store
6 "black" India pale ale (BIPA)	ale	red	bottle /330	speciality store

Table 2 — Principal Quality Parameters of Each Beer

	Clarity (EBC)	рН	Dry Extract (g/L)	Acidity (g HAc/L)	Ethanol (%w/v)	Biterness (EBC)	Color (EBC)	Total poly- phenols (mg/L)
1 (SLB)	0.40 <u>+</u> 0.05a	4.25b	3.84d	1.84ef	5.0c	19e	4.1b	135b
2 (PSL)	0.50 <u>+</u> 0.06b	4.28b	3.65d	1.52e	4.8c	25f	3.8b	146b
3 (WSB)	4.7 <u>+</u> 0.4c	4.12b	5.0ef	2.02c	4.6c	25	7.5f	112a
4 (IPA)	5.5 <u>+</u> 0.0c	4.8b	4.22e	1.95f	4.5c	65	24h	274c
5 (CFB)	7.0 <u>+</u> 0.2d	4.05c	5.47f	2.19g	4.8c	94	22h	289d
6 (BIPA)	11 <u>+</u> 0.1f	4.16b	4.48ef	1.90e	5.1d	55	18g	305e

Beer colour was also within the standard values for SLB and PSL (<7), marginal for WSB (7-11 EBC u.) And high (>11) for other beers. Total polyphenols are expected to range for light beers (110-170 mg/L) and for dark (230-260 mg/L) (Jurić, Ćorić, Odak, Herceg, & Tišma, 2015). Light beers usually have a lower and dark beers a higher polyphenol content. About 1/3 comes from hops, but for craft beers this amount can also be significantly higher (Ramawat & Mérillon, 2013). Polyphenols are molecules containing one or more aromatic rings and two or more hydroxyl (OH) groups attached to aromatic rings. The polyphenols found in beer include simple polyphenols (two or more hydroxy groups on a single aromatic ring) or multiple ring structures such as the proanthocyanidins, which, in turn, may include catechin, epicatechin, and gallocatechin, as well as various polymers constructed from them. Polyphenols are derived directly from malt and hops and are often involved in haze formation in finished beer. They have no aroma, and their major gustatory impact is a perception of astringency. Their role and influence on the formation of beer taste is complex (Aron & Shellhammer, 2010). Also, polyphenols have a significant impact on beer stability (Pai et al., 2015).

	Туре	Corp. scale (Heineken)	Overall grade
1 standard light lager beer (SLB)	lager	4	4.6
2 pilsner type (PSL)	lager	4.2	4.3
3 weizen ale (WSB)	ale	2.8	2.9
4 India pale ale (IPA)	ale	3.4	3.9
5 citrus flavoured beer (CFB)	ale	1.7	2.8
6 "black" India pale ale (BIPA)	ale	3.4	2.9

Table 3 — Test Results of the Sensory Acceptability of Tested Beers

Testing the sensory acceptability of beer was conducted during the summer month of July and the results shown in Table 4 show that light beers obtained the best results, while the most acceptable craft beer for consumers was "India pale ale". In general, beers with increased bitterness and increased polyphenol content were not sensory acceptable as light beers of moderate bitterness, lower polyphenol content and additionally carbonized to obtain the so-called "recent" taste of industrial beers SLB and PSL.

#### CONCIUSIONS

The study showed that at higher temperatures consumers preferred beers primarily with lower bitterness and lower content of polyphenolic components, and to a large extent clearer beers, with the proviso that the evaluators were randomly selected and that some were only occasional beer consumers, so it would be good to compare the results of the same test conducted in the winter months.

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# TOURISM PUBLIC SERVICES



Monikja Likarić: Orrechiette e sorisso

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## DEVELOPING SERVICES WITH SMES ON EUROPEAN ISLANDS

#### Abstract

The Erasmus+ project VISIT focuses on improving conditions for tourism on European islands. The project has developed cooperation with small and medium-sized enterprises (SMEs) and regional tourist offices on specific islands since its start in autumn 2018. The cooperation consists of developing new services with the SMEs and offering them training for free in how to innovate to benefit development in the future. Service design thinking is key for developing and running a successful business. This paper discusses the activities that are designed to enhance cooperation within the local communities and with international networking partners, and the development of services on European islands. One major output of the project is the VISIT Online Community, an online space on a platform, and it can be accessed for free after registering. This community offers any visitor training in how to develop and innovate services using design thinking methods and how to be a sustainable entrepreneur. The article explains the process how the community has been designed and developed as well as the benefits people in the tourism industry can receive when joining the community.

Keywords: island tourism; European Union project; online community; innovation; service design thinking

The project VISIT focuses on improving conditions for tourism on European islands. VISIT stands for Versatile Islands Cooperating for New Services and Innovation in Tourism, and it is an Erasmus+ Strategic Partnerships project. The partnership consists of the coordinator, Laurea University of Applied Sciences, Finland; Linnaeus University, Sweden; Robert Gordon University, Scotland; Kiel University of Applied Sciences, Germany; and Vern' University of Applied Sciences, Croatia. The Technological Educational Institute of Epirus (later University of Ioannina), Greece was part of the project during 2018—2019.

The project has been cooperating with small and medium-sized enterprises (SMEs) and regional tourist offices on specific islands since its start in autumn 2018. The cooperation consists of developing new services with the SMEs and offering them training for free to benefit their development in the future. This paper discusses the activities that are designed to enhance cooperation within the local communities and with international networking partners, and the development of services on European islands.

First, the paper introduces the reasons behind launching the project. Thereafter, the output of the online community is presented with its development process including the planning, building, and testing of the space. Next, the target groups or users are discussed. Additionally, the paper explains some of the activities of the project VISIT and how they are linked to the objectives of the project as well as to the output of the online community. Finally, the paper summarizes the gist of the online community.

#### RAISON D'ÊTRE

VISIT was launched to provide new opportunities for islanders in Europe. Seasonal changes are an issue for islanders (Ioncică, Petrescu & Ioncică, 2015), and Buhalis notes that the quality of tourism products is negatively influenced by the tourists willing to spend less, while the number of tourists increases (1999, p. 341). The islands suffer economically from this dilemma. This has been the situation before COVID-19, and it has influenced the financial dependency of local business owners. Nevertheless, Porter (2001) Mei, Arcodia and Ruhanen (2012, p. 97) note that innovations can influence this situation.

Therefore, VISIT approaches the situation by cooperating with local businesses. This cooperation focuses on assisting the businesses to see and learn how to innovate and help to develop their own businesses and the offerings of services. COVID-19 has brought an additional factor to the dilemma of not earning enough from selling one's services. However, for some islands, the pandemic has completely changed the situation of the season. These islands have been faced with such a heavy season, breaking records of visitors and/or sales, and even having had to extend their season. The latter is one of the missions of VISIT, to help businesses on islands to try to expand their offerings outside of the high season.

# DESIGN THINKING PROCESS AS A GUIDING PERSPECTIVE IN THE PROIECT VISIT

Service Design Thinking is key for developing and running a successful business. Cocreation, user-centricity, sequencing, holistic and evidencing are the main characteristics of Service Design Thinking (Stickdorn & Schneider, 2012). The logic of Design Thinking is a process model with an iterative nature (Ojasalo, Nousiainen & Koskelo, 2015). VISIT implements Design Thinking in its Intensive Study Programs, which are discussed later in this paper.

The Design Thinking process starts with the Map and Understanding phase, which ensures that service developers have a broad understanding of the service and the needs and expectations of tourists (Ojasalo, Nousiainen & Koskelo, 2015). Even entrepreneurs and other actors in the tourism business need sometimes to systematically and consciously research and understand the user's perspective. During this phase, the on-

line community can provide insight and information from other participants to those going through the process.

The Design Thinking process continues with the Forecast and Ideate phase, which emphasizes the creativity, innovativeness and future-oriented generating of new ideas and solutions (Ojasalo, Nousiainen & Koskelo, 2015). The online community provides a platform for sharing ideas with others, which can be inspirational and encouraging. The Model and Evaluate phase of the Design Thinking process concretizes the service idea (Ojasalo, Nousiainen & Koskelo, 2015). Prototyping and testing are key elements to validate the idea with real users. Co-creation on a shared platform offers an opportunity to have testers from other countries and areas.

The final phase in the Design Thinking process is Visualize and Concretize, which aims to convince others to support the idea (Ojasalo, Nousiainen & Koskelo, 2015). Methods like the Service Logic Business Model Canvas could be shared on the joint platform. By carrying out this process, the participant has discovered tools that can be used to develop or solve problems in business life, also in the future.

#### DEVELOPMENT PROCESS OF THE ONLINE COMMUNITY

One of the major outputs in the project is the VISIT Online Community, which is an online space on a platform, and can be accessed for free after registering. This online community offers any visitor training in how to develop and innovate services using Design Thinking methods and in how to be a sustainable entrepreneur. The trainings enhance customer understanding for the entrepreneurs. In addition, the entrepreneurs can learn how to design customer-centered services. The community also offers a space where entrepreneurs, universities, their staff and students can cooperate on smaller projects and share information on job offers, internships and so forth.

This section explains how the work concerning the online community was divided into: 1) exploring the digital platforms that could host the online community; 2) testing the options of platforms; 3) planning the contents into the community; and 4) carrying out the technical testing and gathering user statistics. The final stage is to launch it to the general public and the target groups, which at the time of writing the paper is still expected to take place in the near future.

#### Choice of Platform

Before starting to build the online community, the project tested different options. The project website is on WordPress, which is the reason why the partners examined Buddy Press for the community space. Google Classroom was explored as a potential option and compared with Buddy Press. In addition, the project was introduced to a Finnish platform called Peda.net. This platform was an interesting option to study as one possibility. Canvas by Instructure was another option to choose from.

Criteria that influenced the choice of the platform included, among others, the scalability of the site on different devices, easy navigation, different communication options, activity statistics, uploading and downloading possibilities, structural features, and design opportunities. The platform needed to be adaptable regarding pedagogy to enable collaboration with businesses. This means that learning design is important when choosing the platform. The platform also needs to meet information security requirements and to comply with the European Union General Data Protection Regulation (GDPR).

#### Testing the Platforms

According to the tests carried out among the different options to choose the platform, there were features lacking, such as media upload and media sharing. Private messaging was not possible in some options at all. Some platform options did not work visually or technically as well as visioned on mobile devices. This is an important criterion for many people in the target group of SME representatives, who are busy at work and use the device they have access to when needed. This is often a mobile phone. Therefore, a mobile application of the platform is a positive part of the service offered. Some platforms were more suitable for traditional school studies, and, therefore, they were not the best options for the online community.

The experiences the partners gained in trying out the different options led the partners to choose Canvas as the platform for the online community. Although it is a rather new platform for most partners, it also offers good opportunities for designing a user-friendly community that can be operated on personal computers and mobile devices. Security updates will be regularly performed by the service provider, which will diminish the technical work of project members.

#### Planning of Content Creation for the Community

To start to create content for the online community required the partners to learn how to use the platform. As a new environment, Canvas presented an opportunity to design a modern, user-friendly space for the community. However, training was needed to learn basic features and how to use them to be able to create the different pages, tasks, learning modules and other features of the community. Therefore, Laurea UAS provided training for the partners on how to use the space. A sandbox was created for the purposes of training and experimenting in Canvas.

Matters and functions that needed to be considered include the needs for communication, the enabling of learning, and cooperation possibilities for the users of the community. According to Baek and Kim (2015), the degree of centrality, closeness and betweenness impacts positively on how actively participants operate in online communities. Participants have versatile interaction patterns, which affect how they share information. Furthermore, online communities require trust among the actors, which can be built on interpersonal trust. Cognitive trust increases the credibility of the other par-

ticipants, which encourages them to be active members of online communities (Tsai & Hung, 2019).

When building the contents for the community, the partners needed to consider the basic functions of an easy-to-use space online. Willard et al. (2018, p. 96) lists the main topics concerning the usability of online communities: those are logging in, the design of the main menu and submenus with the structure and format of those. Also, the visibility and how recognizable the actions and functions are is important. Readability of the text includes the brightness of the colors, as well as the sounds need to be audible and clear. After the European accessibility act, digital services and Internet pages need to be accessible to everyone, also including people with disabilities.

As the online community is targeted to business professionals and students, it is, therefore, essential that information technological (ICT) requirements are not too demanding. The time of the entrepreneurs and tourism experts is valuable. These small companies do not have separate development units or big budgets to be invested into service design. On the contrary, in most cases, development is created and conducted in parallel with other actions, often as very practical functions. Hectic work in the tourism business emphasizes the preference for easy access and an extremely user-friendly platform. The online community should provide added value for the participants. Experiences in the project VISIT have proven that operators in the tourism business are hardworking and practice oriented. The online community should not include elements which they find too difficult or confusing to use. The tone of the text, complexity of the system and practicality of the tasks need to be user-friendly and modified to meet the needs of these participants.

When considering possible cooperation in the community, one needs to think about potential relations online. According to Farisi (2012), social relations in online communities emphasize several interesting perspectives. First, betweenness creates connectivity. Some actors have social power in a network, which enables them to create connectivity with others. Centrality is an essential characteristic of interactions and actions in online communities. Togetherness, sense of community, sympathy, and a bilateral shared understanding of the actors determine online communities as virtual social networks. Closeness enables the possibility to gain access to information (Farisi, 2012). For these reasons, it is vital to enable interactive work and communication opportunities in the community.

VISIT partners needed to visualize how different types of users of the online community might be reaching out to each other or communicating or working together. Thus, online communities should provide possibilities for the participants to express themselves. There might be some rewards and credits based on the activity (Galehbakhtiari & Hasangholi Pouryasouri, 2015). This could be the case if only students would be the users of the training module. But since there are also business representatives, the rewards consist of the new services they themselves ideate, or any kinds of joint

results they create together with others, as well as the certificate they receive when they have completed the study module. Therefore, perception of the utility is one of motives for individuals to join online communities (Hashim & Tan 2018).

The pedagogical approach was also to be taken into consideration when creating the contents of the community, since it will offer learning opportunities for the users. One of the pedagogical methods that are useful in online communities for learning is COIL, or Collaborative Online International Learning. COIL is a learning technique for intercultural project work between students of different countries and cultures. It gives every student the chance to gather intercultural experiences without being away from their home country (Coventry University). This makes it suitable for an online community where representatives from different SMEs in European countries and students would work together online designing new service ideas.

IT supported international learning as described above is often referred to as virtual mobility (Villar-Onrubia und Rajpal 2016, p. 77). This makes learning in the online community interesting since participants can learn from each other and share information also on their own country, culture, and business. Some COIL projects have discovered that the training is most successful when participants represent different cultures, backgrounds, and fields of education (Henriksson, Mantere, Mänty & Hardiman, 2020). The main idea of COIL is that two or more universities or industry professionals from different countries are doing a project together via online interaction. Projects are done in real-time; it is important that they are interactive.

A main characteristic of COIL is that learning outcomes are international when working on cross-border solutions together. At the same time helping students to develop their intercultural competences is one of the benefits of employing COIL in online study solutions. There are COIL projects that focus on mere international communication, while others can include tasks which need to be solved together and have tangible outcomes like videos, software, or graphic designs. Projects can also be based on partnerships like Erasmus agreements or other funds (Villar-Onrubia und Rajpal 2016, p. 79). Therefore, in the VISIT Online Community both virtual mobility and international co-creation opportunities in multicultural formations are encouraged.

Besides cultural aspects, students and representatives of SMEs can acquire new knowledge from each other, if they learn together in the online community. Participants can learn about new kinds of thought patterns as well as enhance their digital skills by using some of the tools available in the online community (Coventry University). When employed in the contents of the learning module in the community, COIL can enable students and companies to get further in any subject matter, by working together on development tasks.

#### Features of the VISIT Online Community

The VISIT online community is located on the Canvas platform. This current platform was chosen due to the main characteristics, such adaptability to different needs, mo-

dern communication possibilities, flexible visual opportunities, and scalability as well as meeting a variety of pedagogical approaches.

The online community consists of a section with discussion areas on different topics, which encourages participants to interact with each other. In this section, tourism business companies can recruit students for internships and in this manner hire future professional workers. The other topics that are offered at this moment of designing the section include an area to discuss mutual collaboration and then additional areas on other topical issues.

The second section is called the Self-study Module, and it follows the logic of the Service Design Thinking process (Ojasalo, Koskelo, & Nousiainen, 2015, 202). The module consists of the Service Design Thinking process' different steps designed into pages, tasks and assignments. The design process is presented step-by-step with concrete tasks. Diverse material demonstrates the design process with videos, articles, presentations, links to design cases and so forth.

The Self-study Module aims to encourage people in the tourism industry to co-create new or improve existing services with others interested in the field and its future. The Canvas platform guides the user to proceed doing one thing at a time. It is possible to use a peer evaluation function to ensure openminded collaboration among the participants. On the other hand, if needed, all the uploaded documents can be stored without sharing them with others.

#### Technical Testing and User Statistics of the Online Community

In order to ensure that the VISIT Online Community fulfills the needs of the users, there was the need to test the environment. Robert Gordon University (RGU) was coordinating the planning of testing and the implementation of technical testing of the platform in 2020. The following methods (Table 1) were chosen as testing methods. These tests ensure that the site is both suitable and functional for the project stakeholders and the target audience.

Testing method	Goal
Black-box and white-box testing	Let both the creators of the system and the potential users of the system test the Online Community.
Usability testing	The 25-Point Usability Checklist was used to verify that the site is clear and obvious for the users.
Accessibility testing	Accessibility testing is a legal requirement after EU Web Accessibility Directive. Both the Wave tool and The Accessibility Checker of Canvas were used.
Feedback from students	Get feedback from the pilot users of the Three-Day Sprint with an e-form.

**Table 1** — The Methods and the Goals of the Testing

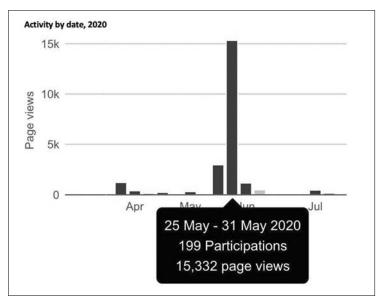


Figure 1 - User Statistics of the Online Community

The testing methods chosen were suitable for the purpose and quick to execute. The testing confirmed that Canvas is a good choice for the platform of the Online Community and it has good usability. Corrections which are related to the accessibility of the content have been possible to make immediately. Based on the testing, several changes have already been made in autumn 2020.

In addition to the large-scale testing, which was presented above, a qualitative test group with selected students have conducted an in-depth testing procedure. A group of students from Kiel UAS adapted a role-play technique and stepped into the shoes of the customer, the latter being a main principle of Service Design Thinking. Their profound analysis resulted in several changes and modifications. Many of them were created to improve the readability and understandability of the material. These improvements also aim to encourage and commit the participants to work and study in the community.

Currently, there have been 70 users in the student role and sixteen users in the teacher role in the VISIT Online Community. Students have submitted a total of 32 assignments and there are thirteen discussion topics. Statistics (Figure 1) show that there have been most participants during the last week of May, when there were in total 199 participations and 15,332 page views.

After the testing procedures, amendments, and corrections to the community space, it has developed into a functioning networking area or room for people to meet and collaborate. This means that the online community is almost ready for its users, who are introduced next.

#### TARGET GROUPS OR USERS

There are two main target groups for the online community. Regarding the goal of the project VISIT, the main user group consists of representatives of companies operating in the field of tourism. They can be entrepreneurs, staff or management. These organizations represent small and medium-sized enterprises on small islands. Their history and working experiences as well as educational backgrounds may vary, but they share the interest in developing services to better fulfill the needs of tourists.

The second important target group is formed containing students from Higher Education Institutions. Mostly, they have their background in the field of tourism and hospitality management. In addition, they can represent other disciplines, too. In a multidisciplinary environment it is essential to gather people sharing diverse backgrounds. In order to fully cover all necessary perspectives during a design process, students from ICT, business, wellness and management make a good basis to combine diverse competences and skills.

In addition to these two main user groups, it is possible to involve also other stakeholders to be part of the online community. For example, local tourist offices, city marketing, even active local or regional associations could benefit from the activities that can take place online.

The Project VISIT has offered tourism companies the developing of services on small islands already in Greece, Sweden and Finland. This development process has taken place in Intensive Study Programs (ISP). Collaboration with entrepreneurs is key for successful ISPs, which are intensive study weeks carried out at a specific location, with participants from different countries. These participants have a dedicated study program for the week (the length can vary), and they are both students and professors from the partners in the project funded by the EU. Representatives of the companies are in close contact with students, staff of universities who are partners in VISIT, with their customers and, in the best case scenario, with the other companies. These ISPs give the possibility for tourism entrepreneurs and other representatives of the tourism companies to learn from each other, share existing businesses and co-create new business ideas together.

The nature of the ISPs is very hands on: students from different universities and countries, from diverse study programs and with different experiences follow the Design Thinking process. This co-creation gives an excellent basis for collaboration in the online community, too. In VISIT, ISPs are conducted on small European islands and in many cases, entrepreneurs know each other quite well already in advance. Their participation in a joined Design Thinking process can strengthen mutual confidence. The online community could provide a shared platform for further co-creation among local actors.

The tourism business in different parts of Europe has diverse challenges as well as different kinds of opportunities. Weather conditions are not the same, local infrastructures have diverse applications, historical backgrounds vary and so forth. Despite the differences, these actors from the tourism companies have also a lot to share. They run their businesses in challenging conditions on small islands, and on all these islands the tourist season is limited. Tourism services are not available or profitable around the year. The goal of the online community is to provide a platform for these tourism service providers who could benefit from sharing thoughts and ideas among their colleagues.

#### BENEFITS FOR VISIT ONLINE COMMUNITY MEMBERS

The users or participants of the VISIT Online Community become members of the community who share some common thoughts or motivation. The motivation can be, for example, the development of island tourism in Europe. The online community offers a place to discuss and learn from the others. Interaction and communication form a basis for the successful use of the online community. From the point of view of the project VISIT, it is important to encourage people to join, to be active, share new discussion topics and develop in-depth collaboration. Interaction does not occur on its own, instead it requires initiatives. In the beginning of the cooperation, it is natural that the project has a strong impact and plenty of actions. After a good start, the online community should have enough content, interaction and actions to operate without any moderator. At its best, participants have a mutual understanding of the benefits of the interactions.

In the times of the pandemic, it has been discovered that some islands in Europe have suffered from the pandemic, while other islands have broken records during the 2020 summer season. During the COVID-19 period, it might be beneficial for the businesses to develop their operations, their offerings, and begin international networking with other business owners in Europe. They could also cooperate with the universities who are partners in the project VISIT. Businesses can also get students involved in developing new services. For these purposes, the VISIT Online Community is suitable for these target groups. They are most welcome to join it in 2021, when the community is launched.

This paper has introduced the objectives of the project VISIT and some of its activities to strengthen international collaboration with networking partners and communities on European islands. The VISIT Online Community has been carefully explained as has its design and development process. The target groups for the online community have been introduced. At the end, the article illustrates some benefits the target groups can receive when joining the online community, which meets one of the goals

of the project, to allow SMEs on islands to learn how to develop their businesses and to cooperate with others in these innovative activities.

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# THE RISE OF NAUTICAL TOURISM IN THE KORNATI NATIONAL PARK

#### Abstract

Because of its intensive connections to the maritime and navigational activities, it is very difficult to define nautical tourism. It is a specific form of tourism that implies the tourists traveling by water, sea, or river and they are docking in marinas and ports. According to the statistics, nautical tourism occupies an increasingly significant place in the overall Croatian tourism industry. As stated in the studies, nautical tourists spend more money than the other tourists do in a classical sense of the word. Nautical tourism, as well as the whole tourism industry, is highly vulnerable when it comes to external impacts. The worldwide outbreak of the COVID-19 pandemic has brought the world to a standstill, and tourism has been affected, worst of all the major economic sectors. This paper aims to demonstrate how much nautical tourism in the Kornati National Park has been affected by the Corona crisis.

Keywords: nautical tourism, tourism vulnerability, corona crisis, COVID-19, Kornati National Park

The Kornati National Park is one of Croatia's better tourist destinations, indubitably being the most attractive Croatian destination when it comes to nautical tourism. The Kornati Islands are located in the Šibenik-Knin County, which is placed on the maps of numerous boaters because of its large number of islands. Anyway, the boaters find the areas under various protection categories the most attractive ones, as the pronounced natural values due to a special landscape diversity and biodiversity, as it is exactly demonstrated by the territory of the Kornati National Park.

The notion of nautical tourism is defined in the paper's Introduction and its characteristics and potential for the economy of the Republic of Croatia is discussed. Partially, the results of research on the impacts of the COVID-19 pandemic on the nautical sector, as well as the relative actors' viewpoints concerning further nautical tourism development, conducted by the Green Sail Organization, have been incorporated in the paper. Nautical tourism in the territory of the Kornati National park is focused on in the paper.

The paper analyzes the ticket sale data in the Kornati National Park prior to the COVID-19 pandemic and subsequent to it. A 2016-20 period is analyzed by virtue of an overall number of the National Park tickets sold and an estimated number of visitors to the National Park. The paper objectives were to demonstrate to which degree nautical tourism in the Kornati National Park was affected by the coronavirus pande-

mic. A specific objective was to prove that nautical tourism is a tourism type that was least affected by the coronavirus pandemic in spite of a decrease in the number of visitors and that it is the safest and least susceptible to external factors, such as to the coronavirus pandemic, with the exception of group visits.

#### NAUTICAL TOURISM

#### In General

Nautical tourism is a form of tourism that is difficult to define. The term nautical is derived from the Greek word nautēs (sailor) and implies navigating skills and nautical science (Šamanović, 2002, p. 105). Nautical tourism can be defined as a total of polyfunctional activities and relationships caused by the accommodation of tourist boaters in nautical tourism ports or outside them and by the usage of sailing vessels, as well as of other vessels connected to the nautical touristic activities for the sake of recreation, sports, entertainment and other purposes (Luković & Gržetić, 2007, p. 33).

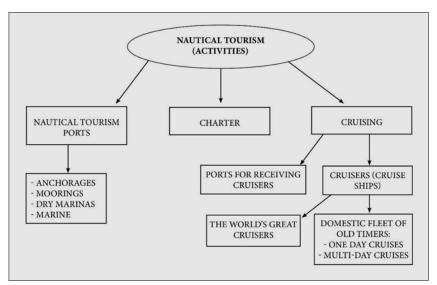
According to Favro (2007), nautical tourism is a form of tourism comprising of tourist boaters' sailing and staying on their own or rented vessels for the sake of enjoyment, recreation, and sports in nautical tourism ports and in all other ports, that is, in the small-sized ones, natural basins, and bays, and all the activities directly and indirectly linked to them. There are multiple criteria that can help divide nautical tourism in its subtypes. According to the main defining motive, nautical tourism can be divided in the following subtypes (Jadrešić, 2002, p. 144-148):

- mobile
- sailing
- bathing
- accommodation
- sports
- winter
- excursion
- fishing
- cultural
- health
- ambiental.

According to a sailing motive, nautical tourism can be divided in the following categories (Jadrešić, 2002, p. 144-148):

- excursions
- cruise
- sports nautical tourism
- combined and fast tourist transportation.

Nautical port is a tourist facility that forms a unity in a commercial, territorial, constructional and functional sense or which, within a broader territorial unity, possesses



**Table 1** — Classification Model of the Basic Types of Nautical Tourism Activities (Source: Luković, T. (2007), Nautical Tourism — Definitions and Dilemmas. Naše more, 54, (1-2), p. 29.)

a separate part of land and the conditions required to meet the needs of nautical tourism and nautical tourists. The nautical ports categorization in the Republic of Croatia is carried out on the basis of the Law on Tourist Activity (Narodne novine [Official Gazette], 8/1996, 19/1996, 76/1998) and the Regulation on the Classification and Categorization of Ports for Nautical Tourism (Narodne novine [Official gazette], 142/1999, 47/2000, 121/2000, 45/2001 and 108/2001). The nautical ports types are as follows: an anchorage, berth, land marina, marina, and boat storage (Croatian Bureau of Statistics, 2020).

A natural resources basis for nautical tourism's development is formed by the following characteristics:

- 1. natural, that is, the geomorphological forms like coastal areas relief, maritime, fluvial, or lacustrine geomorphological form;
- 2. hydrographical elements or the physical, thermal, and chemical characteristics of the water;
- 3. climatic characteristics of an area, mostly focused on air temperature, precipitation, winds insolation, air humidity and cloudiness (Dulčić, 2002, p. 36).

#### Role of Nautical Tourism in the Croatian Economy

Nautical tourism in Croatia plays a significant role. It is the most perspective and profitable touristic product that contributes to the touristic reputation of Croatia (Gračan, 2006, p.112). Croatia has a lot of comparative advantages for further increases in nautical tourism, including a convenient geographical position and the relief of the sea,

	ADVANTAGES	DISADVANTAGES
Resource base	Attractive, indented coast, natural beauty, biodiversity and preservation, undeveloped coast, rich cultural and historical heritage, favorable climate, a large number of sunny days.	Reconstruction of some areas of the coastal zone and part of the island, illegal construction, reduction of landscape and biodiversity, unused renewable energy sources.
Nautical infrastructure	Existing nautical capacities, possibility of capacity expansion, spatial possibility for the construction of new ports, a relatively developed maritime management system.	Small number of quality nautical berths and insufficiently developed logistics due to a growing demand, inadequate infrastructure and a lack of berths for larger yachts, lack of capacity in accommodation units and the level of technical services in marinas, inadequate categorization of nautical tourism ports.
Existing accompanying tourist infrastructure and superstructure	Accommodation facilities, tourist tradition, qualified staff, service activities, rich tradition and hospitality, multiculturalism and tolerance, existence and coverage of spatial planning documentation, diverse sectoral structure, number of educational institutions.	Inadequate offer content (insufficient excursion offer, inadequate store offer, souvenir inauthenticity), a low level of service quality (disorganization of attractions for the reception of cruising visitors, inadequate working hours), different level of interest in development, inadequate cooperation between the nautical ports and the destination entities.
Competitiveness	Competitiveness of port taxes and fees, price competitiveness of Croatia in general.	Lack of a destination development concept and the conflicts with other types of tourism, inadequate and unorganized promotion and a lack of appropriate promotional materials, a lack of joint development initiative, ie., an insufficient implementation of the new strategic directives, a pronounced demand seasonality, an inadequate waste disposal, inadequate drainage and industrial plants' wastewater sewer locations next to the nautical destinations, an insufficient connection between the economy and higher educational institutions, an imbalance of supply and demand.

Table 2 — Advantages and Disadvantages of The Croatian Nautical Tourism (Source: Dogan, K.& Mršić, T. (2003). Preservation of Natural Resources in Croatian Nautical Tourism. Pomorski zbornik, 47-48(1), p. 75.)

good nautical conditions, sailing convenience, richness in natural resources, well-positioned locations for the construction of new nautical tourism ports, naval and ambiental values, recreation and sports, good connection with the land, historical and cultural elements and the hospitality of domiciling population (Brčić & Radić Lakoš, 2010, p. 3).

The total income realized in nautical ports in 2019 amounted to HRK 918 million. As compared to 2018, the total income increased by 7.2%. Pursuant to a demand analysis, the most yachtsman-attractive regions are Šibenik-Knin County and Zadar County. An Adriatic counties' comparison performed in 2019 demonstrates that the highest nautical ports' incomes were accrued in Šibenik-Knin County, as much as HRK 233 million (Croatian Bureau of Statistics, 2020).

#### Nautical Tourism in the Corona Crisis

The research was conducted in April 2020 by the Green Sail nonprofit organization, whose activities have promoted the development of responsible nautical tourism in Croatia for a long time. The poll's objective was to collect the information useful in the recognition of the impacts of the COVID-19 pandemic on the Croatian nautical sector,

to identify the areas in which a support is necessary, and to subsequently dispatch them to the relevant national institutions. They conducted a survey among 53 nautical companies and agencies. Out of the 53 nautical companies surveyed, seven companies were from Šibenik-Knin County.

More than 90% of respondents (48 companies surveyed) were largely negatively affected by the COVID-19 epidemic, having left the business modification consequences explained in the following two responses. The other five companies surveyed (9.4%) have experienced a moderately negative impact on the business caused by the pandemic. On the day of survey completion, the respondents mostly provided answers about the cancellation rates for the upcoming 2020 season, and one part also pertained to the information on the transfer of reservations for the next year. Few companies have also introduced a voucher system instead of cancellations. It is also clear from the answers that the crisis consequences within the nautical sector are currently less reflected on the marinas than on charters themselves.

Many respondents expressed a desire to try to prove themselves on the domestic market during the pandemic, emphasizing a fact that the nautical tourism is actually one of the safest forms of vacation because the boat charterers are isolated from the environment. The visitors accommodated on the vessels enjoy an option of staying on the vessels while establishing the minimal social contacts. These visitors stay exclusively on the boats and anchor at sufficient distances from other users. Therefore, a large number of respondents believe that the form of vacation on a boat is adapted to the measures of physical distancing.

It was also indicated in the research that the further development of nautical tourism should be based on sustainable development and quality planning. Moreover, it is important in the future that there are strict rules regarding environmental protection, such as a permitted vessel cleansing, controls within marinas concerning the preparation and repair of ships, penalties for throwing waste into the sea and so forth. As stated in the Green Sail research, it is necessary to rethink how the sector exerts an impact on the natural resources and ecosystems while pursuing sustainable tourism.

#### KORNATI NATIONAI PARK

#### General Information

The Kornati archipelago is an isolated insular group situated in the central region of the Croatian part of the Adriatic Sea, in Murter-Kornati Municipality. The Kornati archipelago occupies an area of about 320 sq. km and comprises approximately 150 islands, islets, and rocks. A larger part of the Kornati insular group was proclaimed a national park in 1980. The Kornati National Park occupies an area of 218 sq. km and is comprised of a total of 89 islands, islets, and rocks. The islands cover less than 1/4 of the to-

tal park area, which indicates that the sea surface dominates the park. The total coast-line length of all islands amounts to 238 km.

The geomorphological uniqueness derives from the fact that this archipelago represents the densest insular group in the Mediterranean Sea. The coastal cliffs, known as "crowns", are one of the unique features of this area, and they stretch both above and below the sea level across the entire Kornati National Park. The unique nature of the area is also reflected in an exceptional beauty of the archipelago landscape. Because of the relief, indented coast and numerous islands, clean sea, and a favorable Mediterranean climate with many sunshine hours, the Kornati are extremely attractive to many visitors.

Although the territory of the Kornati National Park is managed by the Kornati National Park Public Institution, it is an area entirely possessed in private property. An individual proprietor's possession consists of a house, several smaller tillable regions, and a large pasture. A typical Kornati Island's house is a modest mono-volume shelter necessary for the property usage, with numerous applications - for rest, storage of tools and other equipment, food, as a refuge during the inclement weather, and so forth, and is also presently used in the tourism industry (Sustainable Tourism Development Strategy, 2015, p. 16).

## Economic Activities in Kornati National Park

The main economic activities in the entire area have always been a traditional olive growing and extensive sheep breeding. Recently, the tourism industry is becoming increasingly prominent. The development of tourism industry activities was made possible by the introduction of a fast-motorized watercraft, making the Kornati islands more accessible. The people of the Kornati islands turned to tourism, adapted their small Kornati islands houses for tourist accommodation, and opened taverns and restaurants (Sustainable Tourism Development Strategy, 2015, p. 28).

The development of tourism in the Kornati archipelago, especially within the Kornati National Park, is based on its specific areal characteristics. In the last few years, the Kornati Islands have been distinguished in gastronomic tourism. In the territory of the National Park, there are 21 gastronomic facilities (restaurants and taverns), some of which conjoined the Kornati and Žut Gastro Association in 2019. The Association signed a contract with the Kornati National Park Public Institution that regulates the conditions of Kornati Nation Park ticket sales.

The most represented form of tourism in the National Park is the nautical one due to the fact that the Kornati archipelago is located approximately nine nautical miles from Murter and is accessible exclusively by a watercraft. The visitors of the Kornati National Park can be divided into two basic groups: 1. individual visitors (visit the park by their own or by a rented watercraft); 2. group visitors (whose sojourn in the park is organized by a legal or natural person guiding the park visits).

## Nautical Tourism in Kornati National Park Through Years

Pursuant to the Sustainable Tourism Development Strategy for the Kornati National Park Border Area, published in 2015 as a result of investments (e.g., the construction of a mega yacht marina at Mandalina), the city of Šibenik was expected to be promoted to an elite nautical hub for the Adriatic and the Mediterranean that would also exert a major impact on the Kornati archipelago as a destination of interest for boaters. In addition to the development of nautical tourism, a growth in the number of excursion boats sailing into the Kornati National Park was observed in the 2011-14 period (Sustainable Tourism Development Strategy, 2015, p. 27).

In this paper, we have analyzed the current state of nautical tourism on the Kornati Islands and pointed out a potential and possibility for further development. The paper's special objective was to perform a ticket sale analysis over the months and through the sale channels. The Kornati National Park has two official entrances: from the north at the Velika Proversa strait and from the south at Vrata od Opata. There are three Ćmobile« reception points in operation in Kornati National Park during the tourist season (from May to mid-October) for ticket sales and visitor information. The principle on which the National Park operates is that the reception staff on a watercraft conduct patrols in a given part of the park, providing reception services to the visitors. There is a reception point in downtown Murter, and tickets can be purchased at numerous locations outside the park (from Zadar to Primošten) (Sustainable Tourism Development Strategy, 2015, p. 22). It is also important to emphasize that there is no central entrance to this National Park, but the people may enter it all along the way, so it is very difficult to monitor and track all the tickets sold. Also, it is important to mention that a significant number of those who anchor out of the nautical tourist ports without a ticket are not statistically registered.

The paper has analyzed the number of visitors to the Kornati National Park. To enter the Kornati National Park, a ticket is paid per watercraft regardless of the number of people on the vessel. The price of an entry ticket depends on the place of purchase (as the tickets purchased within the park are more expensive than those purchased outside the park, prior to entry) and the size of a watercraft (the watercrafts transporting individual visitors are divided into four groups based on their length, while excursion boats are charged based on their registered vessel capacity) (Sustainable Tourism Development Strategy, 2015, p. 25).

The number of visitors is an estimated figure, while the number of tickets is a real number since a ticket is paid per vessel, regardless of the number of people on it. An estimated number of visitors is calculated based on vessel length. Excursion boats are charged based on the registered vessel's capacity. This implies that these figures do not illustrate a realistic number of visitors to NP Kornati. There are a few types of tic-

Ye	ear	2016	2017	2018	2019
	Tickets	12,299	13,493	14,198	15,292
TOTAL	Visitors	150,615	169,398	175,275	188,854

Table 3 — The Number of Tickets and Visitors to the Kornati National Park From 2016 to 2019

(Source: Kornati National Park Public Institution database)

kets: a single-day, three-day, and a five-day ticket. Thus, if you purchase a three-day ticket, it will be calculated as one ticket, but the number of visitors will be tripled.

Table 3 demonstrates that the number of purchased tickets is growing annually. The number of visitors, more precisely that of the boaters, is also growing, but it was estimated given that the tickets were sold according to the size of a vessel and not according to the number of people on it.

There are two marinas in the Kornati archipelago: one in the Kornati National Park (ACI Marina Piškera) and the other on the island Žut (ACI Marina Žut) and thirteen other marinas in the area (Sustainable Tourism Development Strategy, 2015, p. 23). According to the Regulation on the Internal Order in Kornati National Park, a marina with 118 berths and 19 anchorages, with a capacity to offer more than 300 berths, is possible. All of this represents a great opportunity for the development of nautical tourism, but only a small number of it has been realized, while at the same time there is a large number of wild anchorages, moorings, and unregistered pontoons (Narodne novine, 2011).

There are currently no mooring buoys in the Kornati National Park area that would provide for safe mooring to the visitors, control visitor numbers and flow, and preserve the valuable habitats in the anchorage areas. At the time, strategically, the Public Institution obtained location permits for the installation of 22 buoys in the Vrulje cove and thirty buoys in the Lavsa cove (Sustainable Tourism Development Strategy, 2015, p. 30).

#### Nautical Tourism in Kornati National Park in the Corona Crisis

At the end of 2019, the world was hit by the COVID-19 pandemic, which led to a partial lockdown of the global economy. Croatia has also been affected by the COVID-19 pandemic, which has resulted in an economic closure. The entire Municipality of Murter-Kornati was a quarantine zone from 25 March until 18 April 2020, which included the National Park. As people circulation was generally minimized at that time, there was no economic activity. That situation lasted until May 2020, when the economic activities started to return to a normal course in three phases (Vlada RH, 2020).

A more favorable situation related to the COVID-19 pandemic led to the loosening of epidemiologic measures in May 2020, so one of the first decisions taken by the national Civil Protection Headquarters was aimed at nautical tourism. The importance of economy prompted the Civil Protection Headquarters to exempt all Croatian nationals'

Anchorages (sea berth)	Berth (sea berths)	Marinas
1. Stiniva (5) 2. Statival (20)	Marina Piškera (124)     Ravni Žakan (29)     Vrulje (4)	1. Marina Piškera (118)

**Table 4** — Nautical Ports in the Kornati National Park According to the Regulation on the Internal Order in the Kornati National Park

(Source: Pravilnik o unutarnjem redu u Nacionalnom parku Kornati. Narodne novine, 53/11.)

ships, yachts, and boats from a decision stipulating that vessels navigating the international waters will be obliged to self-isolation or quarantine prior to entering the seaports and inland ports in Croatia. Also, it exempted the yachts with a hull length amounting to more than 24 meters, docking at the berths in Croatian nautical tourism ports or in the ports open for public traffic.

Furthermore, in the third phase of economic reactivation (from 11 May 2020), the operation of national parks and nature parks, as well as that of catering facilities, was enabled. Then, the Croatian Institute of Public Health issued a series of recommendations regarding the work of travel agencies, camps, and marinas during the coronavirus epidemic, as well as the recommendations for the prevention of infections in the zoos, national parks, and nature parks, as a part of easing the COVID-19 restrictions gradually (HZJZ, 2020).

During the coronavirus pandemic, the tourism industry's vulnerability to the external factors came to the fore. Such a sensitivity has also affected nautical tourism, but probably to a lesser extent than the other tourism branches because of a possibility in nautical tourism (with the exception of group visits) to ensure physical distance, being the main epidemiological recommendation in a struggle against coronavirus.

SALES CHANNEL		June 2019	June 2020	Index
December as late	Tickets	1,910	105	5.50
Reception points	Visitors	16,969	947	5.58
Web shop	Tickets	467	158	33.83
	Visitors	4,569	1,548	33.88
C	Tickets	457	0	0
Caterers' association	Visitors	3,565	0	0
CL:	Tickets	135	0	0
Shipowners (excursions)	Visitors	8,272	0	0
TOTAL	Tickets	2,969	263	8.86
TOTAL	Visitors	33,375	2,495	7.48

Table 5 — Tickets/ Visitors in the National Park Kornati: A June 2019 Vs. June 2020 Comparison.

(Source: Kornati National Park Public Institution database)

SALES CHANN	EL	July 2019	July 2020	Index	
D	Tickets	2,047	1,152	56.28	
Reception points	Visitors	19,664	10,924	55.55	
W.L.L.	Tickets	678	767	113.13	
Web shop	Visitors	17,762	20,412	114.92	
C	Tickets	1,067	484	45,36	
Caterers' association	Visitors	9,239	4,199	45.45	
CL:	Tickets	163	59	36.20	
Shipowners (excursions)	Visitors	11,568	3,599	31,11	
TOTAL	Tickets	3,955	2,462	62.25	
TOTAL	Visitors	58,233	39,134	67.20	

Table 6 — Tickets/ visitors in the Kornati National park: a July 2019 vs. July 2020 comparison.

(Source: Kornati National Park Public Institution database)

As discussed earlier in this paper (Table 3), the number of tickets is a realistic figure, while the number of visitors is an estimated figure. For the purpose of this paper, the number of sold tickets and the number of visitors to the National Park obtained through the sales channels were analyzed. A three-monthly period (June — July — August) of the year 2020 was compared with the same period in the year 2019 (Sustainable Tourism Development Strategy, 2015, p. 30-31).

Due to the COVID-19 situation, 2020 ticket sales started with a delay. At the time of this paper's compilation, the caterers and shipowners had not yet started selling tickets. In June 2020, there were still no tickets sold at the mainland and maritime reception points. The agencies started selling tickets as early as toward the end of the month. In total, the ticket sales scored only 8.86% in comparison with last year's sale, and the number of visitors amounted to only 7.48% of the last year's figures.

In July 2020, a certain increase in web shop ticket sales was noticed - 13% more in comparison with July 2019. The web shop was considered the safest way to buy tickets, especially in the circumstance of a coronavirus pandemic. From 7 July 2020, an independent web shop was functional and registered a significant selling rate from the very onset. The sold tickets and the received visitor figures were far better than in the

SALES CHANN	EL	July 2019	July 2020	Index	
December and the	Tickets	2,047	1,152	56.28	
Reception points	Visitors	19,664	10,924	55.55	
Web shop	Tickets	678	767	113.13	
	Visitors	17,762	20,412	114.92	
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mom. r	Tickets	3,955	2,462	62.25	
TOTAL	Visitors	58,233	39,134	67.20	

**Table 7** — August 2019 Vs. August 2020 Comparison of Tickets/Visitors in the Kornati National Park (Source: Kornati National Park Public Institution database)

previous month, which corresponded to a positive epidemiologic situation in Croatia, but they were still lower than the figures pertaining to July 2019. In total, ticket sales had reached 62.35% of the 2019 sale numbers and the number of visitors had reached 67.20% of the 2019 figures. Compared to the year 2019, group visits to the park were in a steep decline when compared to the individual visits.

The data for August 2020 demonstrated a certain progress registered in the number of tickets sold. The web shop registered a 50-percent increase in comparison with August 2019. Contrarily, the commissioners and the reception point selling registered a 58% decrease. That decrease was registered in the commission sale and at the mainland reception points. A portion of those guests bought their tickets online.

If there had not been a deteriorated epidemiologic situation, it is believed that in the National Park's Public Institution that the increase would continue as well as in the rest of Croatia. The sold tickets' and the received visitors' numbers were insignificantly lower than in July 2020, which also corresponded to a negative epidemiologic situation in Croatia. Croatia was placed on the red list in many countries by the end of August 2020, resulting in a decrease in ticket sales (60.45%) and in the number of visitors (59.86%) was not surprising (HGK, 2020).

The countries that required their citizens to have a COVID-19 test administered or be isolated in a 14-day quarantine were Austria, Cyprus, Estonia, Finland, Island, Italy, Latvia, Lithuania, Norway, Slovenia and the United Kingdom. Two Croatian counties, that is, the Split-Dalmatia County and the Šibenik-Knin County, were red-listed concerning Belgium and Germany. Slovakia marked Croatia red from 1 September 2020, and the country was also red-listed when it comes to Poland from 2 September 2020 - the Poles cancelled all flights from 46 countries, Croatia included. A datum from the Marinas Association in the Croatian Chamber of Commerce emphasizes that the nautical sector has lost significant amounts due to the so-called "red list" and cancelled bookings in September and October 2020. Also, they presented a figure that the charter

currently loses 150 million euro due to the cancelled September and October bookings (HGK, 2020b).

As the COVID-19 pandemic spread, the world has experienced a new awareness and can see its impact on the tourism industry and people's vulnerability. With regard to the development of nautical tourism in Croatia, it is necessary to focus on its main advantage — the possibility of an individual vacation. Guests can navigate by a boat wherever they want and enjoy their vacation away from a crowd in a hotel and on a beach. In 2020, the results of the Kornati National Park have manifested a decrease in nautical tourism, especially in group visits. Prior to the coronavirus pandemic, during peak season (July, August), all shipowners conducted excursions every day, for the most part. In the pre- and post-season (May, June, September, and October), the excursion offer was mostly based on the groups that can be joined by the individual excursionists. In 2020, National Park's group visits totally decreased, while the individual visits decreased to a lesser scale with respect to COVID-19 circumstances and the epidemiologic situation in the country.

Finally, regarding the number of boaters in the Kornati National Park, it was certainly lower this year, but less than expected. A satisfaction with nautical tourism results is present regarding Croatia's overall level, so the Ministry of Tourism quotes that Croatia considerably precedes the other Mediterranean countries when it comes to foreign tourists' arrivals, emphasizing that nautics is one of the segments that has operated well and that all the more proximate emission markets (Germany, Slovenia, Poland, Czech Republic, etc.), in addition to the domestic one, have scored high percentages from last year's turnover in the summer of 2020 (MVPEI, 2020). The sea provides a certain form of isolation, remoteness, less contact between people and a physical distance, which provides a good opportunity that Croatia should use as its competitive advantage for nautical tourism's future. Environmental protection is a priority to the National Park Public Institution, and it should definitely be a priority for its further development in general. Nautical tourism has great potential to become a branch of tourism that contributes to the reduction of environmental pollution and can definitely be a leader in responsible and sustainable tourism in Croatia.

## CONCLUSION

In this article, the influence of the COVID-19 pandemic on nautical tourism in the territory of the Kornati National Park as one of the most attractive tourist destinations is demonstrated. In the National Park, a growth or a fall in nautical tourism is reflected in the number of tickets sold and in the number of National Park visitors. What renders the Kornati Islands beautiful and attractive to the visitors, their natural characteristics, and an open-sea isolation have been a sort of a comparative advantage concerning other tourist destinations at the time of the coronavirus pandemic. Therefore, the

Kornati Islands have been relatively well visited during the summer of 2020, especially in the segment of individual visits.

The secondary data pertaining to ticket sales obtained by the Kornati National Park Public Institution indicates a permanent growth in the number of tickets sold and in the number of visitors in the 2016-19 period. Furthermore, the negative impact of the pandemic on nautical tourism was evident while comparing the trimestral data (June — August) in 2019 and in 2020 with regard to the sale channels, especially in the segment of the park's group visits.

The Kornati Islands have been affected by the coronavirus pandemic, as well as the rest of Croatia, but it has not influenced nautical tourism as significantly. A reason therefore is the shipbound visitors' isolation, as they may enjoy their vacation practically without contact with other people and without major coronavirus-provoked anxiety. In that sense, nautical tourism is the safest tourism type and least susceptible to external impacts, for example, a coronavirus pandemic, with the group visits being an exception to it, despite a decrease in the number of visitors.

Nautical tourism is a highly profitable tourism branch and, as such, is very significant for both the development of Croatian tourism and for the Kornati Islands. Nonetheless, in addition to tourism's major contribution to the development of the national economy, it is necessary to develop it while protecting the natural and cultural heritage and regional specificities. When it comes to the Kornati National Park, the Kornati Islands are a nautically very potent and attractive destination due to their geomorphologic indention, intact nature, and biologic preservation. Simultaneously, however, the potency and tourist potential are in latent conflict with their originality and preservation. The only possible approach in this area is exactly that of sustainable development, which would create the preconditions for the economic growth of all the actors, the Kornati National Park, Murter-Kornati Municipality, the Government of the Republic of Croatia, Croatian Parliament (as a promulgating party of the park's zoning plan, especially bearing in mind a fact that a new decision was passed on a new zoning plan adoption), the denizens and ultimately even of the boaters.

Concerning the research, there is a recommendation that it should be expanded to other maritime parks to analyze the situation and the impact of the pandemic on their business transactions, to better comprehend the status of nautical tourism in Croatia. Also, there is a recommendation to analyze the entire annual business in the Kornati National Park to render the scientific contributions to the topic even more useful.

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# DESTINATION IMAGE COMPARISON OF FIVE CROATIAN ISLANDS

#### Abstract

The main goal of this research was to compare destination images of five Croatian islands (Krk, Lošinj, Pag, Hvar and Vis). The islands were chosen among the twelve largest and most visited Croatian islands. The choice was based on their distinctiveness which had been examined in a preliminary study. An anonymous questionnaire, measuring different attributes of destination image (entertainment, culture, gastronomy, nature and pricing) was given to a sample of students at various study programmes. Participants had to evaluate the destination image for each island, and then rank the islands according to each attribute, in order to measure their relative destination image. The relative destination image could differ from the absolute image and therefore be of crucial importance in choosing a particular destination, especially when choices are limited due to financial or other obstacles. The obtained results were compared and discussed taking into account previous participants' experiences of visiting a particular island. Additionally, the main sources of perceived destination image were analysed for the participants who did not have direct visiting experience. Based on the obtained results, practical recommendations for targeted marketing management of the future island destination images were given.

Keywords: destination image, relative destination image, Croatian islands, marketing strategy

Destination image plays an important role in travel decision-making and is one of the most explored topics in the field of tourism. Destinations with a more positive and recognisable image are more likely to be visited (Baloglu & McCleary, 1999b; Chen & Tsai, 2007; Phau, Quintal & Shanka, 2014), revisited and recommended to friends and family (Artuger, Çetinsöz, & Kilic, 2013; Baloglu & McCleary, 1999b; Beerli & Martin, 2004; Bosque & Martin, 2008; Chen & Tsai, 2007; Echtner & Richie, 2003; Lee, 2009; Phau, Quintal & Shanka, 2014). Furthermore, studies show a strong relationship between destination image and tourist satisfaction (Bosque & Martin, 2008; Coban, 2012; Huete Alcocer & López Ruiz, 2020; Lee, 2009; Puh, 2014).

Due to the great significance of tourism for Croatian economic growth and development, it is imperative to research the strengths and weaknesses of the Croatian touristic image to make effective and efficient decisions in this highly competitive market. Barišić, Prebežac and Mikulić (2012) show that Croatian identity as a tourist destination is not perceived as well developed, nor as a strong factor for differentiating Croatia

from competitors. A better understanding of the Croatian islands image is of great importance for the improvement of market positioning and strategical development. As Echtner and Ritchie (2003) propose, for successful promotion "a destination must be favourably differentiated from its competition, or positively positioned, in the minds of the consumers" (p. 37). Hopefully, this research will help to better understand the visitors' decision-making process when choosing among the five most visited and recognizable islands.

#### THEORETICAL BACKGROUND

Destination image has been studied since the 1970s, and there is still no consensus regarding a universal definition which can be accepted by researchers from various disciplines. In conceptualizing destination image many authors follow two major approaches: The three-dimensional continuum approach (Echtner & Ritchie, 2003) and the three component approach (Gartner, 1993). Echtner and Ritchie (2003) defined the destination image as a multidimensional concept with three main dimensions: attribute based / holistic; functional / psychological and common / unique. The first continuum is the attribute-based image, for example, beautiful nature or exciting nightlife, or holistic impression. The second continuum is based on directly observable or measurable characteristics, for example, price levels or types of accommodation, and psychological, more abstract and intangible images (friendliness, atmosphere, etc.). The third continuum refers to the unique characteristics, for example, Modra špilja for Biševo, or common attributes like beaches or nature.

Gartner (1993) suggested a model with three different but hierarchically interrelated components: cognitive, affective and conative. The cognitive component refers to the beliefs and knowledge about the destination, the affective component is represented by the feelings or emotional responses toward the destination, and the conative component is the behavioural response from the tourists. This model is supported by several research papers (Agapito, Valle & Mendes, 2013; Pike & Ryan, 2004; Tasci & Gartner, 2007).

In earlier studies, the cognitive component of a destination image was mainly analyzed (Echtner & Ritchie, 2003; Fakeye & Crompton, 1991; Gartner & Shen, 1992; Pike, 2002). However, many recent studies included both the cognitive and affective components in the destination image research (Baloglu & McCleary, 1999a; Baloglu & Mangaloglu, 2001; Beerli & Martin, 2004; Martin and Rodriguez del Bosque, 2008; Kesic & Jakeljic, 2012; Rodriguez del Bosque & Martin, 2008). Considering both cognitive and affective components in research may contribute to a better understanding of a concept. The conative component can be measured through actual behaviour, such as repeated visits or recommendations, or behavioural intentions which relate to the willingness to visit, revisit or to recommend a destination to others.

For the purpose of this research, the definition which was offered by Bigné, Sanchéz and Sanz (2009, p. 716) is used: "Destination image consists of all that the destination evokes in the individual; any idea, belief, feeling or attitude that tourists associate with the place". An interesting theoretical model integrates a destination image and self-congruity (Sirgy & Su, 2000). The greater the agreement between one's actual and ideal self-concept and a destination's image, the greater is the tendency for the tourist to visit that place (Beerli, Meneses, & Gil, 2007). In addition, Hosany, Ekinci and Uysal (2007) propose that destinations can have personality traits like individuals. Destination personality is defined as "the set of human characteristics associated to a tourism destination" (p. 63) and authors claim that destination image and destination personality are related concepts.

In the measuring of destination image, the prevalence of quantitative studies over qualitative ones can be noticed (Jenkins, 1999; Pike, 2002). Echtner and Ritchie (2003) suggested that a qualitative methodology could be used along with a quantitative with the aim to obtain an holistic image. Structured methodology (like questionnaires) is easy to apply, results can be coded and statistically analysed, which is a great advantage. On the other hand, using unstructured methodology could help capture the holistic components of the place. In recent years, the tendency to involve a combination of qualitative and quantitative methodologies has increased (Martin & Rodriguez del Bosque, 2008).

#### **MFTHODOLOGY**

#### Goal

The main goal of this research was to evaluate the destination image of five Croatian islands (Krk, Lošinj, Pag, Hvar and Vis) and to compare them against each other in order to evaluate their relative destination image.

#### Instrument and Procedure

In this research, the suggestion of Echtner and Ritchie (2003) to use unstructured (qualitative) and structured (quantitative) methods was followed. In the preliminary research, a group of 34 tourism students were asked to write down free associations they have on 12 largest and most visited Croatian Islands. The chosen Islands were — Mljet, Korčula, Dugi Otok, Cres, Murter, Lošinj, Brač, Hvar, Vis and Krk. In that case participants had not had any associations, they were able to leave the section empty. The main advantages of free assotiations are that they allow the participant to describe his/her unique image which is not predefined. Moreover, it can measure whether the destination image is strong or weak, based on how many responses participants have (Jenkins, 1999). Taking into account the number and quality of associations, five mostly described islands were chosen. Based on a content analysis of the answers and previous destination image research (Baloglu & McClearly, 1999b; Byon & Zhang, 2010; Gallarza, Saura & Garcia, 2002; Huete Alcocer & López Ruiz, 2020; Jenkins, 1999), six ca-

		Krk			Pag		
	М	SD	Ν	М	SD	Ν	
Entertainment	3.21	.91	91	4.47	.86	116	
Culture	3.71	.97	114	3.19	1.06	107	
Gastronomy	3.73	.95	113	3.66	1.02	110	
Nature	4.06	.98	122	3.55	1.09	119	
Prices	3.23	.94	105	2.84	1.03	108	
Infrastructure	3.83	.98	115	3.69	.97	112	

tegories of islands evaluation were chosen for further analysis. These were: 1) day and night entertainment; 2) cultural heritage and manifestations; 3) gastro offer; 4) nature's beauty; 5) overall price acceptability; 6) traffic connections and infrastructure. For the purpose of this study a questionnaire consisting of 19 questions was constructed. In first five questions, participants had to evaluate 5 islands on six categories on a scale from 1 (doesn't possess particular characteristic at all) to 5 (possess particular characteristic to a significant extent). Furthermore, as Pike (2002) in his review of 120 articles shows that only a few studies use a "don't know" option, participants were given the opportunity to choose the grade "0" if they did not know how to evaluate a particular characteristic. The absolute destination image was measured with these five questions.

In this study the focus was also on the relative image, in other words, destination image as compared to competing places. Pike (2002; 2007) points out that majority of previous studies analyzed the isolated image of one destination, without a frame of reference to competing destinations. According to Baloglu and McClearly (1999b) a comparison with other competitive destination results in identifying destinations' strengths and weaknesses, its competitive advantages and distinctive competencies. In the following questions, participants had to compare 5 islands regarding the same six categories by allocating grades from 1 to 5. The next two questions measured the level of familiarity with a particular island, and the sources of destination image formation. Finally, information on age and gender was collected through the last two questions. The online questionnaire was sent to participants through the official student portal and through personal contacts from different universities.

## **Participants**

A total of 151 students participated in the survey, most of them from the University of Applied Sciences Vern', Zagreb. In this study, the majority of participants were female ( $N_F = 57.6$  %;  $N_M = 37.1$  %;). Age ranges from 18 to 48, with M = 23.3 (SD = 4.92). The majority of participants visited the islands Krk and Pag several times, while about half of the sample have never visited Lošinj and Vis.

	Lošinj			Hvar				
M	SD	Ν	M	SD	Ν	М	SD	N
2.9	1.09	66	4.31	1.01	108	2.96	1.19	79
3.41	.99	76	4.18	1.02	107	3.87	1.05	87
3.7	.98	73	4.25	.85	106	3.81	1.12	86
4.15	.98	88	4.41	.93	109	4.37	.91	97
3.24	1.08	74	2.51	1.37	101	3.37	.99	84
2.98	.95	71	3.3	1.06	102	3.02	1.15	85

**Table 1** — Descriptive Statistic for Absolute Image Destination Perceptions of Five Islands in Six Categories

#### RESULTS AND DISCUSSION

Descriptive statistics for absolute destination image items is given in Table 1. Only participants who chose a grade between 1 to 5 were included (not 0). For Krk island, the highest grade was allocated to its natural beauties and the lowest to entertainment. As participants were students, their perception of entertainment differs from other age groups; probably due to the lack of night clubs, Krk is perceived as a less entertaining island. On the other hand, Pag island, often referred to in the media as the Croatian Ibiza, got the highest grade among the five islands for entertainment and is perceived as expensive. Hvar obtained high grades in almost all the categories, as it is seen as a beautiful island, with rich cultural heritage and great gastronomy. Not surprisingly, it is also perceived as the most expensive island. The least number of participants evaluated Vis, those who did viewed it as an island with average entertainment and great natural beauty. For Lošinj island, nature is also perceived as its best feature, and entertainment is evaluated with the lowest grade. Both islands are regarded as heavily reachable and connected.

Table 2 presents the results of the relative destination image with rankings on 10 different attributes shown. For easier comparison, means within each category were transformed into ranks.

In the entertainment category there were two questions — *night life* (clubs, cafés etc.) and *offer of daily sport and recreational activities*. Regarding night life rankings, Pag is perceived as the best destination. However, regarding the daily fun rankings, Krk has the highest rank. Over 80% of the participants have visited Islands Krk and Pag, the majority of them more than once. It may be concluded that a direct, personal experience could be very important for evaluating these categories.

In the culture category there were also two questions — *cultural heritage* (monuments, archeological sites, etc.) and *cultural manifestations* (shows, concerts, etc.). It is perceived that Hvar has the richest cultural heritage, and Lošinj the poorest. It is interesting to note that Lošinj, with the most inhabited island town in Croatia — Mali Lošinj, received the lowest rank. Regarding cultural manifestations, Vis is ranked as the

Category	Subcategory	Krk	Pag	Lošinj	Hyar	Vis
Entertainment	Night Life	3	1	4	2	5
	Sport & Recreation	1	2	4	3	5
Culture	Heritage	2	4	5	1	3
	Cultural Manifestation	3	2	4	1	5
Gastronomy	Gasto Quality	5	4	3	1	2
	Gastro Quantity	2	3	4	1	5
Nature	Preservation	4	5	2	3	1
	Beauty	4	5	3	2	1
Prices	Affordability	5	2	3	1	4
Infrastructure	Quality	1	2	4	3	5

Table 2 — Rankings of Five Islands on Ten Categories

last. Half of the participants have never visited Lošinj and Vis, so it can be assumed that they are less familiar with their cultural features.

The next category is the quality of infrastructure (good transport connections, availability of services etc.). As it can be expected, Krk was rated as the best — it is the closest to the capital city, connected with the mainland by a bridge as well as paved with new roads. The worse infrastructure quality is perceived on Vis island, which is probably related to it being the furthest from the mainland and the least inhabited.

In the nature category, two questions were asked relating to — *untouched and preserved nature* and *nature beauty*. For both categories Vis received the highest rank and Pag the lowest. The gastronomy category also had two questions — *gastro quantity* (number of restaurants, taverns and other food establishments) and *gastro quality* (the offer of delicious, autochthonous and home-made dishes and drinks). In relation to gastro quantity, Hvar is seen as the best and Vis as the worst. As perceived, the worst in gastro quality is Krk, although gastro quantity is seen as the second best. This also shows that our participants are able to distinguish between a wide gastro offer and a high-quality gastro offer.

The last category was pricing. Hvar is perceived as the most expensive for the total stay, and Krk is perceived as the cheapest. It should be noted that 16 % of participants visit Krk almost every year, which could affect their judgment that Krk is cheaper than other islands. Additional research should be made in order to test how consistent these subjective perceptions are with the objective data.

## Differences in Relative Image Based on Familiarity Level

In order to expand the understanding of the differences participants might have in their destination image perceptions, they were divided into three groups: 1) those who have never visited a particular island; 2) those who visited the island only once; 3) tho-

se who visited the island several times + visits every year + lives there/is from there. Three groups were then compared (ANOVA) for each island.

## Krk Familiarity

When the average rankings of five islands in 10 different categories were compared, three groups of participants showed statistically significant relative image perception only in category Krk infrastructure (F = 3.2; p = .04; df = 2). Post hoc Scheffe test results show that differences exist (MD = .81; p = .04) between those participants who have never visited the island (group 1; N = 27, M = 3.00, SD=1.41) and those who have visited Krk several times (group 3; N = 83; M = 2.19; SD = 1.51). Participants who had visited Krk several times rank it as having a better infrastructure relative to the other four islands, than those who have never visited it. The infrastructure is something that can best be perceived through direct experience, it is not typically advertised. For Krk, it is obviously an important and distinctive quality that should be presented as an advantage compared to other islands.

## Pag Familiarity

For Pag island, three groups of participants showed significant differences in relative image perception only in the category nightlife (F = 3.43, p = 0.04; df = 2). Post hoc Scheffe test results show, that differences exist (MD = .79; p = .04) between those who have never visited the island (group 1; N = 30, M = 2.8; SD = 1.47) and the those who have visited Pag several times (group 3; N = 78; M = 2.01; SD = 1.44). Those who have visited Pag several times rank Pag as the island with a better nightlife relative to other four islands.

## Hvar Familiarity

For Hvar island, three groups of participants showed significant differences in relative image perception only in the category quality of infrastructure (F = 3.74, p = .03; df = 2). Scheffe test results show that differences exist (MD = .67; p = .04) between those who have visited the island only once (group 2; N = 41; M = 3.56; SD = 1.11) and those who have visited it several times (group 3; N = 47, M = 2.89; SD = 1.27). Lower average rank for group 3 indicates, that those who have visited Hvar several times rank it as having a better quality of infrastructure relative to other four islands, than those that visited it only once.

## Lošinį Familiarity

For Lošinj, three groups of participants showed significant differences in relative image perception in two categories: Lošinj gastronomy (F = 3.9; p = .02; df = 2) and price (F = 5.72; p = .00; df = 2). For the gastronomy variable, Post hoc Scheffe test results show differences (MD = .69; p = .02) between those who have never visited (group 1;

		Krk			Pag		
	Μ	SD	Ν	М	SD	Ν	
Personal Experience	3.55	1.62	136	3.49	1.54	131	
Family Experience	3.4	1.37	122	3.58	1.29	125	
Strangers Experience	2.21	1.33	122	2.58	1.43	120	
Media	2.65	1.4	120	2.92	1.43	119	

N = 69, M = 3.18; SD = 1.39) and the those who have visited Lošinj once (group 2; N = 43; M = 3.86; SD = 1.17). Students who have never visited Lošinj perceive its gastronomy as better, relative to the other four islands, and compared to those who visited it once. The other significant difference was found on the variable Lošinj pricing. Post hoc Scheffe test results show that differences exist (MD = .63; p = .02) between students who have never visited the island (group 1; N = 70, M = 3.11; SD = 1,28) and the those who have visited Lošinj once (group 2; N = 43, M = 3.81; SD = 1.16). It means that students who have never visited Lošinj think of it as a cheaper island than those who have visited it once, relative to other four islands. Also, the difference was found (MD = .91; p = .01) between those who visited the island once (group 2) and those who visited it several times (group 3; N = 34, M = 2.91). Students who have visited Lošinj several times perceive it as cheaper than one time visitors.

## Vis Familiarity

When the average rankings of the five islands in the 10 different categories are compared, based on the familiarity they have with Vis island, our three groups of participants showed no significant differences in relative image perception of Vis in any of the ten categories.

## Destination Image Sources

In order to test the differences in the islands' images, we asked participants to evaluate to which extent their opinions are formed through four potential sources: a) personal experience of an island visit; b) the experience of acquaintances, friends, family; c) the experience of unknown people — travel forums, blogs.. d) through the media. As it can be seen in Table 3 and is expected through the familiarity level, participants evaluated Krk mostly through personal experience. For all the other islands, indirect experience of acquaintances, friends or family was the main source of image creation, confirming how strong the personal word of mouth is in the destination image creation, as suggested in earlier studies (Baloglu & McClearly, 1999a; Curie & Wesley, 2008; Madden, Rashid, & Zainol, 2016). Curie and Wesley (2008) emphasize that particularly for the students' population, information gathered from the peers is more influential than from other sources.

L	.ošinj			Hvar			Vis	
M	SD	Ν	M	SD	N	М	SD	N
2.6	1.64	127	2.94	1.78	127	2.87	1.91	126
2.96	1.43	123	3.62	1.27	122	3.12	1.5	124
2.23	1.33	120	2.87	1.46	119	2.45	1.41	120
2.83	1.41	122	3.2	1.41	119	3.01	1.46	122

**Table 3** — Sources of Destination Image — Descriptive Statistics

## Sources of Destination Image in Visitors and Non-Visitors

In order to test whether the sources of image destination differ between those who have never visited a particular island and those who have visited it, an independent samples t-test was made. For the islands Krk, Pag, Hvar and Lošinj, no significant differences were found among groups, indicating that other sources of information stay equally strong. The only significant difference was found for the island Vis in the source — friends/family experience (t = -2.014; p = .03), where those who did not visit Vis (n=63, M=2,84, SD=1,67) rate this source as less important than visitors (n=61; M= 3,41; M=1,26). These results could suggest that even though participants visit an island they still take and evaluate information about it from different sources, and these sources are almost as equally important to them as they are to non — visitors. Previous research (Jenkins, 1999; Gallarza, Saura, & García, 2002; Ferreira Lopez, 2011; Madden, Rashid, & Zainol, 2016) also confirms that when destination image is created it does not remain permanent, but changes with new information and objective changes through the tourism development process.

#### CONCLUSION

In the past five decades, numerous studies have examined the destination image of particular places. However, the majority of previous studies have focused on the absolute image, without the frame of reference to competing destinations. In this study, the absolute and the relative destination image of five Croatian islands in six different categories was measured. The findings of this study indicate that results of the absolute and the relative image categories are similar for the majority of the islands. However, the absolute image is not informative or predictive enough unless we know the relative image as well. For example, regarding its absolute image for the infrastructure, Krk is allocated a relatively average grade (M=3,8), but among the five islands it is perceived as the best. This is the same for the absolute image rating of Vis island for gastronomy (M=3,8), but in comparison to the other four islands, it is perceived as the worst. That is why it is recommended that a comparison with similar destinations is made in order to better understand how tourists make decisions about destinations.

The results of this research could provide practical information for tourist organisations who are responsible for creating and managing the image of a particular island. We suggest that such promotional campaigns are conducted that emphasize the distinctive traits of the particular island. Consideration should be given not only to information on attributes that are common to all destinations (such as beautiful beaches or nature) but also to the unique features, which distinguish a particular island from the others. Furthermore, it can be suggested that adjustments to island campaigns are made for specific sociodemographic groups. Simultaneously, as the peer recommendation is considered to be the most believable communication channel among the student population, it is important that the development of image is based on reality. Otherwise it could have a negative effect.

It is important to acknowledge that there are some limitations to this study. Firstly, the student sample is rather small, that is, it is not representative. The majority of the students in this research were students at a private university which attracts students of a higher financial status. These results can therefore hardly be applied to the student population in general. Furthermore, the application of e-survey questionnaires, although more convenient, less expensive and environmentally friendly, has some serious disadvantages. Without any feedback on how many participants actually received the questionnaire, the response rate cannot be calculated. It is also important to take self-selection bias into account. Motivation to participate in online surveys is different, and some individuals are more likely to participate (e.g. females more than males). What is more, the questionnaire was sent under the specific circumstance of the lockdown as the consequence of the COVID 19 pandemic prevention measures. This specific time could have heavily influenced students' motivation for research participation. Therefore, the replication of this study is strongly advised.

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## ADVENTURE SPORT TOURISM ON CROATIA'S ISLANDS

## Abstract

Like tourism, mass sport is a phenomenon that is undergoing intense development in modern society. The social dynamics of tourism and specific factors defining it — such as health, mental and physical needs, relationships with the local community, and the experience of local culture and nature — are of interest to the field of Sociology. The demands and expectations of modern tourists are becoming more and more complex. The most popular sports in most societies are founded on patriarchal values and centered around superiority and victory. However, new mass sports in modern Western societies frequently reject this concept, founding themselves instead on alternative values and interests without an insistence on competition. Recently, numerous sports have been established on the basis of pleasure and participation, emphasising support for others and respect for the environment. These sports thus focus on personal empowerment and the idea that one must care for one's body and enjoy the quest for experience, instead of being subject to the imperative of attaining competitive success (Coakley, 2009). Considering the increasing popularity of these "changing sports" in recent times, this research focuses on their presence on the Croatian islands. This research is founded on semi-structured interviews with participants in the "Škraping" sporting event on the island of Pašman. Respondents' motivations to participate in "Škraping" arise from dedication to a healthy lifestyle and frequent outings in nature. Additionally, they believe that "Škraping" and similar events make insufficient use of tourist potential.

Keywords: sport, adventure, tourism, island, Škraping, Croatia

The devastation of natural resources and heavy exploitation of the environment is the highest price we pay for modern material prosperity. The concept of sustainable development is an attempt to halt the spread of this ecological crisis and to repair the damage already done. While there are multiple definitions of sustainable development, in essence, the concept refers to a form of social development that guarantees environmental protection. This concept affirms values and norms in opposition to the ideas of humanity's linear progress and the subjugation of nature to culture (Kalanj, 1994). In other words, it represents the abandonment of the idea of a world of abundance and unlimited resources. The concept of sustainable development thus attempts to balance the relationship between society's material progress and natural resources, which are either collected or destroyed in the name of progress, and to enable material develop-

ment that meets the needs of the current population without endangering the ability of future generations to meet their own needs. Global increases in the consumption of goods and services make sustainable development difficult to implement. Globalisation unyieldingly permeates and irreversibly transforms subordinate political, economic, and cultural systems, presenting a great challenge to humanity. Beck (2003, p.134) notes that globalisation in and of itself does not imply a one-sided, one-dimensional process; instead, glocalisation and globalisation processes take place in parallel, simultaneously serving as "driving forces and expressive forms of a new polarisation and stratification of the world population into the globalised wealthy and localised poor". Observing tourism in the glocal context, the appearance and development of alternative forms of tourism as opposed to the domination of mass tourism also point to new development possibilities, which also include the ideas of sustainability and resource protection. The characteristics of the environment are the basic resource upon which tourist products are built. Tourists from developed societies increasingly support the idea of sustainable development and environmental protection in everyday life, as well as searching for unique environmental and natural experiences in the tourist destinations they visit. The most popular sports in most societies are founded on patriarchal values and centred around superiority and victory. However, some new sports in modern western societies often reject this concept. In recent times, numerous sports centred around enjoyment and participation have been established, accentuating support for other participants and respect for the environment. These sports focus on personal empowerment and the notion that the body must be nurtured and that people should enjoy seeking experiences without the imperative of attaining competitive success (Coakley, 2009). The most common mass sports offered at Croatian tourist destinations are cycling, walking, tennis, hiking, and fishing (Bartoluci et al., 2016). Considering the increasing popularity of new "changing sports" (Coakley, 2009), this research focuses on their distribution throughout tourist destinations on the Croatian islands. This paper is based on interviews with participants of the "Škraping" event on the island of Pašman in order to understand their motivations and evaluation of experiences in Croatian islands' "changing sports events".

## SUSTAINABLE TOURISM

Tourism is an important part of the world economy. According to UNWTO data, 1.185 billion people went on tourist trips in 2015. McIntosh et al. (1995, p.10) define tourism as "the sum of phenomena and relationships arising from the interaction of tourists, business suppliers, host governments, and host communities in the process of attracting and hosting these tourists and other visitors". The creation and development of the concept of sustainable tourism is in line with the concept of sustainable development. Sustainable tourism is defined as tourism that takes full account of its current and future economic, social, and environmental impact, meets the needs of visitors, the economic sector, the environment, and the destination. Sustainable tourism makes optimal use of

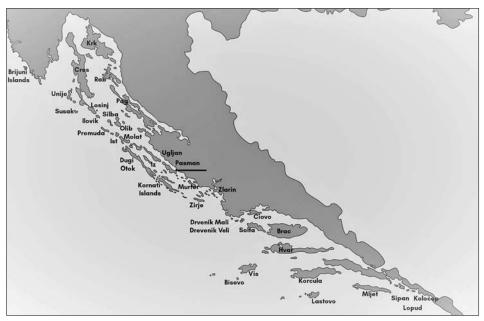
ecological resources (which are a key element in the development of tourism), protects important ecological processes, and helps protect natural heritage and biodiversity. Štifanić (2002) notes that the sociology of tourism critically examines the sustainability of tourism models founded on new communication paradigms and new technologies in organising tourist groups, which have increasingly complex demands and expectations. The modern tourist wants to directly experience the local community without mediation. Štifanić (2002, p. 873) thus notes that tourism should be researched in the broader cultural context of modern society, primarily as a consumer activity in which local culture, communities, and the environment become the point of tourist consumption. Cohen and Cohen (2019) found that, in recent years, the sociology of tourism has been marked by three general trends: the growing application of specific novel theories from other fields to tourism; the examination of new facets of tourist phenomena; an intensified inquiry into the status of tourism as an intellectual or cultural project. Two millennia ago, the Mediterranean was the cradle of Greek culture and the Roman Empire; by the mid-20th century, it had become a synonym for mass tourism. In the context of the European economic conjuncture, Willams (1997, p.214) describes the Mediterranean as a whole as a "pleasure periphery". The development of tourism was highly significant to all Mediterranean countries. This was especially true of socialist Yugoslavia. Patterson (2010) holds that, without the boom in tourism of the 1960s and 1970s, Yugoslavia would have been a strikingly different place, as would have Yugoslav socialism, which differed starkly from Eastern European socialism at the time. Obrador-Pons et al. (2009) consider the Mediterranean the largest tourist destination in the world, noting that tourism has transformed numerous weakly developed Mediterranean economies. Mass tourism in the Mediterranean has developed into a new cultural formation combining global, national, and local influences, representing a different tourist experience abbreviated as the three Ss — Sun, Sea, and Sand. Obrador Pons et al. (2009) conclude that mass tourism has become the fibre of the Mediterranean, giving the region a new economic and social role and a post-modern identity. Mass tourism and Fordist models of tourism are founded on the mass, standardised production of goods and services. Bramwell (2004, p.16) assumes that mass tourism is less sustainable than "alternative" tourism because the former is more likely to entail environmental damage, as it rejects Fordism and accentuates the conservation of natural resources, the landscape, and culture. Thus, at the centre of alternative or sustainable tourism lies a group of implicit values dedicated to the integration of economic, social, and cultural goals. Tourism's interest in sustainable development is also logical, as it is the only industry whose product is the physical and human environment itself. Poljanec-Borić (2017) considers the relationship between the development of competitive tourist products and the protection of natural heritage and local culture; it also notes that tourism paradoxically increases the value of natural heritage while simultaneously causing its destruction through the production of mass demand.

## ADVENTURE SPORTS TOURISM

Sociology seeks to determine the significance of sport to society and culture. This holds especially true in determining the reasons for the popularity of a particular sport and how it is organised and connected to other social institutions in the local, national, and global context. "Sport is an institutionalised competitive activity that involves vigorous physical exertion or the use of relatively complex skills by individuals whose participation is motivated by a combination of intrinsic and extrinsic factors" (Coakley, 2009, p. 8). The affirmation of "internal rewards" is especially important in this process — the motivation for partaking in sports, especially amateur (non-elite) sports. Coakley (2009) emphasises that the inclusion of sports in personal and social life influences relationships with other people, as well as our perceptions of body image, masculinity and femininity, social class, race and ethnicity, labour, entertainment, power, pleasure, pain, deviance, conformism, and violence. Considering the complexity of sport and sociological research on the topic, sports tourism represents a separate research topic in sociology. Today, sports and tourism are firmly connected; they are among the most common leisure activities. Sports tourism includes travelling to passively or actively participate in sporting events. Gammon and Robinson (1997) take a similar approach to defining "sports tourists", though they prefer to classify them as either "hard" or "soft" participants. A "hard" sports tourist is a person who travels for either active or passive involvement in competitive sport; thus, their prime motivation for travel is sport. The "soft" sports tourist is someone who is primarily more involved in recreation or leisure than competitive activity. Standevan and De Knop (1999, p. 12) define sports tourism as "all forms of active and passive involvement in sporting activity, participated in casually or in an organised way for non-commercial or business/commercial reasons that necessitate travel away from home and work locality". In the context of the hierarchy of needs (Maslow, 1943), sports tourism falls within the field of human "self-actualisation" (fulfilling personal creative and intellectual potential). The focus of our research is adventure sports tourism. Bourdeau et al. (2004) emphasise that the natural landscape is a key resource for this kind of tourism. The physical, hydrographic, and climatic properties of the landscape determine the kind of adventure sports tourism that can take place in a particular destination. It thus depends on various natural conditions. Bourdeau et al. (2004, p. 103-105) notes that adventure sports tourism as a diffuse activity that unfolds under special conditions such as "natural" conditions (access issues, spatial limitations, etc.) and "cultural" conditions (seasonal use; high participant mobility, which results in brief stays; participants' possession of the necessary sporting equipment, etc.). Describing a locality as a "natural" sporting place does not mean that natural resources are used in their fully natural state, as organisers must (temporarily) mark them for adequate use and communication with tourists. Ever more frequently, promotional materials and advertisements are using associations with the words adventure, excitement, challenge, adrenaline and so forth. Adventure involves a range of emotions, of which excitement is key. This implies intellectual, physical, and emotional risks and challenges. Adventure tourism depends on the environment and is focused on activities in nature. It can thus exist independent from infrastructure, as adventure tourists themselves assess or decide whether a particular tourist experience is an adventure or not. Higham (2005) notes that the popularity of sports such as snowboarding and windsurfing is growing, and that these and other similar sports are relatively free of formal organisational structures generally managed by national or international sports organisations. These sports can develop rapidly, or quickly engender hybrid forms that complement particular natural or built resources at a particular tourist destination, thus providing new tourist products. Buckley (2006) lists some examples of adventure tourism: free climbing, sailing, kayaking, snowboarding, spelunking, hot air ballooning, skydiving, mountain biking, scuba diving, surfing, off-roading and so forth.

## AIM AND METHOD

Coakley (2009) divides sports into "Elite/Commercial sports" and "changing sports". The first are organised and played for profit, and are a part of the global sports market. Elite or commercial sports are consumed on a wide scale: spectators at sports arenas, TV, radio, magazines, newspapers, Internet and so forth. Commercial sport organizations are businesses, and their goal is to expand into as many markets as possible. In commercial sports, the public good is replaced by the corporate good. Commercial sports require media to provide coverage, publicity, and news. Coakley (2009, pp. 548-571) shows how this has led to the creation of numerous forms of sports organised around pleasure and participation, emphasising freedom, authenticity, self-expression, enjoyment, holistic health, support for others, and respect for the environment. So, these new sports focus instead on personal empowerment and the notion that the body should be nurtured and enjoyed in a quest to experience challenges, rather than trained and subordinated in a quest to achieve competitive success or make profit. Higham and Hinch (2002) point out that the majority of research on sports tourism examines sporting events, most of which are large or significant events such as the Olympics or other major sports tournaments. Higham (1999) notes that small-scale events can be important to the development of a national or regional sports tourism industry, as well as providing marketing and economic development to small destinations or regions. Pleasure and participatory sports are also subject to social and economic forces that may cause them to become increasingly mainstream. The predominant approach to the study of tourist travel motivation has been to attempt to characterise "push" factors as determinants of travel behaviour; these factors are typically conceptualised in terms of needs (Pigram & Jenkins, 1999, p. 229). This research is intended to determine the ba-



Picture 1 — Map of Croatian Islands

sic motivations for the participation of organisers and tourists in adventure sports tourism on the Croatian islands.

For this analysis, we selected one tourist sporting event on the island of Pašman, "Škraping". It is a unique international trekking race along off roads and sharp island rocks ("škrape"). The goal of the race is to improve the self-confidence of participants, stimulate interest in sports, and to improve the development of natural-resource-based tourist events related outside of the main tourist season. At the beginning of the race, competitors receive a map of the island showing checkpoints they must pass through in the shortest time possible. The race is divided into four categories: Ultra (45 km); Challenger (25 km); Active (12 km); Light (6 km). In 2019, 1,300 people participated in this event. Unfortunately, "Škraping" was postponed in 2020 due to the Covid-19 pandemic. Contrary to initial plans, because of the pandemic, the researchers were unable to participate in and observe these events; they were also unable to conduct in-depth interviews.

Our research aim is to describe tourists' motivations for participating in "changing sports" (Coakley, 2009) activities on Croatia's islands and identify respondents' views on ecology, sustainable tourism and sport. We conducted online semi-structured interviews using a snowball sample of 11 (aged 29 to 46) respondents from Croatia. The respondents have experience participating in "Škraping". The questionnaire had three thematic blocks (ecology, sustainable tourism and "changing sports") with 21 questions. The shortest interview was 24 and the longest 49 minutes.

## RESULTS AND CONCLUSION

In the autumn of 2017, the Croatian National Tourist Board (CNTB) showed videos at the World Travel Market in London in which popular Croatian athletes and artists presented Croatia's natural environment, cities, and tourist products. Under the slogan "Croatia — Full of Life", the videos included sports figures such as tennis player — Marin Čilić, football players — Luka Modrić, Dejan Lovren, Mateo Kovačić, Mario Mandžukić, and Ivan Rakitić, basketball player Dario Šarić, musicians — 2 Cellos and Maksim Mrvica, and actress Zrinka Cvitešić. Such use of sports and show business stars to promote Croatian tourism is in accordance with the findings of Bartoluci (2013, 2020), who claims that Croatian state institutions have used Croatia's most successful athletes in various circumstances as "sports ambassadors" since the 1990s. This research will portray an alternative sport — trekking — on the island of Pašman as a counterpoint to elite sports. In Croatia, there are a number of trekking races and an entire community of sports enthusiasts, who successfully organise and hold races without institutional assistance, most often with the crucial help of local mountaineering clubs and volunteers. These athletes are at the very margins of interest of the tourist industry and the media. One good example of their work is the "Dalmatian Trail League", which began with three races in 2014. This number has grown to twelve (Marjan Trail, ProminaTrek, ImberTrek, Jesenice Treking, Mosor Grebbening, Tisno Trail, Lastovo Trail, Vela Strka, Kozjački Satarluk, Sinj Trail, Čvrsnica Ultra Trail, and Vis Trail).

"Škraping" is a unique international trekking race in nature; it is run on dry stone walls made of sharp island rocks. The race is held yearly in Tkon on the island of Pašman, with logistic assistance from the municipality and the local tourist board. Pašman is a 63 km<sup>2</sup> island in the Zadar archipelago; it is separated from the city of Zadar and town of Biograd na Moru by the Pašman Canal. It is connected with the island of Ugljan by a bridge at Ždrelac strait; ferry lines connect it to both Biograd and Zadar. According to the 2011 census, the island has 2,845 residents. The key tourist goal of "Skraping" is to introduce the public and potential guests to the island's human and natural resources in order to provide additional tourist products outside of the main tourist season. Since the first event in 2006, the number of participants has grown continuously; in 2018, a total of 1,400 people from 11 countries took part in the event. "Škraping" also includes a number of other interesting events, such as plays, lectures, workshops, environmental clean-up drives and so forth. It also features a fair of island products involving numerous exhibitors from both Pašman and other Croatian islands. At the start of the race, the participants receive a map of the island with checkpoints they must pass in the shortest time possible. During the race, participants pass through pre-defined checkpoints near attractive locations on the island; in addition to its sporting character, this gives "Skraping" a tourist character as well, as it introduces participants to the island and promotes Croatia as an active holiday destination.

The goal of this research was to affirm the motivations for people to take part in "Škraping", as well as their attitudes towards ecology, sustainable tourism, and sports. The interviews conducted show that the participants are ecologically aware and follow the topic in the media. All are aware of global ecological problems, but they focus on local nature protection issues, especially those on the Croatian coast and islands. They have strong objections to the work of institutions in environmental protection.

"I recently read about devastation on Lastovo, an island that is a protected area under the purview of the Lastovo Archipelago Nature Park, a public institution. If the park staff say in media statements that they are powerless because state institutions have not responded to their reports of devastation, you can imagine what nature is like in places that aren't "protected". I thought things would improve once we joined the EU, but a lot of it still isn't how it should be." (Male, 42)

"The island of Mljet has been a hit in recent years. Vis underwent this a few years ago. But Mljet is a national park, so somehow I think it won't be as easy as it was on Vis, but again, Plitvice Lakes has also been devastated, which is also a national park. I don't know, I hope that a younger generation will come and change things for the better, but the real issue is how much of it can be fixed." (Female, 29)

In regards to respondents' opinions about problems with environmental protection, they believe room exists to develop sports-related tourist products that would also serve to protect the environment. In addition to cycling or hiking, which have a long tradition in Croatian tourism, respondents also listed numerous alternative sports, especially various trekking competitions, as insufficiently promoted tourist products that have a positive impact on environmental protection. Almost all respondents agree that sports tourism in Croatia is fairly outdated and requires updating to satisfy the tendencies and needs of modern tourists. In this regard, they see an opportunity for sports tourism to develop as an ecologically sustainable product that appeals to a large number of people.

"It's great, I think running is becoming more and more popular in everyday life, it's actually a tourist product that enough people might be interested in participating in, and you don't have to destroy the landscape with buildings." (Female, 35) "At those races, if you're the social type, you really can meet lots of people and make new friends with people you can attend other races with later." (Female, 30) "I think there are many opportunities for sports tourism, as is the case with Škraping. For example, there are hiking trails that you can both hike and run, then there are coastal routes but they aren't promoted, not many people know about them except for mountaineering clubs or groups of friends. There isn't enough of that in Croatian tourism." (Female, 34)

The majority of respondents were involved in team sports in their youth. For them, the decisive moment at which they stopped playing these sports was the selection process between amateur and elite players; they do not see any sense in investing such great effort and sacrifice to take part in sports. Competition and results are fully in the background for them. In accordance with this, they rarely follow sports on TV; the majority have a poor opinion of the amount and influence of money in elite sports.

"I never watch football, but I think the amount of money the players make is ridiculous. It's unimaginable for me to even write it on paper, let alone that someone has that much in their bank account." (Female, 35)

"After your thirties, you can't get together a team for sports, so you find something you can enjoy on your own." (Male, 46)

Participation in "Škraping" was not motivated by competition. Enjoying sports activities, socialising, and having fun with other participants are the core of our respondents' motivations for taking part in the event. Their expectations of "Škraping" were met, and the majority have thus taken part in the event multiple times, as well as in other similar trekking events.

"We didn't go to compete, we went purely for the experience, as an excursion. It would last all day, from morning until evening, every year small producers would exhibit their products, people can see something new, buy some products." (Female, 38)

"Škraping is actually the only race I attended with friends who aren't as dedicated to running as I am. Škraping is actually a good example of a race that can be included in Pašman's tourist offerings, as well as that of Croatia as a whole." (Female, 29)

"They put a good story together, and they have courses ranging from easy to ultra. That's why these events are massive, you don't have to boil it down to a bare result if the main ambition of participants is something ultra-difficult." (Male, 42) "Of course, there are always extremes, but then the factor of participation is important, it's important that you run. Will you be the fastest or the slowest? Who knows. But you're here, you made an effort." (Female, 29)

"It was like a game for me, you have to be careful with your footing on the stones to keep from hurting yourself and to make it through the terrain, so your brain has to be working, and I thought that was very entertaining. I love that, if you really don't plan your route, you can spend a lot of time on the stone walls, you can extend your route and you can decide not to finish the race in time, what I like is that the terrain is so diverse, there are flat parts you can walk, you can climb up to peaks, you can walk through olive groves, walk on dry stone walls, you can end up in a pub and have a beer and keep running." (Female, 34)



Picture 2 — Official Poster for The 2020 Event

"The motivation was simply that I love spending time in nature, it's stress relief for me to be in nature, so my main motivation wasn't to go relax a bit, to let off steam mentally, but my expectations were absolutely more related to socialising than to the active part, I wasn't planning to break any records or anything. I expected to have a good time socialising with people in nature, and that's what happened." (Male, 37)

In conclusion, all respondents who participated in "Škraping" share a love for nature and hiking. Considering the snowball sample used, it is unsurprising that all live in large or small urban areas and that the majority has a higher education; in accordance with this, they express high ecological awareness and are critical of certain phenomena in society and sport in general. They all had exceptionally positive experiences with "Škraping" and fond memories of the event; their motivations for participating arise from their affinity for hiking and trekking, a healthy lifestyle, and frequent trips into nature. They are oriented towards new, alternative sporting activities involving participation, socialising, and enjoying nature, which is an entirely different concept of sports than that they had in their childhood and youth. They believe "Škraping" and trekking events on the island and coast have great tourist potential, and that they have not been sufficiently recognised by the tourist industry and local communities.

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# rural tourism in the function of sustainable development in croatia

#### Abstract

Rural tourism has not so far been explored enough in the Republic of Croatia. This is probably due to the lack of statistical data and inadequate statistical benchmarks. In the Republic of Croatia, rural tourism is one of the most promising selective forms of tourism. The aim of this paper is to point out the importance of rural tourism in the Republic of Croatia, with an analysis of the current situation and the problems encountered. The results of the research clearly indicate the spontaneous development of rural tourism, without sufficient concrete development measures. It can be concluded from the research that rural tourism in the Republic of Croatia is still in its infancy. Unjustifiably neglected rural areas can and must be included in the strategic development of tourism and thus be recognized on the international tourism market. The development of rural tourism will significantly contribute to the growth of native population standards. The diversification of the rural economy is also necessary due to the changed demand trends and rural development in the service of the country's economic prosperity. Accordingly, the basis of rural tourism is sustainable development, which is reflected in the revitalization of already existing resources for tourism purposes. With the development of rural tourism, the Republic of Croatia has great prerequisites for extending the tourist season and giving new quality to overall Croatian tourism, since rural area accounts for 92% of the territory of the Republic of Croatia and about 40% of its population lives there. There is a potential for implementing all of the above through the implementation of EU green policies and the application of knowledge and skills of EU member states with experience across smart villages. The methods used were: desk research, analyses, syntheses, and descriptions.

Keywords: resources, sustainable development, revitalization, smart villages

In the last several decades industrialisation and urbanisation trends have greatly altered the economic position of rural society. A decrease in population figures in rural regions, economic changes and society restoration have become almost universal issues. Rural resources have become more and more subject to pressures arising from a growing range of economic, social, political and environmental impacts (Garrod et al., 2006). Rural tourism is frequently identified as a driving force (Irshad, 2010) for keeping the integrity of resources in the countryside, for strengthening rural economy and maintaining rural lifestyle and as one of the contributors to a possible economic and demographic revitalisation of Croatia (Grgić et al., 2017). Rural tourism is part of a larger spectrum that includes also agricultural tourism, cycling, eco-tourism, religious tou-

rism, hunting tourism, fishing tourism and so forth (Kantar & Svržnjak, 2017). However, the most commonly addressed form of rural tourism is agricultural tourism.

According to the World Bank (2019), with respect to territory size, rural tourism may have significant economic impacts on regional development. Economic potential of tourism as a key driver of growth and development, is based on the competitive advantage that lies in the country's natural and cultural resources (Joshi & Bhujbal, 2012). The Republic of Croatia is a country rich in traditional heritage, traditional cuisine and touristic services, but untapped potential is a weak spot in the overall economy.

Negative demographic trends, low employment rate and development delays represent the basic problems of rural areas. Analysis of professional and scientific literature demonstrates the importance of rural development for the economy of the Republic of Croatia. Rural tourism is a type of tourism activity where the visitors' experience refers to a wide range of products and services mostly related to activities connected with nature, agriculture, rural lifestyle/culture, fishing and sightseeing. It takes place in non-urban (rural) areas which share the following characteristics: a) low population density, b) landscape and land use dominated by agriculture and forestry and c) traditional social structure and way of life (WTO, 2019). However, the most frequently applied criteria used to differentiate between rural and urban areas is the OECD definition based on population density. On the local level, areas are classified as rural or urban based on the threshold of 150 inhabitants per km<sup>2</sup>. On the regional level, the OECD defined three groups, dependant on the population share in the region living in rural local areas: a) mostly rural areas (more than 50% of people live in local rural areas), b) significantly rural regions (15-50% of people live in local rural areas) and c) mostly urban regions (less than 15% of people live in local rural areas) (Ministry of Agriculture, Fisheries and Rural Development of the Republic of Croatia, 2008). Due to the above mentioned, this paper shall make an attempt to prove the hypothesis that used potentials in rural tourism are on a low level and that enormous effort is required in order to achieve sustainability of rural tourism in the Republic of Croatia. Research methods used in this paper include desk research, analyses, syntheses, descriptions; secondary data are collected from relevant sources such as the World Bank or the Croatian Bureau of Statistics.

#### THEORETICAL OVERVIEW OF RURAL TOURISM

The concept of sustainable development refers to a form of development policy that is used to satisfy economic, social and environmental societal needs resulting in short-term, middle-term and long-term benefits. It is based on a presumption that development needs to satisfy today's needs without endangering the wellbeing of future generations. In practice, it understands making conditions for long-term economy development with respect for the environment (European Commission, 2019). Petrić (2006)

connects tourism with sustainable development through seven principles that may be considered basic principles of sustainable tourism development: 1) limit human impact on Earth; 2) maintain biological resources in the region; 3) minimise exploitation of non-biodegradable materials; 4) promote long-term economic development that increases benefits from the given amount of resources and maintains natural resources; 5) ensure just cost and benefits distribution from the use of resources and implementing environmental management, e.g. managing the natural environment; 6) ensure efficient participation of society and interest groups in decisions that refer to them; 7) promote values that encourage others to accept sustainability principles. Rural tourism and sustainable development are two concepts that simply go together.

A very first significant article on rural tourism in the Republic of Croatia was written by Kušen in 1992 (Demonja, 2014). The article addresses problems of rural tourism in Croatia and deals with the specific terminology of rural tourism. Some Croatian authors have investigated the development of rural tourism in various parts of Croatia, e.g. Mesarić Žabčić (2008) conducted research in the Međimurje County, Ružić (2011) in the Istria County, Vučetić (2012) in the east of Croatia, Bartolucci et al. (2015) in the counties of continental Croatia, and Kantar and Svržnjak (2017) about rural tourism of the Koprivnica-Križevci County. Demonja and Ružić (2010) published a book on rural tourism (Rural Tourism in Croatia) that represents a source of information and knowledge on rural tourism and provides a strong contribution to defining rural tourism terminology. The authors use arguments to provide answers to a number of crucial and current developmental questions, among which is the question on whether agriculture and tourism are indeed basic developmental opportunities of Croatia.

In the Republic of Croatia, agricultural tourism is often confused with rural tourism or eco-tourism, but the truth is that rural tourism comprises all those forms of tourism. Rural tourism incorporates each tourism activity in rural areas, so also cycling tourism and adrenaline tourism, mountain tourism, health tourism, eco-tourism and many other specific forms of tourism belong in this category. Rural tourism is, however, a notion without a consensus reached with respect to its definition (Petrić, 2006). With regard to the fact that there are great differences between rural parts of Croatia in the coastal area (Primorje-Gorski Kotar County) and in Slavonia or Medimurje, different definitions of rural tourism are derived, with respect to the characteristics of those areas (Bartolucci et al., 2015).

Having in mind that rural tourism rests on natural resources, it needs to contain elements of sustainability. The tourism market is developing, and as one of the effects, rural tourism has become a new means of achieving industrial growth and the way to support the sustainable development of rural areas (Eraqi, 2010). According to Krajnović et al. (2011), the concept of sustainability in rural areas needs to be observed from a wider point of view. Sustainability cannot be based only on the narrow principles of environment protection, so sustainability objectives need to include the following: -pre-

servation of local culture and identity of the local community; maintenance of the land-scape and natural habitat; — preservation and sustainable development of rural economy; sustainable tourism development in the long term; development and encouragement of support, understanding and raising awareness of "decision makers", particularly local, regional and national authorities, but also of other institutions responsible for the long-term development of rural areas; development of a clear understanding of the fact that being related to tourism only is harmful, and does not produce the desired outcomes, so activities need to address the diversification of local rural economies and establish balance between rural tourism development and other industries in the rural area.

Furthermore, rural tourism development encourages investments in improvement of housing on family farms and improvement of agricultural production (with respect to sustainability and ecology) and hence, rural tourism supplements the basic activities of family farms.

## PRESUMPTIONS FOR SUSTAINABLE RURAL TOURISM DEVELOPMENT IN THE REPUBLIC OF CROATIA

Even though the Council of Europe defined rural tourism as far back as 1986, the Ordinance on providing catering services on family farms in the Republic of Croatia was adopted only in 1996, and through that document, the Ministry of Tourism defined the legal framework for activities within the new tourism sector. A relatively short history of rural tourism in Croatia started in 1998 when the first holder/owner of touristic family farms was recorded. In the beginning, 32 family farms were unevenly distributed across counties. Rural tourism in the Republic of Croatia is still characterized by considerable underdevelopment, which is a consequence of long neglect of rural areas and family farms, and of the fact that Croatia was more oriented towards coastal tourism. Gastronomy is also not well developed, and neither are family farm economies that are indeed tourism products (Ministry of Agriculture, 2015). Rural tourism can considerably encourage economic stability. However, declining socio-economic indicators, depopulation and population aging create problems for the regional area. According to the Croatian Bureau of Statistics, the number of people in the Republic of Croatia shows that in 2018 Croatia had 4,087,843 inhabitants, which is actually a continuation of the declining trend, since that is 0.9% less inhabitants than in 2017. Population decrease is more dramatic in rural areas, and rural exodus and depopulation accelerated additionally in the second half of the 1960s when a large number of people living in villages decided to leave due to economic reasons. Diagram 1 shows further rural population decline from 2008 to 2018.

The most relevant points that determine sustainable development concept are: ecological, socio-cultural and economic. According to Bartoluci et al. (2015) adoption

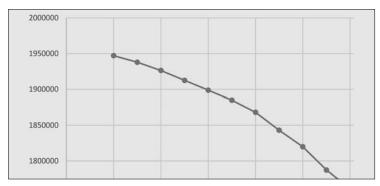


Diagram 1 — Rural Population in The Republic of Croatia From 2008—2018 (Source: author; according to the World Bank, 2019)

of those principles is crucial, because it is rural tourism that should become the driver of touristic development. Recently tourists have increasingly become interested in natural and cultural heritage and in spending their leisure time in the countryside. Local population frequently focuses on tourism for economic purposes and easy income, thus becoming dependant on tourist needs to that extent that they even start to compromise local identity.

However, the current situation is not satisfactory with respect to underdeveloped domestic demand and an unstimulating environment, and the Croatian rural tourism offer is developing at an extremely slow pace (Ministry of Tourism, 2013). Rural tourism holds a great potential for encouraging local economic growth and sociological changes due to its complementarity with other economic activities. Development strategies so far have been focused on promotion of the dominant touristic product as the 3Ss (sun, sea, sand) which resulted in a high level of seasonality and unrecognizability of the Republic of Croatia in the sense of rural tourism, but only coastal. Rural tourism strategy development of the Split-Dalmatia County (Split-Dalmatia County Tourist Board, 2009) is one of the few drafted county strategies of rural tourism. The strategy, completed in 2009, represents a framework for promising the development of the county's rural area and for ensuring the quality of life for people living in that area.

After the national catalogue "Rural Tourism of Croatia" was published in 2015 by the Croatian Chamber of Commerce in cooperation with the Ministry of Tourism, a certain progress was experienced. The bilingual catalogue (in English and in Croatian) represents a systematic and clear list of all types of objects that might be used for providing tourism services to visitors in Croatian rural areas. The catalogue encompasses a rich and diverse rural offer provided by households in the rural area, with a complete list of domestic food and beverages producers, and a special place is preserved for other specific forms of tourism closely related to rural development. The catalogue functions as advertising material and provides great advantage to the development of rural tourism in the future because it aggregates all elements of rural offerings which in nor-

County of	Arrivals			Overnight stays		
	Tota	Domestic tour.	Foreign tour.	Total	Domestic	Foreign tour.
Krapina-Zagorje	1 142,313	73,841	68,472	330,277	tour. 184,881	145,396
Sisak-Moslavina	36,640	18,102	18,538	90,142	55,234	34,908
Karlovac	332,991	24,951	308,040	565,298	45,732	519,566
Varaždin	61,257	29,150	32,107	141,512	80,022	61,490
Koprivnica-Križevci	18,537	11,142	7,395	38,814	22,169	16,645
Bjelovar-Bilogora	22.556	14,959	7,597	69,756	50,763	18,993
Primorje-Gorski Kotar	2,789,179	316,934	2,472,245	14,897,443	1,158,042	13,739,401
Lika-Senj	736,284	38,099	698,185	2,647,025	122,516	2,524,509
Virovitica- Podravina	14,184	9,846	4,338	33,453	23,615	9,838
Požega-Slavonija	13,284	9,657	3,627	30,611	21,944	8,667
Slavonski Brod- Posavina	28,614	11,608	17,006	50,791	22,408	28,383
Osijek-Baranja	92,239	57,481	34,758	177,677	105,069	72,608
Vukovar-Srijem	88,942	68,855	20,087	138,470	108,119	30,351
Međimurje	70,337	36,963	33,374	168,146	78,476	89,670

Table 1 — Arrivals and Overnight Stays of Tourists in Croatia in Mostly Rural Counties, as on August 31, 2017 (Source: Croatian Bureau of Statistics /2018, p. 437/. Statistical Yearbook of the Republic of Croatia. Zagreb: Croatian Bureau of Statistics.)

mal conditions has problems with penetrating the domestic market, and even more problems with penetrating foreign tourist markets due to a lack of quality advertising materials and promotion. Creation of such a unique national catalogue of rural tourism offerings, comprising all business entities, may greatly facilitate the creation of a national strategy for rural tourism development. It needs to be taken into consideration that there are around 500 households in the Republic of Croatia that engage in tourism, which is a relatively small number in relation to the potential that this tourism segment holds, but in order for it to develop on a larger scale, wider support is required, including better legal framework and greater aid from the government (Ministry of Tourism, 2018).

In order to have an overall perspective on rural tourism, accommodation capacities need to be taken into consideration. According to the research conducted by Demonja (2014), statistical data from 12 mostly continental counties were observed (Krapina-Zagorje, Sisak-Moslavina, Karlovac, Varaždin, Koprivnica-Križevci, Bjelovar-Bilogora, Virovitica-Podravina, Požega-Slavonija, Slavonski Brod-Posavina, Osijek-Baranja,

Vukovar-Srijem, Međimurje). Even though Primorje-Gorski Kotar and Lika-Senj counties are included in the table as mostly rural, they are not included in the research because they are mountain resorts. At the time this paper was written, the only recent available data were taken from the Statistical Yearbook 2018, and those data refer to the year 2017 (Table 1). Table 1 shows the number of total tourist arrivals (921,894) and 19,379,415 tourist overnight stays. Primorje-Gorski Kotar County achieved the greatest number of domestic and foreign tourist arrivals (2,789,179) and Požega-Slavonija the least (30,611). The situation is considerably more favourable than in previous years. In comparison, in 2011 the number of tourist arrivals in the 12 mostly rural counties amounted to 511,741 (which is 80% less than in 2017) and 1,088,883 domestic and foreign tourist arrivals, which is by 68% less than in 2017.

otal revenues from tourism in Croatian rural areas is only 1%. Why is it not possible to use the potential of the area in Croatia qualified as rural? Croatia is experiencing an increasing support from EU institutions, and allocation of funds to total tourism and development of non-agricultural activities in rural areas is also increasing. Tourism is co-financed, but support activities are financed as well: product processing, traditional crafts and making of souvenirs, investments in renewable energy sources, agriculture and forestry (IT technology, workhouses for machine repair, kindergartens and playgrounds, sports and recreational centres, veterinary units, hospices...).

Table 2 — Accommodation Capacities in Mostly Rural Counties of the Republic of Croatia, as on 31 August, 2017 (Source: Croatian Bureau of Statistics /2018/. Statistical Yearbook of the Republic of Croatia. Zagreb: Croatian Bureau of Statistics, 437.)

County	Accommodation capacities, as on 31 August 2017  Rooms, apartments and camping sites
Krapina-Zagorje	1,271
Sisak-Moslavina	533
Karlovac	2,876
Varaždin	1,276
Koprivnica-Križevci	302
Bjelovar-Bilogora	452
Primorje-Gorski Kotar	66,140
Lika-Senj	13,187
Virovitica-Podravina	276
Požega-Slavonija	234
Slavonski Brod-Posavina	442
Osijek-Baranja	1,149
Vukovar-Srijem	666
Međimurje	667

The Statistical Yearbook also includes rooms, apartments and camping sites in mostly rural counties. The largest number of those objects was recorded in Primorje-Gorski Kotar County (66,140). The lowest number of accommodation capacities was offered in the Požega-Slavonija County (234). In relation to 2011, an increase of 27% was marked in 2017 in mostly rural counties of the Republic of Croatia (from 7,965 to 10,144).

## REVITALISATION OPPORTUNITY THROUGH SMART VILLAGES AND GREEN RURAL TOURISM?

Green tourism is one of 10 key directions for tourism as provided in the National Tourism Strategy by 2020 (Ministry of Agriculture, 2015). In 2017, the European Commission introduced an initiative for the development of smart villages in the EU with the aim to achieve synergy between traditional agriculture, Internet, local wireless networks and innovations, and through smart specialisation enable development of new models. Additionally, the initiative strives to fight negative demographic trends in rural areas. Public policies such as the circular economy, energetic union and digital economy should bring about the energetic transition of the European Union to a low-carbon society with an acceptable cost for the economy and intensified involvement of citizens in the decision-making process, with the aim of maximising social profit. In adopting public policies, coordination and cooperation between various sectors such as energetics, transport, agriculture, economy and spatial planning is necessary. Development strategies, being key documents with political objectives, need to contain action plans for each sector in order for adopted political objectives to be optimally achieved. Action plans need to respect regional and local specificities, empower planning, financing and implementation of activities, as well as encourage participation in EU initiatives such as smart villages (Škrlec, 2019). It is obvious from the above mentioned that the notion of smart villages is increasingly present in the EU. The EU Rural Development Program for the 2014—2020 period prescribes a great number of users, and various projects can be financed from the program, both projects directly related to agriculture and those which are not strictly agricultural, but which are significant for the rural area. Numerous projects from that fond can be fully financed from the EU. This represents a financing opportunity for various aspects of rural tourism.

EU countries provide a good example (Austria, France, Germany, Italy), among others also Slovenia which is implementing a smart village pilot-project in some municipalities, with the aim to connect food producers and consumers, develop rural tourism, implement digitalisation, improve the welfare of vulnerable groups and encourage innovations. Croatia is just at the beginning of concept implementation. Government assistance is necessary for the development and strengthening of rural tourism, just as it is necessary for the development of tourism in the continental part of the country, bec-

ause without the assistance, those areas will not be able to develop, particularly in the situation when a large part of population is leaving the area due to a lack of perspective. Hence, it would produce both social and demographic benefits.

Some counties turned to development of sustainable rural tourism models. For example, the Split-Dalmatia County, primarily based on proven Italian and Istrian models, started the ethno-eco village project, with specific excursions, accommodation, agro touristic, artistic or combined villages with the purpose of preserving cultural heritage, the restoration of old houses, farm houses, the prevention of depopulation and the return of the domicile population, the revival of traditional production and old crafts, healthy food production etc. Ethno-eco villages are economically and ecologically sustainable villages, in compliance with ecological criteria. Ethno-eco villages reflect the Dalmatian folk culture and construction methods, and most of them offer a spectacular view of the sea, while those without it provide an ideal micro-climate. Those villages have been developing for centuries, they have been built in line with the natural characteristics of the area and this is by the very fact that they offer to their guests a return to nature abundant with cultural tradition.

In 2016, the Ministry of Tourism included in the Action Plan for the development of green tourism a set of priority topics defined on the basis of the analysis of the situation in Croatia and in the EU, and through a participation process of analysing opportunities, obstacles and needs which encompassed representatives of all significant stakeholders related to "green tourism". In the detailed elaboration, related to the development of certain products, among others rural tourism, the importance of integrated environmental sustainability is pinpointed, and formulations are provided as follows: the implementation of new technologies and ecologic standards in environmental protection, establishing the "environment friendly" measure, establishing a minimum standards system, responsible "green" operations, introducing limitations in particularly sensitive areas.

#### FINANCING SOURCES — GRANTS

In 2018, the Ministry of Tourism of the Republic of Croatia spent around 24 million kuna on projects aimed at enhancing attractiveness and competitiveness of Croatian tourism. Particular attention is placed on the development of tourism in the continental area, in the Dalmatian hinterland and on the islands, sustainable development, the use of new digital technologies and connecting tourism and agriculture (Ministry of Tourism of the Republic of Croatia, 2019). The most interesting and the most prominent investment financing sources are subsidies, i.e. grants. Alongside national sources, the Republic of Croatia is entitled to resources from European and structural funds, and the current programming period is 2014—2020. Even through tourism has been recognised as a significant activity, programmes for tourism have not been separately defined, but

resources for tourism are held within operative programmes: Competitiveness and Cohesion, Efficient Human Resources and Rural Development Programme.

#### QUANTIFICATION OF CROATIAN RURAL TOURISM SUSTAINABLE DEVELOPMENT VARIABLES

In order to better understand the future of rural tourism, quantification of selected rural tourism model variables for 2011 and 2017 was conducted. Those years were selected because 2011 was the first year in the Statistical Yearbook in which the variables were provided, and the Statistical Yearbook 2017 was the most recent one available at the time this paper was written. The value of variables is defined using statistical reports from the World Bank and using statistical yearbooks published by the Croatian Bureau of Statistics. In order to conduct quantification of selected variables, it was necessary to define the value of variables in 2011 and 2017.

Quantification of model variables was completed on an index scale from zero to 100 (Jugović & Lončar, 2006; Vidučić et al, 2019). The assumption is that value zero is valid for developing countries, and 100 for most developed countries. Below is the model quantification, based on considerations provided previously in this paper. When evaluating model elements, their status and significance in the realization (Nikolić, 2003) of the sustainable development of rural tourism in the Republic of Croatia in 2011 and 2017 was taken into account, and their expected values in 2023.

**Table 3** — Quantification of Croatian Rural Tourism Sustainable Development Variables (Source: author)

	Input			Change	
Value of sustainable rural tourism model	2011	201 <i>7</i>	2023	2011/2023	
1 Tourist arrivals	20	36	65	45	
2 Tourist overnight stays	20	37	68	48	
3 Accommodation capacities	20	25	32	12	
4 Rural population in the Republic of Croatia	100	95	92	-8	

Quantification of Croatian rural tourism sustainable development model variables shows that by 2023 the greatest positive change will occur in the tourist overnight stays variable. That may mean that guests will decide to stay longer in an accommodation capacity because the quality of accommodation capacities will increase. Eventually, that will result in greater guest satisfaction with the tourist overnight offer. An increase in the number of overnight stays and the number of tourist arrivals shall result in a slower trend of the decreasing rural population which leads to a conclusion that tourism will have a positive impact on the slowdown of rural population loss. In conclusion, it is evident that rural tourism has a positive impact on the sustainable development of the Republic of Croatia.

#### RESEARCH LIMITATIONS

It is not simple to show the exact numbers (reliable estimates) on rural tourism because a great number of accommodation capacities was simply not included in the official tourism statistics, and rural tourism statistics are not separated from coastal tourism. An additional limitation of this research is the absence of data on tourist arrivals and overnight stays by facility type, and only a global framework is available, as pointed out also in the research conducted by Demonja (2014). Furthermore, a vast majority of rural accommodation falls below the capacity threshold used to include tourist services in official statistics. Nevertheless, even global estimates related to accommodation capacities in small, micro or complementary accommodation in rural areas provides interesting results for the entire Europe (EU-27 + others): more than 500,000 accommodation units, around 6,500,000 beds and "agro tourism" accounts for around 15-20% of the total number. Elaboration of data shows that the average annual demand and supply growth in the last 10-15 years has been around 10-15%: a significantly higher value than for European tourism in general, where the rate amounted is only at 4-5% (European Commission, 2009).

#### CONCLUSION

This paper confirms the hypothesis that the potential of rural tourism is great, but still a lot of effort is required in order to achieve rural tourism sustainability in the Republic of Croatia. Sustainability of rural tourism in the Republic of Croatia was investigated and quantification of mostly rural tourism showed that the greatest change is expected in the tourist overnight stays variable (48), and the lowest in the rural population variable (negative). However, the quantification shows that the rural population will decrease at a slower pace in the future, due to increased tourist overnight stays, accommodation capacities and tourist arrivals.

It is evident that rural tourism in the Republic of Croatia does not have the significance it should have. For a number of years, it has been developed without proper control, without a real strategic plan and without identity. Promotion of rural tourism encourages people to engage in creative ideas that will enrich tourism offerings and generate employment and economy development. Tourism in rural areas may be a reason for the population to stay in rural areas, but also to return there. Activities aiming at harmonised tourism development in the Republic of Croatia need to continue, tourist consumption needs to increase and year-round tourism encouraged, as well as networking between providers of tourist services with producers of agricultural and food products, all with the aim to provide active contribution to the sustainable development of the region small entrepreneurship. Rural tourism needs to be put in the context of rural area development. Even though in recent years changes have been noticeable in many segments of tourism offerings, additional effort needs to be put on quality deve-

lopment, not only the numerical increase in turnover and accommodation capacities. This would incorporate new quality and innovative products shaped for the needs of smaller market groups, new management techniques, new technologies in the interpretation of attractions, new skills and knowledge in shaping green policies. However, there are still great rejections to novelties, particularly in the case when greater limitation and stricter control measures are understood. The development of rural areas is also important for the diversification of the rural economy and this diversification is crucial because it creates the precondition for demographic stability which is, on the other hand, the basis for the sustainability of all other development components. Croatia will soon draft a new comprehensive document which will define all local needs and put them in the context of the new era.

To sum up, rural tourism in the Republic of Croatia is a significant potential tourism area because it provides great opportunities for the prolongation of the tourist season while providing new quality to Croatian tourism overall. It can also facilitate the successful identification of relevant developmental and strategic frameworks that shall direct the future development of rural areas, and also its sustainability.

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### EUROPEAN COMMITTEE OF THE REGIONS' INTEREST IN THE ISLANDS

#### Abstract

The European Committee of the Regions (CoR) is an EU policy advisory body, and with its Opinion on Islands Entrepreneurship (COR-2017-19), draws the Union's attention to the islands. CoR states that the islands do not enjoy a special status in the cohesion policy and need it according to the characteristics of the remote regions. It recommends stronger measures within the post-2020 period. The objectives of the EU cohesion policy are pursued according to the financing method established by the Commission, in line with GDP per capita, but the CoR expresses a different view as many barriers specific to island development are not covered by GDP per capita as an indicator. It recommends adding islands as an additional category to the legislative amendment to Regulation (EC) 1059/2003 on territorial doctrines so that the new category of islands would have a direct effect. CoR emphasizes that the island markets are always small and remote, and entrepreneurs prefer to relay on landbased products and services. It proposes that the EU Member States (MS), with islands, establish small shops for the islands by establishing an Island Desk within the Commission service. In applying the partnership principle, recommends adopting the specific need of island regions in partnership agreements and operational programs. To better position entrepreneurs in islands in competition, it recommends that they use state aid for islands. It stresses the need to involve local and regional authorities in defining national and EU island policy in accordance with the principle of subsidiarity.

Keywords: European Committee of the Regions, cohesion policy, principle of subsidiarity, island position, recommendations.

In the development of EU regional policy, since 1975 when the EU Regional Development Fund was established, the Commission has a central role and is in direct contact with the European Committee of the Regions (CoR). The EU policy advisory body with island representatives participated in the work of the Commission and Parliament. When researching the importance and results of CoR's national representations, it becomes clearer that its role in the process of creating EU laws is becoming increasingly important. On the one hand, it supports the regions to maintain as much freedom of expression as possible within the subsidiarity. The CoR refers to the Parliament's resolution on the special situation of islands, which supports the principle of subsidiarity of the island region with a special situation. This principle has encouraged the emergence of cohesion policy because it brings the regions independence and the associated interconnectedness of the regions. On the other hand, CoR supports the competi-

tiveness of the island regions in the common market and the development of macroregions and interregional groups (EGTC) by issuing opinions on all issues of European integration. Before submitting a proposal for a new legislative act, the Commission shall consult and may consider the regional and local dimensions of a particular measure. CoR gives legitimacy to the regions in defending their interests before EU institutions. It seeks to show how the CoR's opinions and views change EU laws in the interest of island regions. Also, the CoR can coordinate regional policy in each EU member state and can also influence representatives of the authorities in the regions and local communities to seek protection of their interests according to the principle of subsidiarity. The CoR's influence in the European Union is more pronounced in adopting a homogeneous position, that does not yet exist, on EU island policy.

For the first time territorial cohesion is being introduced alongside economic and social cohesion by the Lisbon Treaty (2009). The CoR see a solution in EU cohesion policy because the economic crisis has affected the potential development of the islands, recalling the EU's undertaking to promote economic, social and territorial cohesion as set out in Article 174 TFEU. Cohesion policy is the EU's main instrument for large investment projects under Art. 312/2 TFEU. The Commission has not designed cohesion policy as long-term and each of all Member States must unanimously adopt the Multiannual Financial Framework (MFF). The general goal of cohesion policy reduces disparities between different regions and the backwardness of the most disadvantaged regions and promotes and supports the overall harmonious development of its MSs and regions. Discussions are taking place around the specific role of the CoR with a statement on what cohesion policy should look like after 2020. The CoR provides indications on priorities on the frontline of the COVID-19 crisis and the EU 20121-2027 budget in its Cohesion Alliance. Thus, as the emergency risks deepening disparities between more and less developed communities, "attention should be paid both to urban areas as the drivers of green and digital transformation and to regions that suffer from severe and permanent natural or demographic handicaps". MSs have to "assume their responsibilities towards citizens and agree upon the next Multiannual Financial Framework and the Recovery Strategy to secure the timely start of Cohesion Policy programmes as of 1 January 2021" (points 2 and 10 in the Declaration of the Cohesion Alliance). According to the CoR, cohesion objectives will be achieved when implemented as a voluntary cooperation between MSs with the islands and the Commission. The Union shares competence with its MSs in the fields of the internal market as well as economic, social and territorial cohesion (Art. 4/2 TFEU). In a given area, then legally binding acts may be adopted by both the Union and the MS (Art. 2/2 TFEU).

The topicality of the researched issue on the CoR's interest for the EU island development policy, requires dividing the work into two connected wholes. The next section, entitled "Opinion of the European Committee of the Regions — Entrepreneurship on islands: contributing towards territorial cohesion", lists a key document and current

EU island legislation in the function of the regionalization system. Following this, the section entitled "Respects the diversity of island policies", is intended to analyze the legal possibilities of island regions in the spatial and socio-political system of the European Union. The purpose of this paper is to consider the formation of a shared competence between the Union and the Member States' islands according to Art. 4 TFEU. Bearing in mind that there is not a binding EU act in the field of spatial planning of the MS and no common instrument for reconciling individual differences.

## OPINION OF THE EUROPEAN COMMITTEE OF THE REGIONS — ENTREPRENEURSHIP ON ISLANDS: CONTRIBUTING TOWARDS TERRITORIAL COHESION (2017/C 306/10)

The Lisbon Treaty contains cohesion provisions on the need to reduce inequalities between the development levels of the various regions in order to promote the overall harmonious development of the Union. Special features of remote islands are recognized in the primary EU legislation of Article 174 of the Treaty on the Functioning of the European Union (TFEU). However, it does not specify which are the serious and lasting island territorial, economic and social difficulties and therefore the normative framework in the field of island policy is inconsistent. As an instrument of soft law, this Opinion is used in island MSs to regulate their own island circumstances in a flexible way. Within the EU island policy, there is no single legal basis for a unified EU island development policy. Article 174 TFEU reflects a possible synthesis of binding legal rules with soft law, like the Resolution of Parliament on special situation of islands (2016) and the Opinion of the CoR — entrepreneurship on islands: contributing towards territorial cohesion with indications of intent to approximate policies in the area. Presenting itself as the EU institution for identifying potential solutions to promote entrepreneurship and to boost islands' economic, social and territorial development, the CoR recommends a policy aimed at strengthening territorial cohesion as the most appropriate policy in addressing the development gap between island regions and the mainland.

The CoR gives 52 policy recommendations in its own Opinion which are important for initial EU island policy. First of all, it gives an interpretation of the provisions of Article 174 TFEU. It emphasizes that small size, distance and/or remoteness and vulnerability create territorial, economic and social handicaps that are recognized, which hinder both the fair integration of islands in the single market, as well as the complete territorial integration of island populations. It recalls that Art. 174 TFEU states that island regions need particular attention from the EU, which shall aim to reduce disparities between the levels of development of the various regions within and between Member States (no. 2., 3.). It welcomes the work done by the Parliament intergroup and similarly of the Conference of Peripheral Maritime regions of Europe who ask for a special status for remote islands in cohesion policy (no. 7., 8.). It stresses that these

island regions have geographic, economic, demographic and social features that are specific to them (in comparison with mainland regions) and are shared across the various islands and throw up unique challenges when implementing European policies that affect them. In order to promote entrepreneurship on the islands, the CoR considers it necessary to take into account the specific characteristics and challenges of the islands, so that measures to improve working conditions for entrepreneurs are fair and effective (no. 6., 17.). It draws attention to the characteristics of the outermost regions which face serious problems that are aggravated by their specific constraints as recognized in primary law and that impact on their economic and social development and these should be considered (no. 19.). So, with focus on post 2020, the CoR recommends that the provisions of Articles 174 and 175 TFEU on territorial cooperation be applied to island development policy. It goes further when recommending to Members how to achieve this goal, to include islands as an additional category in the Amended Regulation 1059/2003 regarding spatial typologies (no.20.). It stresses the usefulness and advantages of the EGTC Regulation (1302/2013) for local and regional authorities and for the islands of Europe (no. 26.). By referring to the Resolution on the special situation of islands, the CoR expects the Commission to set up an Island Desk to facilitate the distribution of island products (no. 21.). It welcomes networking EU islands, EGTC, to enable experiences to be shared and administrative engineering and innovation to be pooled (no. 22., 37.). It recalls that islands' GDP per capita amounts to 79,2% of the EU average and that the situation in the 2000s has deteriorated since than due to the financial crisis, the migration crisis, changes in tourism habits and lack of innovation as in Amandman on behalf of the Parliament's Committee for Regional Development, B8-0106/2016 (no. 4., 5.). Underlines the maximum possible use of EU instruments (ESI Funds) in order to offset the economic impact of the natural handicaps that affect islands but notes that the small size of many island projects means that local island communities seem in practice to be unable to access ESIF financing and EIB loans (no. 23., 24.). It stresses that many obstacles that are specific to island development are not captured by using per capita BDP as an indicator and suggests broadening the range of complementary indicators used in the context of cohesion policy in order to more accurately determine islands' socio-economic circumstances and attractiveness (no. 30.).

Stressed is the importance of the partnership principle and the CoR urges MS to ensure that this principle is fully implemented in order to ensure that the specific needs of island regions are considered in partnership agreements and operational programmes. It stresses the need to involve local and regional authorities in defining national and European policies that affect them to bring regulatory frameworks governing intervention into line with islands' specific needs, in accordance with the principle of subsidiarity (no. 38., 39., 40.). In the same vein, it proposes further research to find other indicators enabling the additional costs faced by islands to be fully documented

and calls for attention to be paid to non-financial and hard-to-measure aspects, suggesting applying a, "island clause" (no. 31., 32., 34.). It highlights the importance of state aid for island regions' small size, remoteness and isolation. But, it stresses that as island markets are often small and remote, mainland businesses are rather reluctant to supply goods or service there for transport connections and energy supply. Recommendations are made that this sector be able to benefit from exemptions regarding state aid (no. 44., 48.). It proposes that *de minimis* Regulation could be more flexible and that the public procurement stipulations could be relaxed in the case of islands consultation procedures (no. 49.). It supports the flexibility that is currently used with regard to schemes enabling islands to benefit from specific tax incentives or a reduced corporate tax rate in order to offset the additional costs caused by being an island (no. 50.).

#### RESPECTS THE DIVERSITY OF ISLAND POLICIES

In its opinion on entrepreneurship on the islands, the CoR declared itself as an EU institution to address the challenges facing island regions. This is significant given the existing indications of the intention to harmonize the EU island's policy. At the initiative of the European Parliament and the European Commission, a resolution on the island's special situation (2016) was adopted deciding on the elements of EU island policy, considering Articles 174 and 175 TFEU. The CoR relies on the European Parliament legislative Resolution on the island's special situation and suggests important steps in creating island legislation. Thus, seeking amendments to add islands as an additional category in the proposal for a new regulation of the European Parliament and in respects to the Council No 1059/2003, regarding the territorial typologies (Tercet), so that the new category of islands would have a direct effect in implementation. When giving advice to island entrepreneurs, the CoR emphasizes the need to involve local and regional authorities more in the process of defining development policies and emphasizing the characteristics of the islands and how to attract investors. Consisting of national delegations that have impact over their governments and that represent the islands in their Member States, it is useful to keep abreast of opinions that the CoR adopts. Considering that the island markets are always small and remote, and entrepreneurs prefer to rely on land-based products and services, it proposes that MSs with islands establish small shops for the islands by establishing an Island Desk within a commission service. Its opinion reflects the values of the cohesion policy in the application of the principles of subsidiarity and shared management, it stresses the need to involve local and regional authorities in defining national and EU island policy. Although it is an act of soft law that has an indirect political effect, it is also a part of EU legislation. Recommendations and opinions cannot create rights and obligations but can influence the interpretation of legally binding acts (Rodin, 2018, p.22). In applying the partnership principle, it recommends adopting the specific needs of island regions

in partnership agreements and operational programs. The CoR has the right to participate in legislative procedure and can file a lawsuit for annulment of the EU act (Rubić, 2013, p. 64).

The CoR has been given a stronger position vis-à-vis other EU institutions and has a significant impact on the generally insufficiently clear role of regions and local governments. When assessing compliance with the EU legal system, the criterion is not only the content of legal norms but also the political, economic and social content that is regulated by legal norms. It is secondary whether the national legal institute regulates a certain legal relationship in the same or different way from that in the EU. Each category of legal acts is specific in its effects. It is necessary to place normative regulation in the political, economic and social context in order to judge the adaptation of the national legal system to the European one. The Court has developed a doctrine that Union law derives not only from written sources but also from the general principles of law it establishes in its practice (Rodin<sup>1</sup>, 2018). The CoR considered that the island's special interests were at stake and gave an opinion on it, which it forwarded to the Parliament, Council and Commission together with the minutes of their meetings (Art. 307 TFEU). Complex regionalization processes manifest through the role of the CoR as an advisory political body of the Union but in island politics has a pronounced role when representing the interests of island regions. It emphasizes the need to reject the hierarchy: European union-Member State-regions-cities and municipalities, instead of reaching an agreement through partnership between different levels of government. It encourages regional cooperation through networking and supporting regional networks, but their analysis goes beyond the scope of this paper. It influences the political process of creating regions in the European Union with the help of government officials who demand greater powers, national, regional and local authorities in the macroregional system, and it informs the CoR of their significant territorial cohesion policy activities. The objectives of EU cohesion policy are pursued according to the financing method established by the Commission in line with GDP per capita but the CoR expresses a different view as many barriers specific to island development are not covered by GDP per capita as an indicator. The EESC also considers that the criteria used by the Commission's Eurostat to define island areas need to be reviewed and more appropriate criteria used (EESC Opinion 2017 / C 209/02, points 2.4 — 2.6). Generally, it emphasizes the lack of special status for islands in cohesion policy but it is needed according to the characteristics of the remote regions. Also, it contributes in order to strengthen territorial integrity with its recommendations for the development of entrepreneurship on the islands. The CoR analyzes the projected savings in according to the

<sup>&</sup>lt;sup>1</sup> Siniša Rodin has been a judge of the European Court of Justice in Luxembourg since 2013 and with a mandate until 2021.

Commission Multiannual Financial Framework after 2020 because they will not be useful for island development.

It respects the findings of nosologists about the need to consider the island's own parameters. Regarding to the consequences of the economic crisis, the CoR has addressed the issues of the potential development of the EU island areas as they are at a disadvantage compared to the mainland regions. Also, it has commented that EU cohesion regional policy aims at balanced development of all regions, but as part of the investment policy, it does not deal with geographical and demographic parameters according to Article 174 TFEU for islands.

Relationships among the natural factors of the island affect the climate and the mainland, the formation of rocks and soil, water and plants. The relations between sea, land, and air are different on islands in the sea or in the ocean. Then, the peculiarity of the island is migration because the inhabitants of the natural area of the island gave it a cultural significance. When the islands are inhabited, rocky areas are cleared, agricultural crops are planted, a man carries with him his racial type, language, customs, nature, standard of culture and life. Islanders give their islands, on the basis of various geographical and social elements, various functions, agricultural, viticulturally, olive, afforested, fruit and vegetable, livestock, mining, quarry islands, fishing, sponge and coral, with different focus such as sericulture islands, seafarers' islands, shipbuilders, tourist islands. The functions of the islands are changing, some weakening and some strengthening while others are abruptly approaching and oscillating tremendously due to tourism<sup>2</sup>. The CoR represents the interests of nations and emphasizes that potentials and opportunities for islands can be used only if the provisions of Art. 174., which recognize the permanent natural and geographical difficulties of the island, are respected<sup>3</sup>. A contribution of the CoR in the development of island policy is to reconsider the need for regulation by the European commission.

It notes what the parameters small size means in terms of area, population and economy; distance and/or remoteness is physical distance and time needed to reach markets, particularly in relation to the single market and to large industrial, financial, political and population centers; and vulnerability means into economic, environmen-

<sup>2</sup> It's appropriate to state, "Naši otoci na Jadranu", by Ivo Rubić, the first geographical synthesis on Croatian islands researched various natural geographical features of the islands and the peculiarities and problems of their socio-economic development in 1952 (from the prologue by Josip Faričić, of the overprint edition "Naši otoci na Jadranu").

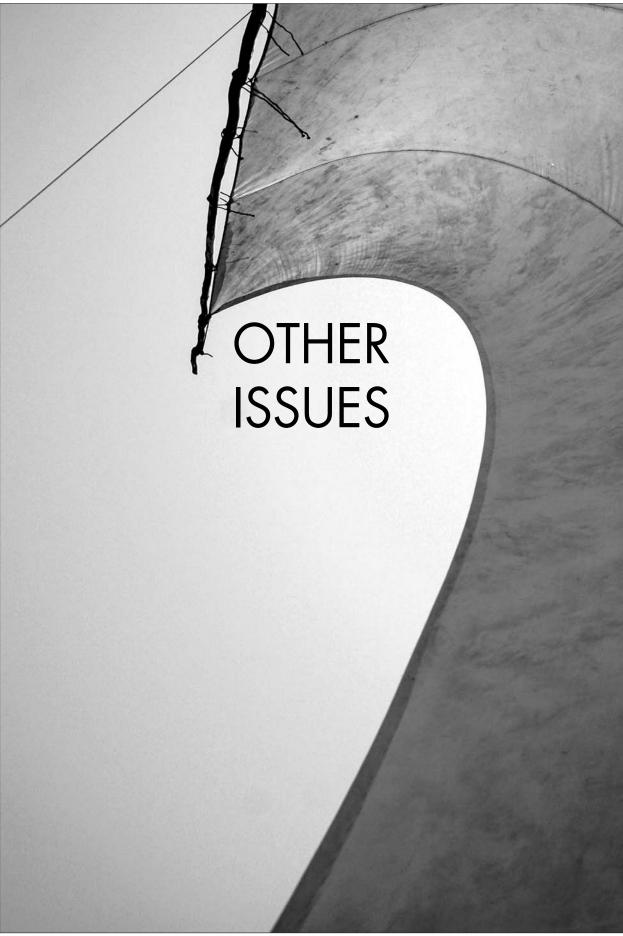
<sup>3</sup> In the case of Kyrtatos v. Greece no. 41666/98: The applicants Ms Kyrtatou and her son, as owners of wetland land on the island of Tinos, filed a lawsuit against the building permit authority and two buildings were built near the wetland, endangering the natural habitat for protected animal and plant species. Their lawsuit was upheld, and the Greek government considered the demolition of buildings excessive. However, a judgment was rendered against Greece. (Publications Office of the EU, the Council of Europe manual).

tal and social threats. It urges tailored measures to be put in place in order to improve basic conditions, enabling islands to contribute to inclusive growth within the EU. This means that any EU policy that aims to promote entrepreneurship must consider the same economic, environmental and social islands' specific characteristics and challenges if it is to be fair and effective. Differences between the levels of development of different island regions at sea or in the oceans, the limited financial resources of island Member States and their different legal frameworks, raise problems of harmonizing island policy and raise questions about how the EU and island Member States will shape it.

There is no legislative act with direct effect on the EU's island development policy, and the CoR contributes with opinions having the interpretive effect of a secondary source of law, to the development of each EU island region by recognizing its own island parameters.

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# CONCEPTUAL-NARRATIVE FRAMES AS A LINGUISTIC TOOL IN POLITICAL COMMUNICATION

#### Abstract

This paper aims to analyse the use of communication tools in order to explore the way in which politicians primarily, and then media indirectly, govern political images by using the narrative frames within political statements. The main focus is therefore to analyse the media texts about chosen Croatian politicians in order to provide an observation of linguistic-communicative narrative strategies used by politicians and their impact on political images. This method of analysis of political text within the media discourse includes an approach both from a linguistic and from a communicative perspective. A total of 100 media texts have been empirically analysed by using first quantitative and qualitative analysis of linguistic data, followed by narrative analysis. The analysis covers the period from the day of the Presidential Election on 5 January 2020 until the Parliamentary Election on 5 July 2020. The media texts which covered the topic on chosen politicians have been isolated by searching the most read Croatian portals in the period of analysis. The results suggest two basic conceptual frameworks, the frame of responsibility and the frame of competence, within which are identified narratives based on master myths (Lule, 2001) of victim, scapegoat, hero, good mother, trickster and another world.

Keywords: political language, metaphor, master myth, media text, political image

Media discourse about politics and politicians serves as a transit between political communication and the public, which are potential voters (Wodak, 2009). Although media texts should be composed respecting the principle that media news is factual, disinterested, impersonal and objective (White, 2000), journalists and editors choose which statements or parts of politicians' statements to quote in the text. Accordingly, it is important how politicians conceptualize attitudes, which rhetorical strategies they use, and which are the dominant linguistic choices in statements (Charteris-Black, 2005). The wide range of rhetorical features as journey metaphors, personification and master myths, as well as lexical choices produce a communication basis, which can be used by journalists in order to interpret political statements (Charteris-Black, 2005; Musolff, 2016; Perrez et al., 2019).

Conceptual-narrative frames based on linguistic choice and master myths can be considered as a powerful strategy in order to evoke evaluative bias according the politician's image (Musolff, 2016). Research suggests that it is possible to shape a political image in a way that may affect public perception (Rosenberg et al., 1991, Scacco & Peacock, 2014, Muddiman et al., 2014). According to Charteris-Black (2005) analyses of

the speeches of key world leaders show their awareness of the interrelationship of leadership capacities and linguistic performances. As one example of such a leader, the author cites Margaret Thatcher, which "was the first British politician to appreciate the need for the manufacture and projection of a political image and this played an important part in the creation of an effective political myth" thorough communication (Charteris-Black, 2005, p. 87).

This paper consists of a theoretical part that include the insights about the metaphor theory with the emphasis on personification and reification as mapping processes and theoretical outlines regarding master myths narratives. The research part contains an overview of methodology and analysed texts and a presentation including a discussion of the findings. The conclusion presents a generalized view of the key findings concerning the theory.

#### THE THEORETICAL FRAMEWORK

Metaphors as a Part of the Conceptual-Narrative Frames in Political Communication

"In democracies voters make decisions on the basis of overall impressions of the reliability, honesty, morality and integrity of politicians as much as on their actual policies (Charteris-Black, 2005, p. 1). Political image therefore consists of their representation on a conceptual and linguistic level, which are accordingly encoded. According to Stuart Hall (1997), representations are part of the cognitive production and communicative exchange of meaning within a society. The process of representation refers herein to the selection of linguistic means, signs and images that represent cognitive assumptions about the world. "Representations are systems of values, ideas and practices with a dual function: first, to establish an order that will enable individuals to orient themselves in the material and social world and to master it: and second, to allow communication to take its place among community members, providing them with a code for social exchange and a code for naming and classifying unambiguously different aspects of their world and their individual and group history" (Hall, 1997, p. 15). In this paper, these representations are considered key elements of conceptual-narrative frameworks within communication. Further, within the process of interpreting representations, it follows that linguistic choice can govern the process of the interpretation of political messages, as in the case of this paper for example.

According to Lule (2001), Charteris-Black (2005), Ahrens (2009) and Mussolf (2016), Perrez et al. (2019), the choice of language in general, the choice of metaphor and master myths in particular, is important to the persuasiveness of a successful politician. As Charteris-Black (2005) points out, "it is because it exploits the subliminal resources of language by arousing hidden association that govern our system of evaluation" (2005, p.2). Within the paper, metaphors are analysed according to Conceptual

Metaphor Theory (CMT) with an emphasis on their use in political texts according to the typology of Charteris Black (2005).

Conceptual Metaphor Theory (CMT) came into existence with the book *Metaphors* We Live By (1980/2015) by authors George Lakoff and Mark Johnson. They posit that "our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature" (Lakoff & Johnson, 2015, p.10). According to the CMT, certain attributes associated with one conceptual domain (source domain for example — person) map or as assumed later blend with attributes of a target domain, and the metaphor behind the language use of lexemes names a conceptual metaphor. Accordingly, the lexeme on a semantic level indicates a conceptual metaphor on the cognitive level. Therefore "the semantic field is the lexical manifestation of a conceptual domain, but the latter transcends it because in addition to lexical information it also includes commonly held beliefs, folks' theories and "encyclopaedic" knowledge about the source domain (Musolff, 2016, p. 11) Accordingly, the choice of lexeme on a semantic level indicates a conceptual metaphor on the cognitive level. For example, the lexeme 'to go' in the sentence 'the party is going the wrong way', indicates the conceptual metaphor 'politics is a journey'. Therefore, the mapping process involves partial transfer of conceptual knowledge about the source domain (Koller & Semino, 2009, p. 12).

The analysis of metaphors in the paper will be done according to the index of conceptual metaphors compiled by Charteris-Black (2005, p. 233-234). Therefore, in order to construct political images based on the master myths of Jack Lule (2001), emphasis is placed on the analysis of the use of personification and metaphors for travel. Personification, as the most common ontological mapping process, means that different abstract topics (such as decision, state, crisis etc.) are communicated in terms of the domain of person (Lakoff & Johnson, 2015, p. 44-45; Charteris-Black, 2005). Therefore, political metaphors, such as 'nation'/'party'/ 'policy is a person', have the largest potential to describe and categorize some abstract topics, but also to evaluative bias according to personal experience with other people. Charteris-Black (2005, p. 204) and Musolff (2016, p. 111) explained the use of personification in political discourse with the argument that it enables high argumentative and evaluative potential within its communicative force. Along these lines, "journey metaphors are generally employed by politicians to conceptualise long-term purpose" (Charteris-Black, 2005, p. 131). Therefore, the process of conceptual meaning transfer between the two domains takes place in accordance with the use of the lexeme "which is abstract (...) but in the used context refers to something that is concrete" (Charteris-Black, 2005, p. 15). Thus, in political statements, syntagms such as 'the path of justice' or 'the road to the election'. The

<sup>1</sup> According to the agreement on writing conceptual metaphors, both the source and target domains are written in reduced capital letters (SBL HANDBOOK OF STYLE, 2016)

source domain from which the path and road lexemes is derived as the 'Journey' domain.

#### Master Myths in Role of Conceptual-Narrative Frames

Journalists are not just people who provide us with information shaped by objective choice of language. They transmit information in the manner of narrative tradition, while also transmitting narratological constructions and typical role holders (Žanić & Borčić, 2016, p. 130-131). Within this paper, narratives are viewed as "a form of mediated semiotic representation of organizing spatial and temporal data into a cause-and-effect chain of events with a beginning, middle and end that reveals someone's experiences" (Braningan, 1992, p.3) which consist of an introduction, disruption, plot, climax, unfolding and end" (Gillespie, 2006). An understanding of different media text depends therefore on the understanding of conceptual — narrative frames, which are related to the structure of a speaker's knowledge of a language. (Car & Osmančević, p. 132).

In order to deconstruct the conceptually narrative frameworks in the background of political messages, this paper, as already mentioned, analyses the use of metaphors and master myths as key elements of these frameworks. The use of master myths is analysed according to the typology of Lule (2001). Lule observes news stories as information put in "sacred, societal narratives with shared values and beliefs, with lessons and themes, and with exemplary models that instruct and inform" (Lule, 2001, p. 18). He (ibid.) classified the narratives in media texts into seven categories of master myths as follows: the victim, the scapegoat, the hero, the good mother, the trickster/deceiver, the other world and the flood. This typology was chosen because it indicates the attribution of the bearer of the role of an activity, in this case politicians, and at the same time indicates the part of the image that is conveyed by the text.

According to Lule (2001, p. 15), master myths are archetypal figures that serve as a pattern model for human life, because they are taken from and shaped by the shared experiences of all humans" (Lule, 2001, p. 15). All these archetypal figures, events and forces are part of narratives, but they leave open opportunities for subjective evaluation of their position in the text, because the process of coding meaning occurs between the media content and the individual who consumes it (Hartley, 1982).

#### **MFTHOD**

#### Research Sample and Methodology

In order to show the use and the power of political narratives based on master myths and metaphors based on personification as well as journey metaphors, the analysis is conducted on the sample of media texts about presidents from the two strongest Croatian political parties, specifically the president of the Croatian Democratic Union (hereinafter: HDZ) Andrej Plenković and then president (at the time of analysis) of the So-

cial Democratic Party of Croatia (hereinafter: SDP) Davor Bernardić. Accordingly, the analysis conducted in this paper can be considered as an attempt to establish a model of image analysis based on the synergy of metaphors and master myths.

The analysis covers the period from the day of the Presidential Election on 5 January 2020 and till the Parliamentary Election on 5 July 2020. The survey included articles published on the most read Croatian portals, according to the statistical data presented on the Gemius Audiance website<sup>2</sup>. In addition to the individual monthly statistics of visits to portals, from January to July 2020, the four most read Internet portals were selected, as follow: 24sata.hr; net.hr; vecernji.hr and dnevnik.hr. Two of them are extensions of the newspaper, 24sata and Večernji list, and the other two portals. The survey unit was one press release.

The main focus of the investigation is to examine the use of lexemes on a language level which indicate the use of metaphors and master myths on a communicative level and consequently to conclude what the dominant narratives are in the role of image constructors. The focus is on synergy between the mapping processes (personification and journey) and some specific master myths (Lule, 2001) in order to realize a rhetoric strategy, that illustrate the use of specific conceptual-narrative frames. The context of the use of conceptual metaphors, master myths, or conceptually narrative frameworks particularly, indicates the possibilities of interpreting political statements by a wider audience that consumes media content. Along this line, the following questions have been posed:

- 1. What metaphor and master myths are dominant in the analysed sample?
- 2. Which conceptual-narrative frames are suggested by the dominant metaphors and master myth?
- 3. Which image characteristics arise from the analysis of elements of indicated conceptual-narrative frames?

The process of sampling design was performed in two steps. The first step was to select all texts relating to one of the chosen politicians and to build the general corpus of texts from the chosen sources. The second step was to create a sample. By using the Random Number Generator, the sample of 100 articles from the whole corpus of found texts was selected, 50 texts for each politician. Therefore, our sample is a simple random sample and all member of the general corpus had an equal probability of being chosen.

Charteris-Black (2005) points out that metaphor analysis could be based on the quantitative and qualitative analysis of linguistic data. Quantitative analysis yields the frequency of a lexeme by using lexical software and serves within this research as a support to the qualitative analysis that is primary for the interpretation of image buil-

<sup>&</sup>lt;sup>2</sup> This page lists the results according to the given variables: analysis period, the country for the analysis, number of real users, average daily real users, page views.

ding strategies. In order to select the most used lexeme as the basis for personification and journey metaphors mapping processes, the lexical analysis was conducted by using the Lexical Analysis Software WordSmith Tools. Lexical Analysis of the selected texts provided a wordlist with the frequencies of the uses of specific lexemes. It is used as a guideline to the second step of the analysis. The next step was to classify the lexical units for the metaphor's analysis. The classification is based on quantitative as well on qualitative analysis, as follow: the frequency of the use, semiotic markedness and specific use in the context. After that, the third step of the analysis was conducted. This step is related to the identification of the conceptual metaphors based on classified lexemes from the second step. This analysis was carried out by use of existing Croatian dictionaries, Anić (1996) and Šonje (2000). The fourth step refers to the analysis of image communication tactics depending on the use of a master myth. The next stage of the analysis included the narrative analysis, according to Gillespie (2006) and Lule (2001). The narrative analysis (ibid.) includes the identification of language choice on the level of metaphors, symbols and others rhetorical tools. It is important to emphasize that due to the limits of one paper it is impossible to discus in detail the findings relating to step (1) to (4) of the analysis. For this reason, a decision was made that the interpretation of the results would be based on the dominant master myths and metaphors that are the key bearers of the role in the image narratives of the analysed politicians. Due to the spatial limitation of the text, the interpretation lists the most common examples, based on which conclusions are drawn on how the image is created. Therefore, it should be emphasized here again that the results are symptomatic and apply only to the analysed texts and examples of narratives.

#### FINDINGS AND DISCUSSION

#### Davor Bernardić

The analysis includes 50 media texts quoting Davor Bernardic's statements. Although these are media texts, the study is focused on the use of linguistic and communicative narrative means from which the characteristics of the politicized image can be deduced. The politician, therefore, by consciously or unconsciously using metaphors and master myths, shapes an image that journalist furthermore and additionally put in some context within the media text.

The following characteristics of conceptual-narrative frames used by Davor Bernardić can be concluded from the analysis: a) the use of personification dominates in the context of the following conceptual metaphors (a list of conceptual metaphors in Charteris Black, 2005, p. 233 is used as a support): Croatia is a person, the party is a hero, the party is a trickster, political opponents are enemies, politics is ethics, purposeful activity is travelling along a path toward a destination, social and economic pro-

blems are enemies; and b) the dominant master myths according to Lule (2001) are as follow: hero, trickster and the other world.

In line with above, the analysis indicates the structure of conceptual-narrative frames of Bernardić in the form of binary opposition of two opposing concepts, in the sense of the meaning of the explanation of the narrative according to Lévi-Strauss (1967). In the discourse of Davor Bernardić 's statements, these opposing concepts refer to good and bad and justice and injustice, as in (1) "(...) a big coalition is out of the question with the party on the defendant's bench" (vecernji.hr, 29 June 2020). In that example lexemes 'the party on the defendant's bench' indicate the conceptual metaphor 'party is a person' within the master myth of a trickster. This master myth Bernardić explicitly puts in a narrative about the HDZ and the president of the HDZ. Therefore, it is evident that the rhetorical strategy of analogy, by emphasizing the characteristics of the opponent within the good versus bad concept, the politician shapes thw positive frame of his party or himself as a leader.

Bernardić systematically uses metaphor to emphasize himself as a hero — a warrior of justice for political freedom based on the threat of the metaphor and master myth of HDZ as enemies of the people and as tricksters, as in (2) "(...) because of your voters, you have threatened the entire tourist season" (vecernji.hr, 29 June 2020). This strategy is used in all analysed texts, which shows that Bernardić does not focus on the content created by his party but positions himself in the relationship between heroes (he and SDP) and tricksters (HDZ), as in (3) "I want to do something good for our country, that's why I got into politics, (...) Injustice bothered me when Croatia was looted in the late 1990s" (dnevnik.hr, 28. June 2020).

Personification and journey metaphors are used in order to emphasis his strength in a fight against his political opponents, by using linguistic tools in order to highlight the negative image of HDZ and their policies, as in (4) "The elections ahead of us (...) are elections between two different paths: the beaten HDZ's path of corruption or restart, a new beginning for Croatia" (večernji.hr, 22 June 2020).

Since some media in the analysed period opened the topic of the possible insufficiently strong leader competencies of Davor Bernardić, the topic of competence was present in both analysed samples. In the sample of the statements of Bernardić, he tried to highlight his political strength in this "election battle", as in (5) "I'm absolutely moving in the fight for the Prime Minister's post" (24sata.hr, 16 January 2020).

Conclusively, in the analysed texts, two conceptually narrative frames are dominant, in particular the frame of responsibility and the frame of competences. These frames are theoretically based on the following narratives/master myths: (a) SDP as a returned hero and a righteous person, (b) Croatia as a victim, but also a scapegoat because of HDZ politics and (c) politician as tricksters and/or heroes fighting against the others (master myth of the other world).

As already stated, the dominant rhetoric strategy is the strategy of analogy, by using the opposite dichotomy, always in relation to HDZ. An exception was found in four statements, as in (6) "(...) you are protected, we will take care of you. It will be one of the first laws passed by the government of Restart Coalition (...)" (net.hr, 06 July 2020). In these examples, Bernardic emphasizes only the strength of his party and him as a leader, without putting it in context with the HDZ.

In conclusion, the analysis of Davor Bernardic's statements shows an attempt to create an image of the opposition trickster and hero, with the emphasis on activities and attributes, which are associated with party opponents. The analysis showed no difference in the use of narratives depending on the portal.

#### Andrej Plenković

The analysis includes 50 texts in which Andrej Plenković's statements are quoted. The results suggest that the same conceptual-narrative frames are found in statements and texts about Andrej Plenković as in texts about Bernardić, as follow:

- a. dominant is the use of personification as in metaphors: Croatia is a person, the party is a hero, the party is a trickster, political opponents are enemies, politics is ethics, purposeful activity is travelling along a path toward a destination, social and economic problems are enemies, politics is ethic.
- b. the dominant master myths according to Lule (2001) are as follow: hero, trickster and the other world.

These metaphors and master myths are used in the framework within the conceptually narrative frames of responsibility and the frame of competences. These are the same frames as in the texts with Davor Bernardic's statements, so it can be assumed that these frames are a key conceptual-narrative frame in the process of communicative building of political images in Croatia. Along these frames, the narratives used by Andrej Plenković can be classified into the following groups: (a) HDZ as a dignified party, but also as a hero who is not always recognized (b) party or leader as a hero who will not give up the fight for a better society and (c) politician/party as trickster regarding the competence.

The texts published in January and February, after the HDZ-loss of presidential election, do not point out Plenković as the leader of the losing party who should take responsibility and correct his mistakes, but the party that is a dignified loser, the culprit is someone outside, and as soon as they clearly identify the culprit outside the party, they can influence the party to impending recovery on the road to parliamentary elections. The narratives about Andrej Plenković describes his composure and strength as the foundation of the entire part's strength regarding fore coming parliamentary election, as in (1) "We will win this election, go to a second term for a speedy economic recovery" (29 June 2020). Furthermore, Plenković is presented as a hero fighting against

the problems in society as in (2) "(...) to compete with ideas that are good for HDZ and Croatia (...)" (vecernji.hr, 10 February 2020).

As in the statements of Davor Bernardić, Andrej Plenković positions himself also as a leader through the party's image, as in (3) "that the HDZ be the strongest and most dominant political force in Croatia" (vecernji.hr, 10 February 2020) by using a conceptual metaphor 'party is a person'. He provides the attributes of courage and responsibility (hero master myth) onto his party, and by doing so he highlights his own competence, as in (4) "No one will determine for the HDZ who can be the head of the Croatian government" (vecernji.hr, 03 July 2020). As in Davor Bernardić's statements, Plenković positions the strength of himself and the party through the oppositional character of good and bad, as in (5) "The SDP is going with a sausage coalition because it does not have the strength to go out on the HDZ square alone", (vecernji.hr, 27 June 2020. There is also a visible metaphor POLITICS IS A WAR, along with the metaphor 'party is a person', as in (6) "(...) we fought for every Croatian man, for every job (...)", (vecernji.hr, 03 July 2020).

In conclusion, the dominant conceptual narrative frames are: the frame of responsibility and the frame of competence. Therefore, within the frame of responsibility is highlighted (for the politician) the strength of his party and him as a leader, and within the frame of responsibility is communicated the lack of leader components of his opponents, in particularly Davor Bernardić. In addition, a rhetorical strategy of analogy through contrast is used, primarily in relation to Davor Bernardić and the SDP. The analysis showed no difference in the use of narratives depending on the portal.

#### CONCLUSION

The topic of this paper is to describe the manner in which conceptual narrative frames are used in political statements and to offer an example of an analysis model, which is based on the synergy of metaphors and master myths on the communication level and the choice of word on the linguistic level. Therefore, the key characteristic of a political image is that it is manageable and can be influenced by associations and values based on conceptual narrative frames and their use in context.

The results suggest two dominant conceptual narrative frames in both samples: the frame of responsibility and the frame of competence. In line with these frames, Bernardić tried to present himself through the master myth of hero, by using the analogy between his party and the HDZ. The dominant narrative was the one about a righteous party who will fight against the cancer of the society — corruption and poor governance of the state by the HDZ. Andrej Plenković also positioned himself through the image of his party, based on the concepts of strength and courage to lead the country. Consequently, he uses, on the linguistic level, the lexemes that indicate the master myths of heroes for his party and tricksters for the SPD and their leader. The results

suggest that both Croatian politicians systematic use metaphor to communicate political master myths of hero and trickster based on conflict. Accordingly, the results suggest that the master myths within the conceptual-narrative frames are effective mechanism for positive and negative image building. Therefore, the results are symptomatic and refer to the selected media texts.

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## Appendix List of Analysed Articles (URL • Date of publication)

#### ANDREJ PLENKOVIĆ (attended 20 August 2020)

https://www.vecernji.hr/vijesti/pratite-uzivo-uskoro-se-ocekuje-govor-andreja-plenkovica-1415030 • 5 July 2020

https://www.vecernji.hr/vijesti/politicar-koji-ne-pokazuje-sve-karte-radoholicar-i-perfekcionist-koji-privatni-zivot-otkriva-putem-djece-1414918 • 5 July 2020

https://www.vecernji.hr/vijesti/plenkovic-nitko-nece-hdz-u-odredivati-tko-moze-biti-na-celu-hrvatske-vlade-1414523  $\bullet$  3 July 2020

https://www.vecernji.hr/premium/za-hrvatsku-bi-na-vlasti-bio-najbolji-hdz-ali-bez-skore-1414350

• 2 July 2020

https://www.vecernji.hr/vijesti/plenkovic-u-10-izbornoj-jedinici-ocekujem-uvjerljivu-pobjedu-hdz-a-1414104 • 1 July 2020

 $https://www.vecernji.hr/showbiz/sprajc-otkrio-kako-je-izgledao-susret-s-plenkovicem-pogledi-sugovorili-vise-od-rijeci-1413760 \bullet 30 June 2020$ 

https://www.vecernji.hr/vijesti/veceras-u-20-30-posljednje-suceljavanje-plenkovica-i-bernardica-1414255  $\bullet$  3 July 2020

https://www.vecernji.hr/premium/mi-smo-u-koaliciji-s-gradanima-a-sdp-ide-s-kobasicastom-koalicijom-jer-nema-snage-sam-izaci-na-megdan-hdz-u-1412920  $\bullet$  27 June 2020

https://www.vecernji.hr/vijesti/plenkovic-u-vukovaru-u-5-izbornoj-jedinici-ocekujemo-8-zastupnickih-mjesta-1412604 • 25 June 2020

https://www.vecernji.hr/vijesti/plenkovic-o-samoizolaciji-stvar-je-sto-se-mene-tice-zatvorena-postupilo-se-prema-uputama-hzjz-a-1412138 • 24 June 2020

https://www.vecernji.hr/vijesti/zele-da-zbog-suceljavanja-idem-u-samoizolaciju-taj-film-nece-gledati-1412016 • 23 June 2020

https://www.vecernji.hr/vijesti/plenkovic-termin-izbora-ostaje-isti-nije-mi-jasno-kako-se-to-mozedovoditi-u-pitanje-1411901 • 23 June 2020

https://www.vecernji.hr/vijesti/plenkovic-hasanbegovic-nije-ni-trebao-biti-u-hdz-u-1410693 • 17 June 2020

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# FACT-CHECKING IN THE REGION: COMPARATIVE CONTENT ANALYSIS OF FACT-CHECKING PORTALS FROM CROATIA, SERBIA AND BOSNIA AND HERZEGOVINA

#### Abstract

The definition of media literacy has been changed forever with the popularization of the term fake news after the 2016 US presidential elections. A need to further verify the accuracy of the information has appeared beside the critical understanding and the analysis of information obtained through the media. Fact-checkers have evolved with the development of fake news and their goal is to verify and evaluate the authenticity of the news that is produced and transmitted by the media. This paper aims to present the methodology of three fact-checking websites as well as to examine the dominant topics, the sources of questionable statements or information and who they relate to. The posts of fact-checkers based in Croatia, Serbia, and Bosnia and Herzegovina have been analyzed using a method of combined qualitative and quantitative content analysis. The results showed that on average three-quarters of the total number of articles on all websites were judged to be untrue and that only one in ten disputed statements came from social networks. It is shown that interaction of the audiences on social network profiles is equal in terms of a very small percentage compared to the total numbers of their followers.

Keywords: fact-checking, fake news, content analysis, Factograph, Truth Meter

An accelerated rhythm of life and the development of technology underlined a need for constant and rapid sources of information. This trend made it difficult to properly conduct the journalistic production process and led to an emergence of false news, caused by the non-verification of sources and need to publish news without prior verification statements. Because of the potential of social networks for the rapid and exponential expansion of information, by integrating these platforms into everyday life, each individual can become a source of fake news. These platforms are often used by politicians for their particular interest and the information they publish is often (deliberately) untruthful. Because of this growing disorder in the informational sphere, fact-checkers were developed globally. There are unordinary newsrooms of investigative journalists who try to improve media literacy among end consumers and develop a sense of responsibility for prominent individuals in the public sphere.

The purpose of this paper is to review recent literature on the topic of fake news and fact-checking and conduct original research to present the ways in which fact-checking websites check disputed statements and data. For the purpose of research, content analysis was conducted on three fact-checking websites in Croatia, Serbia and Bosnia and Herzegovina. The period of analysis was from November 2018 until March 2019 and the sample was 107 units of analysis (articles). The main goal of the research was to determine how three selected websites reveal the degree of accuracy in news and which topics they deal with. The number of reader interactions on social media profiles was also investigated.

The research started with five hypotheses:

- H1: Most inaccuracies occur in articles dealing with statistics;
- H2: Sources of more inaccuracies will be members of the ruling parties on state and local levels than those in opposition;
- H3: The number of interactions on social networks will be higher with portals that have fewer posts;
- H4: In more than 90% of cases, the accuracy rating will be "untrue";
- H5: Disputable statements or data were made in equal numbers in traditional media and on social networks.

#### FAKE NEWS AND TYPES OF MISINFORMATION

Fake news is not a new term, but its meaning has changed over time. There are six different types of fake news: satirical news, parody news, fabricated news, information manipulation, advertising, and propaganda (Tandoc, Wei & Ling, 2018). What all types of fake news have in common is the effort to make them look like real news to have more credibility. The most problematic category is deception, in which false content is intentionally created with the idea of deceiving the reader, and the motive is financial gain (Bambauer, Verstraete & Bambauer, 2017). The information which serves as a foundation for fake news can be sorted into misinformation and disinformation categories and the difference between them is intention. Misinformation is inaccurate information that is unintentionally published, and its publication most often occurs in crisis cases where the priority of reporting is speed. Disinformation is information that is intentionally false. When disseminating such information on social networks, there may be problems in discovering the original motive for the dissemination (Jack, 2017). This type of misinformation, as well as problematic forms of fake news, can be defined as false, inaccurate, or misleading information designed and presented with the aim of misleading the media audience for the sake of financial benefits or some political or worldview goal (European Commission, 2018).

Due to the growing popularity and presence in the media, the term fake news is of concern to media professionals and attempts are being made to use it as little as possible. Nowadays, it is a very vague, politically dangerous term whose use is most noti-

ceable in political communication in the function of defense against accusations. This concept does not currently differ from already existing forms of propaganda and misinformation (Bounegru, Tommaso & Mauri, 2017).

#### GLOBAL DEVELOPMENT OF FACT-CHECKERS

Observing the fundamental values of journalism, fact-checking can be understood as good journalism, defined by principles of true reporting and impartiality. Where fact-checkers differ from ordinary journalism is in presenting necessary evidence and calling those responsible out. Fact-checkers represent one of the key parts of the democratic process as well as exercising freedom of speech (Singer, 2018).

The development of political fact-checking began in the United States (US) in 2003 with the founding of FactCheck.org and continued in 2007 with the founding of PolitiFact and the Washington Post Fact Checker<sup>1</sup>. The first examples of modern fact-checking appeared in the US in the early 1980s, during the presidency of Ronald Reagan. Of all the fact-checkers currently active in the US, only five were established before 2010. Almost all major media publishers in the US have embraced and tried the trend of fact-checking (Graves, Nyhan, & Reifler, 2015). First European fact-checkers appeared in the UK in 2005 when Channel 4 News launched a blog to verify statements during parliamentary elections. By the end of 2010, certain forms of fact-checking websites existed in ten European countries. More than 50 specialized fact-checkers have been launched in Europe in 2010s (Graves & Cherubini, 2016).

Perhaps the most deserving event for the growing trend of the popularization of fact-checking was the establishment of the American PolitiFact in 2007 and the Pulitzer Prize they won in 2008 for the media-exposed coverage of the 2008 US presidential election. As a result, PolitiFact began working with many partners across the US and by 2012, it was working with 11 partner organizations that operated using the same methodology. Such a franchise approach has greatly helped to popularize the notion of fact-checking (Graves, Nyhan, & Reifler, 2015).

Despite the similarities in strategy and methodology, fact-checkers around the world differ in approach and structure. While many were created as part of existing media organizations, some were founded by independent journalists, and a smaller number was created at the initiative of academics or political experts (Singer, 2016). Although fact-checking in Europe has developed through existing and recognized media organizations, currently more than 60% of existing fact-checkers operate independently or as projects of non-profit associations or organizations (Graves & Cherubini, 2016).

<sup>&</sup>lt;sup>1</sup> Amazeen, M. (2015) Sometimes political fact-checking works. Sometimes it doesn't. Here's what can make the difference. The Washington Post. Retrieved from: https://www.washington-post.com/news/monkey-cage/wp/2015/06/03/sometimes-political-factchecking-works-sometimes-it-doesnt-heres-what-can-make-the-difference/ (24 August 2019)

In 2015, the International Fact-Checking Network (IFCN) was established at Poynter Institute with the goal of connecting world's fact-checkers under one umbrella organization. In addition to following fact-checking trends around the world and publishing articles in a weekly newsletter, they also organize annual conferences and provide professional education services<sup>2</sup>. Potentially the most important part of their work is the establishment of a code of principles.

# FACT-CHECKERS MODUS OPERANDI

As a form of responsible journalism, fact-checkers are committed to analyzing and publishing statements identifying untruths regardless of their source. The viability of a fact-checker starts from complete impartiality. By doing so, fact-checkers can positively influence political behavior and the amount of untruths declared, and thus contribute to the society in which they operate (Amazeen, 2015). Lim (2018) states that different fact-checkers who overlapped in their checks agree when it comes to complete truths or untruths, while significant differences occur in controversial statements that they rated as semi-true or mostly false. As Graves (2016) points out, fact-checker editors follow what they publish and thus try to check as many statements as possible. Average fact-checkers have a relatively smaller audience compared to media standards, but the importance of their actions increases with each transmission of their content.

#### DEFICIENCIES IN THE WORK OF FACT-CHECKERS

As Brandtzaeg and Folstad (2017) point out, despite the impartial and objective work of fact-checkers, audiences with very pronounced worldviews will not accept facts that contradict those views, especially when it comes to politics and important social issues. Confidence in fact-checkers also depends on their ownership and funding, as well as the transparency of their methodology. When analyzing and verifying disputed statements, there is the possibility of losing context of original statement as well as combining parts or whole statements to set a new context. In this way, fact-checkers can rate a true statement as less true because it can be interpreted in more ways than one. These problems arise because fact-checker methodology arises through their operation, without the possibility of referring to some already existing methodology (Uscinski, 2015).

# BASIC INFORMATION ON HISTORY, FINANCING, AND THE METHODOLOGY OF SELECTED FACT-CHECKERS

The starting point in selecting the research sample was Duke Reporters' Lab from Duke University which has been involved in fact-checking around the world since its inception. It is currently run by Bill Adair, the founder of the Pulitzer Prize-winning web-

<sup>&</sup>lt;sup>2</sup> The International Fact-Checking Network. Poynter.org. Retrived from: https://www.poynter.org/ifcn/ (24 August 2019)

site Politifact, and Mark Stencel, who manages a global database of fact-checkers<sup>3</sup>. Duke Reporters' Lab is currently the only website with a systematically organized and upto-date database of fact-checkers, and for that reason it is the starting point for numerous investigations on this topic<sup>4</sup>. In August 2019, there were 187 active fact-checkers in their database, including one for every country selected for this research: Croatia, Serbia and Bosnia and Herzegovina.

#### FAKTOGRAF.HR

Faktograf.hr is the only Croatian fact-checking website founded in 2015 as a joint project of the Croatian Journalists' Association and GONG. It became a member of IFCN and cooperates with Facebook. Faktograf is part of IFCNs' FactCheckEU project, in which 19 European fact-checking websites publish articles translated into 10 languages with the aim of reaching audiences across Europe5. One of the founders of Faktograf.hr is also executive director of GONG Jelena Berković and the editor-in-chief is Sanja Despot. The launch and operation of Faktograf.hr is financed by: National Endowment for Democracy, TechSoup Foundation, United States Department of State, and the United States Embassy in Zagreb7. For the purposes of conducting analyses and evaluations, a grading system has been developed that ranges from 1 to 5 (Ni F od fakta, Ni pola fakta, Tri kvarta fakta, Fakt, Polufakt)8.

#### ISTINOMER.RS

Istinomer.rs is the only Serbian fact-checker included in the Duke Reporters' Lab database which was founded by the non-profit civil society organization CRTA in 2009. Since January 2019, the editor-in-chief has been Milena Popovic<sup>9</sup>. An exhaustive list of all financial resources and amounts received are published on the CRTA website<sup>10</sup>. It

<sup>3</sup> About the Lab. Duke Reporters' Lab. Retrieved from: https://reporterslab.org/about-the-lab/ (18 August 2019)

<sup>&</sup>lt;sup>4</sup> Fact-Checking. Duke Reporters' Lab. Retrieved from: https://reporterslab.org/fact-checking/ (18 August 2019)

<sup>&</sup>lt;sup>5</sup> Međunarodna mreža za provjeru činjenica (IFCN) pokreće FactCheckEU, novi europski projekt provjeravanja činjenica. Faktograf.hr. Retrieved from: https://faktograf.hr/2019/03/18/medunarodna-mrezaza-provjeru-cinjenica-ifcn-pokrece-factcheckeu-novi-europski-projekt-provjeravanja-cinjenica/ (18 August 2019)

<sup>6</sup> Što je i čemu služi Faktograf.hr. Faktograf.hr. Retrieved from: https://faktograf.hr/metodologija/ (18 August 2019)

<sup>7</sup> Što je i čemu služi Faktograf.hr. Faktograf.hr. Retrieved from: https://faktograf.hr/metodologi-ja/ (18 August 2019)

<sup>8</sup> Koje su ocjene? Faktograf.hr. Retrieved from: https://faktograf.hr/sto-su-ocjene/ (18 August 2019)

<sup>9</sup> Redakcija. Istinomer.rs. Accesed from: https://www.istinomer.rs/redakcija (18 August 2019)

includes the Ministry of Foreign Affairs of the Federal Republic of Germany and the Ministry of Foreign Affairs of the Czech Republic.

The grading system used by the editorial board is divided into several categories. The analysis of truthfulness is divided into six grades (*Kratke noge, Neistina, Skoro neistina, Poluistina, Skoro istina, Istina*). Two ratings were subsequently added to this category, which are used only in certain situations and do not belong to the previously mentioned scale (*Neproverivo, Zloupotreba činjenica*). The third category is the evaluation of the fulfillment of promises made by politicians<sup>11</sup>.

# ISTINOMJER.BA

Istinomjer.ba is a fact-checker from Bosnia and Herzegovina which was created as a project of the civil association "Zašto ne" in 2010. One of the main sources of funding is the international non-profit organization National Endowment for Democracy. A complete overview of their received funds and their cost structure is published on the portal's website 12. They do not have prominent editors on their website and they point out that their content is created and edited by their journalists 13. Istinomjer.ba deals with checking and evaluating claims of political figures and the fulfillment of the promises of politicians at the state or local level, as well as the fulfillment of pre-election promises. In the case of evaluating controversial statements and data, they use a 3 point scale evaluation system (Neistina, Poluistina, Istina). Promises of politicians in office range on a 5 point scale (Neispunjena, Djelomično ispunjena, Ispunjena sa zakašnjenjem, Ispunjena, Radi se na tome) 14.

## RESEARCH: METHODOLOGY, RESULTS AND DISCUSSION

Research was conducted using the method of combined quantitative and qualitative content analysis on a sample of three selected fact-checkers: Faktograf.hr, Istinomer.rs and Istinomjer.ba. The unit of analysis was an online article published in a section with the assessment of its accuracy, while other categories, such as political analysis, were not considered.

<sup>10</sup> O nama. CRTA — Centar za istraživanje, transparentnost i odgovornost. Retrieved from: https://crta.rs/kosmo-mi/ (18 August 2019)

 $<sup>^{11}</sup>$  O Istinomeru. Istinomer.rs. Retrieved from: https://www.istinomer.rs/o-istinomeru (18 August 2019)

<sup>12</sup> O Istinomjeru. Istinomjer.ba. Retrieved from: https://istinomjer.ba/o-istinomjeru/ (18 August 2019)

<sup>13</sup> Istinomjer tim. Istinomjer.ba. Retrieved from: https://istinomjer.ba/istinomjer-tim/ (18 August 2019)

<sup>14</sup> Metodologija. Istinomjer.ba. Retrieved from: https://istinomjer.ba/metodologija/ (19 August 2019)

Data was collected over a period of four months, from 1 November 2018 to 1 March 2019. During that time, 107 units of analysis were collected, of which 20 were published on Faktograf.hr, 21 on Istinomer.rs and 66 on Istinomjer.ba.

Due to the lack of similar research, authors developed their own analytical matrix, categories and variables of which were defined by the implementation of preliminary research. After conducting a test study and removing categories that were shown as non-comparative, there were seven categories left on the analytical matrix that included the classification of disputed statements or data, the examination of methodology, defining subjects and objects in disputed statements, counting interactions in publications on social media profiles, analysis of accuracy ratings and sources of disputed statements or data.

#### GOALS AND HYPOTHESIS

The main goal of the research was to determine how three selected websites reveal 'degree of accuracy' and which topics they deal with. Also, the number of reader interactions on their social media profiles was investigated. Given the volume of research and the matrix used, the following specific hypotheses were defined:

- H1: Most inaccuracies occur in articles dealing with statistics;
- H2: Sources of more inaccuracies will be members of the ruling parties on state and local levels than those in opposition;
- H3: The number of interactions on social networks will be higher with portals that have fewer posts;
- H4: In more than 90% of cases, the accuracy rating will be "untrue";
- H5: Disputable statements or data were made in equal numbers in traditional media and on social networks

#### RESULTS AND DISCUSSION

In the preliminary research it was concluded that all articles on portals deal with the topic of politics. Also, one of the categories of the analytical matrix questioned whether an article mentioned possible consequences or a call for action (call for resignation, public apology, initiating the establishment of investigative commissions...) but it was not the case with any of the units of research. From the collected data, we can conclude that the editorial board of Bosnian, Istinomjer.ba, is the most active, responsible for more than half of the total number of articles included in research. While Faktograf.hr and Istinomer.rs publish an average of 5 articles per month. Istinomjer.ba publishes more than 15 articles per month.

# Classification of Disputed Statements or Data

The first category refers to what is disputable in a particular statement or data: statistical data, direct data, or data on the work of an individual, political organization, state

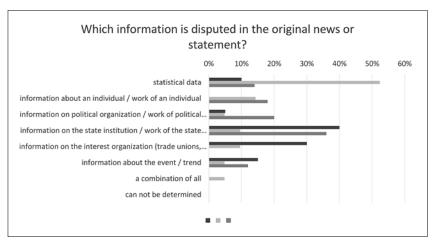


Figure 1 — Comparative Review of Disputed Data or Statements

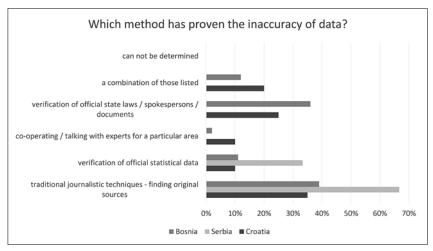
institution, interest organization (e.g. trade unions, religious institutions, associations etc.), data on an event or trend.

In the results from Faktograf.hr, two phenomena should be noted. First, there is no disputed statement or information about the individual or the work of the individual. This is very interesting given that political communication in Croatia is often reduced to *ad hominem* attacks. It is also necessary to note that almost a third of the answers are related to the data on interest organizations. Most of these are articles related to media outlets in Croatia, because of the numerous lawsuits against journalists.

Statistical data and data on the individuals on Faktograf.hr make up only a tenth of the results, while on Istinomer.rs they make up as much as two thirds. Such results should be observed with caution because most of the reported statistics are due to the error of the subject who provided the data, and less often to the deliberate distortion of numbers. Contrary to Faktograf.hr, Istinomjer.ba does not have a single disputable statement or information about an interest organization. This can probably be attributed to the editorial board's commitment to monitor all levels of government and state and local institutions.

# Methodology Used for Disputing Fake News

The second category refers to methods used by editorial staff to prove the inaccuracy of stated data. In each published article/analysis of accuracy, authors point out how they checked disputed information and how they came to true information. After a pilot study, it was concluded that journalists relied on one of these four methods: traditional journalistic techniques (finding original sources), checking publicly available statistics, cooperation and discussion with experts in a particular field and checking official state documents or laws and communication with spokespersons.



**Figure 2** — Comparative Presentation of the Methodology

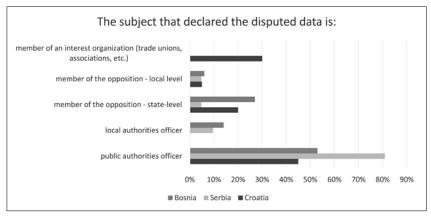


Figure 3 — Comparison of Results on Subjects Who Made Disputed Statements or Data

Istinomer.rs showed results in this category that stand out. There were three times the number of articles in which official statistics were checked than that on the remaining portals. We can explain by the fact that Istinomer.rs had the largest number of articles in which disputed claims were related to statistical data. Such a rebound would probably be reduced to some extent by extending the research period.

# Subjects and Objects of Disputed Statements or Data

This category refers to two subcategories that examined who uttered the disputed statement and about whom or what it was.

It is very easy to conclude that on all three websites the vast majority of subjects are from state or local government bodies. While on Faktograf.hr it is about slightly less

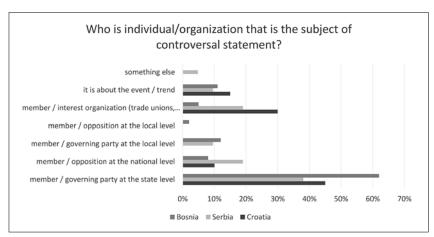


Figure 4 — The Object of the Disputed Statements or Data

than half of the total number, on Istinomer.rs the number is twice as high, and on Istinomjer.ba it is about two thirds of the subjects.

In the case of the Faktograf.hr, almost a third of the results are members of interest organizations, most often a religious institution (Catholic Church) and there were almost no articles related to religious institutions on other websites. Those results are connected to protests "One in five million", to which many controversial data and statements are concerned. Although the results are evenly distributed, it would be interesting to compare them with the data from periods when there was no protest.

Serbian website Istinomer.rs has the biggest number of subjects that made a disputed claim from the state government which were mainly focused on objects of the opposition at the state level. Most often the subject was the Serbian President Aleksandar Vučić who made claims concerning either his actions or actions of his political opponents. The difference in the results of subjects who made disputed claims and the objects of these claims at the local level of government can be attributed to the political system in Bosnia and Herzegovina, in which local government is much closer to the state than in Croatia and Serbia.

#### Interaction on Social Networks

This category refers to counting the interactions (comments, share and reactions as "li-ke" label) of website readers on their profiles on social networks. Since all three websites are the most active on Facebook and all of them published all the articles covered by this research on their Facebook profiles, other social networks were not considered for this category.

For the purposes of analyzing the obtained results, it should be noted that at the time of the survey in April 2019, the Facebook profile of the Faktograf.hr portal had 17.000 followers, Istinomer.rs 117.000 followers, and Istinomjer.ba 45.000 followers.

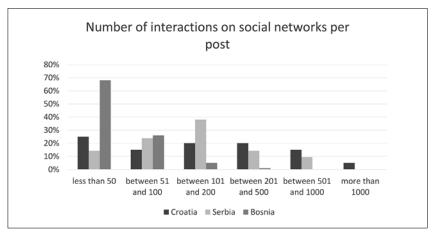
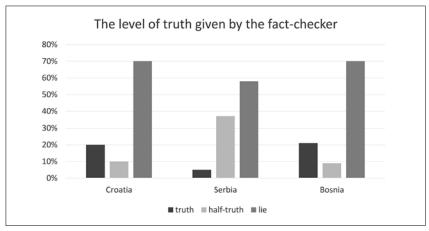


Figure 5 — Comparison of the Number of Interactions on Social Networks



**Figure 6** — Comparison of Accuracy Ratings on All Three Portals

Given these figures, we can calculate that Istinomer.rs and Istinomjer.ba have a similar ratio of the average number of reactions per post on their Facebook profiles. On the Bosnian webpage Istinomjer.ba, only 0.11% of the total number of followers react to two thirds of posts, and with Istinomer.rs, 0.15% of the total number of followers react to the same number of posts. The Serbian fact-checker managed to record a very large number of reactions to the publication in several cases.

# Accuracy Assessment

This category refers to the accuracy ratings that fact-checkers give to disputed statements or data in their analysis. Each website uses a different ranking. Faktograf.hr uses a five-point scale, Istinomer.rs uses a six-point scale and Istinomjer.ba has the simplest ranking system that includes only "untruth", "semi-truth" and "truth". To compute any

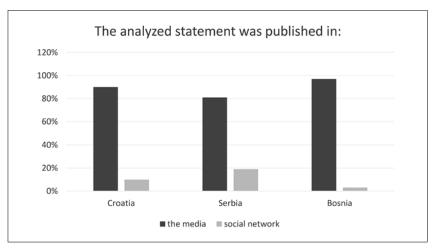


Figure 7 — Comparison of Sources of Disputed Claims on All Three Portals

correlations, we made those scales comparable, so the ranking systems were equated with the simplest one used by Istinomjer.ba.

It is difficult to attribute a reason for a very similar structure of accuracy ratings on all websites, although a slightly smaller number of true and semi-true claims on Istinomer.rs can potentially be attributed to the prevalent form of controversial statements and data on that website, more precisely statistical data.

# Sources of Disputed Statements or Data

The last category refers to the medium in which the disputed statement was published: mainstream media or social network.

The vast majority of analyzed controversial statements were published in the media. On Faktograf.hr, 10% of disputable statements came from social networks. On Istinomjer.ba, only 3% and on the Serbian fact-checker only every fifth statement. This trend can be related to the popularity of the social network Twitter in Serbia, which is not the case in Croatia and Bosnia and Herzegovina.

#### DISCUSSION

After these research results, conclusions can be reached that correspond to specific hypotheses. Hypothesis 1 stated that most inaccuracies occur in articles dealing with statistical data. This hypothesis was confirmed in the case of Istinomer.rs because there are more than half of the articles in which the disputed claims are related to statistical data, while Faktograf.hr and Istinomjer.ba do not contain statistical data in the three most common categories of disputed claims.

H2: Sources of more inaccuracies will be members of the ruling parties at state and local levels than those in opposition was confirmed on all three fact-checkers. Most

of those who made disputed statements were members of the government at the state level, while the number of those in power at the local level is much smaller?.

H3: The number of interactions on social networks will be higher with webpages that have fewer posts, was also confirmed? A larger percentage of followers of the Faktograf.hr and Istinomer.rs portals have reactions to their posts than followers of the Istinomjer.ba portal, which publishes on average three times more articles per month.

H4: In more than 90% of cases, the accuracy rating will be "Untrue": the hypothesis was rejected because the average of untrue claims was around 70% on all three fact-checkers.

H5: Disputable statements or data were made in equal numbers in traditional media and on social networks. This hypothesis was convincingly rejected, given that on average on all three websites only every tenth incident of controversial information originated on social networks?

#### LIMITATIONS AND SUGGESTIONS

During the research, several limiting elements were noticed that would need to be adjusted in the case of future research. Primarily, it is a period of data collection. Although enough data was collected over the four months of the study to draw conclusions, extending this period would help with more accurate conclusions. The biggest problem in defining the time frame of the research was the portal Istinomjer.ba whose archive contains only last 60 published articles. The research could be expanded in terms of sample size. Since the end of the research period, Duke Reporters' Lab has recognized and verified another fact-checker from Bosnia and Herzegovina; Raskrinkavanje.ba. The research could also be extended to more countries in the region, for researchers without a language barrier.

It is necessary to notice the shortcomings of the analytical matrix of the content analysis. The matrix was made targeted for this research due to the impossibility of finding an existing matrix that would meet all the necessary criteria. Although it was sufficient for the needs of this research, perhaps, in the case of an increase in the sample and the research period, there would be a need to change certain categories and offered variables.

#### CONCLUSION

In the age of social networks and smartphones, each individual is only a moment away from spreading (dis)information around the globe. In such a world, fact-checkers play a key role in the fight against disinformation and raising the level of media literacy among media audiences, but also in improving the behavior of political figures. This form of influence on society is still lacking in the case of fact-checkers in the region. Their actions boil down to analyzing and verifying the truth of certain statements, bec-

ause they lack the support of both the audience and the media to call for certain actions, such as calling for a boycott or insisting on someone's apology or resignation.

If influential mainstream media paid more attention to the analysis of these fact-checkers, perhaps the consequences for those who declare untruths would be more significant. One of the reasons is the fact that this movement is still rather young in the media environment but initiatives such as IFCN allow the methodology to be systematized and somewhat harmonized, leading to easier interpretation and analysis of fact-checkers worldwide.

The research conducted for the purpose of this paper is the first research of this type conducted in the region and, despite its shortcomings, may form the basis for future similar research. Such research is needed to monitor and observe fact-checkers in order to conclude whether they respect the values of impartiality and transparency of the organization and methodology. After all, no one has a monopoly on the truth.

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# OVERTOURISM AT A NATURAL HERITAGE DESTINATION: THE PLITVICE LAKES NATIONAL PARK CASE STUDY (CROATIA)

#### A b s t r a c t

Lika-Senj County, specifically the Plitvice Lakes National Park, has all of the characteristics of overtourism connected to a rural area. Although one of the most undeveloped counties, with a large share of rural territory and incomplete transitional processes, Lika-Senj County has the potential to develop sustainable tourism. The county's weaknesses can thus be seen as its primary developmental opportunity. So, this paper is based on the theoretical concept of integral sustainability. In its first section, the desk method is used in order to analyse existing sources and documents relevant to understanding the concept of over- and undertourism. The second part focuses on socio-cultural processes over the past two centuries that led to the critical situation in which UNESCO is considering the reclassification of the Plitvice Lakes as an endangered heritage site. This is followed by a basic analysis of publicly available statistical data related to the structure of tourist arrivals in recent years together with the irritation index concept. The goal of the paper is to highlight the negative processes that led to the current state of overtourism development in Plitvice Lakes and to consider potential solutions in Lika-senj County as a whole, with special focus on the Lika region.

Keywords: Lika-senj County, overtourism, Plitvice Lakes, undertourism

Every country seems to have tourism 'hot-spots' with many visitors coming to these sites or places during peak periods. Sometimes certain crowding effects are considered a positive sign that lead visitors to conclude that the destination or attraction is worth visiting. Nevertheless, when the carrying capacity of a tourism system is reached, too many visitors can lead to serious problems for the destination. This phenomenon seems to have increased in recent years and is sometimes referred to as 'overtourism' (Weber et al., 2017 p. 197). Overtourism can also be described as unchecked and unsustainable tourism leading to significant problems. When tourism is not managed correctly, it has the potential to cause considerable damage and disruption (Innerhofer, Erchbamer & Pechlaner, 2019). In Croatia, this phenomenon become particularly apparent in the summer months, so it can be called intense or seasonal overtourism (Cheer, Milano & Novelli, 2019). Although the phenomenon of overtourism appears at other Croatian destinations (in Zadar, for example), it is most often associated with the city of Dubrov-

nik on the Adriatic coast and Plitvice Lakes National Park in the interior (Peeters et al. 2018; Panayiotopoulos & Pisano, 2019). The geographic position of Plitvice Lakes National Park is interesting, since this is one of only five UNESCO natural sites in the territory of south-eastern Europe.

The Report of the Joint WHC/IUCN Reactive Monitoring Mission to Plitvice Lakes National Park identified seven key factors affecting the National Park: 1) new and existing housing, major visitor accommodation and associated infrastructure inside the property; 2) impacts of tourism and visitors; 3) water extraction; 4) surface and ground water pollution from waste water and traffic; 5) transportation infrastructure and effects arising from its use; 6) management and institutional factors; and 7) changes to traditional ways of life and knowledge systems (abandonment of small scale agriculture). The Report underlines that "with transformation of the traditional houses and farms into tourism facilities and abandonment of small-scale agriculture, the park is losing not only part of its biodiversity but also important cultural and historical features" (UNESCO, 2017, p. 1). Among the fundamental problems cited by the authors Peeters et al. (2018, p. 188), the high number of visitors, lack of a sewage system and wastewater treatment, lack of capacity (which actually turns away guests), environmental issues and economic interest prevailed over the protection of the Park. The same authors describe Plitvice Lakes National Park as an "emblematic example of a great attractive natural heritage site dealing with overtourism" (Peeters et al., 2018, p. 189). Destinations suffering the strain of tourism face a number of consequential problems. Among these are increased traffic congestion, pollution, parking problems, destruction of historical sites, and disgruntled residents moving away (Innerhofer, Erchbamer & Pechlaner, 2019).

The UNESCO Report lists a total of ten recommendations, of which the following should be underscored: strengthening cooperation among national, regional and local authorities; developing the Spatial Plan for the Plitvice Lakes National Park; completing the visitor management plan; effectively enforce regulation on water use and wastewater management; reducing traffic pressure; finalizing the new Management Plan for property through an inclusive and participatory approach (UNESCO, 2017: 2).

Based on these recommendations, UNESCO requested from the Republic of Croatia a report on the level of conservation of Plitvice Lakes National Park. In February 2018, the State submitted the Report to UNESCO, which was not disclosed to the public. However, it is evident that the main stakeholders concentrated on solving the most pressing problems, primarily wastewater treatment and the attempt to curtail the number of visitors. At the  $42^{\rm nd}$  session of the World Heritage Committee, UNESCO accepted the Report and sought a progress report for 2019, which will be considered at the World Heritage Committee's  $44^{\rm th}$  session.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> In light of the developments in the world related to the COVID-19 pandemic, it was decided that the 44th session of the World Heritage Committee, initially scheduled for 29 June — 9 July 2020 would be postponed to a later date (in June/July 2021).

#### **METHODOLOGY**

#### Basic Concepts

Most of the discussions of overtourism have proceeded since 2017. However, this does not mean that we are talking about a new phenomenon. Studies dealing with the pressure tourism brings to bear on local communities and resources have appeared since the 1970s, as have concepts tied to the phenomenon of mass tourism. A good example is the irritation index, a term coined by anthropologist Doxey in 1975 (Peeters et al., 2018). Citing this scholar, Pavlić and Portolan (2016), in the Encyclopedia of Tourism, provided the following definition: "the irritation index or Irridex is based on the understanding of local residents' attitude change toward tourists and tourism development in different stages of a destination's life cycle. Its different phases are primarily the consequence of tourism development in terms of its varying social, economic, and environmental impacts on the destination. This model assumes the resulting circumstances with negative socio-cultural impacts can lead to irritation in the local community. Its four stages of euphoria, apathy, irritation, and antagonism explain the deteriorating responses of the local residents to tourism development. During the first stage, the number of tourists is small and the local community welcomes tourism. In the phase of apathy, the number of tourists increases, and the relationship between tourists and residents becomes formalized. Irritation is the phase when residents become concerned about tourism due to significant growth of arrivals and increasing competition for resources. In the last stage, antagonism, tourists become responsible for everything bad that has happened in the host community." It may be stated that as long ago as the 1970s, it was recognized that "tourism destinations suffer from their own success" (Butler, 1980 as cited in Peeters et al., 2018, p. 25).

Overtourism is a social phenomenon and is discussed both as a concept and model. "Overtourism describes the situation in which the impact of tourism, at certain times and in certain locations, exceeds physical, ecological, social, economic, psychological, and/or political capacity thresholds" (Peeters et al., 2018, p. 22). This phenomenon affects: 1) the gentrification process, 2) declining local population; 3) protest movements; 4) loss of destination attractiveness; 5) loss of residence liveability; 6) mismatch between type of visitors and destination; and, 7) mismatch between groups of visitors (Peeters et al., 2018, p. 23). The same authors emphasize that overtourism is ultimately the result of tourism strategies focused on volume growth, as currently pursued throughout the world, and it mostly reflects residents' perspectives on tourism. In addition, overtourism develops when one or more of the ecological, physical, social, psychological or economic capacities in a destination is exceeded. In one word, overtourism is an "unsustainable mass tourism practice" (Milano, 2017 p. 5 as cited in Cheer, Milano and Novelli, 2019, p. 560).

The concept of undertourism actually emerged due to the excessive burden on individual tourism destinations, thus precisely due to the overtourism phenomenon. This concept implies the total natural and cultural heritage and other qualities of a given destination which is attempting to place itself in the function of tourism, for which it has a potential based on its scenic beauty, natural and cultural heritage and developed infrastructure. This concept therefore denotes a certain "idle capital" of individual destinations which are attempting to activate themselves with the help of carefully conceived developmental plans, creative economies and creative industries. Multiple destinations have activated undertourism messaging in recent years. "Oslo, for example, launched a campaign in 2017 that focused on 'rescuing' tourists from popular cities like Paris and bringing them to Norway's capital, where museums generally lack crowds, restaurant reservations are easy to secure, and public parks have plenty of free space" (Peltier, 2019 as cited in Bušljeta Tonković, 2019). This concept thus often exploits overtourism in other destinations as a reason for giving up on them. The emphasis is placed on those destinations which offer a high-quality and pleasant stay with equal opportunities for relaxation and entertainment. In the interest of promoting such "unfairly neglected destinations," marketing experts often toy with slogans such as "Sumatra is the new Borneo". Simply put, undertourism pertains to a tourism product outside of the tourist hotspots, simultaneously highlighting "alternatives that tourists didn't know they loved" (Peltier, 2019 as cited in Bušljeta Tonković, 2019). In this way, they open the possibility of developing sustainable tourism.

#### Methods

The proposed theme will be examined with the help of a methodology combining two scholarly fields — sociology and history — and it rests on the theoretical concept of integral sustainability. The objective is to present the phenomenon of overtourism through an interdisciplinary approach, that is, to highlight the negative processes that led to the current state of overtourism development and to consider a potential solution. By using the term bricolage here as well, we underscore the complexity of the processes which must be studied and analyzed, and the methods which must be employed. The presentation of the researched phenomenon here recalls the assembly of a mosaic made of different fragments and facets of reality. This ultimately results in a reconstruction of the picture of reality which, with the help of various means, methods and techniques, is completed into a unified insight (Denzin & Lincoln, 2005). The desk method will be used to gather and process already existing data and analyze available sources of literature (Rapley & Rees, 2018). After gathering and analyzing the basic data tied to historical events during the 19th, 20th and 21st centuries, statistical data tied to tourism indicators for the territory of Lika-Senj County and the Lika Region will be analyzed. With the help of these data, the basic features of Plitvice Lakes National Park's development were shown with emphasis on ecological-environmental capacity, physical-facility capacity, social-perceptual capacity, economic carrying capacity and psychological capacity.

The basic objective of the text is to use a presentation of overtourism in the territory of the Plitvice Lakes Municipality and National Park to highlight the potential of other parts of the Lika-Senj County and the Lika Region, which simply can be called the potential of Lika as an undertourism destination. The text sets forth from the basic premise that since its very establishment, Plitvice Lakes National Park never aspired to sustainable but rather mass tourism. As a result of such management, the Park has experienced the overtourism phenomenon, the consequences of which can be diminished by implementing the general idea of integral sustainability, that is, the concept of undertourism as part of sustainable tourism.

## RESULTS AND DISCUSSION

#### Historical Overview

The Plitvice Lakes are the oldest and largest Croatian national park, and simultaneously an eminent tourism phenomenon visited by over 1.5 million people annually for two basic reasons: 1) the exceptional wealth of plants and animals, 2) intense tourism activity which is present in over 30% of the Park's territory. These two elements are at odds with each other.

From the very beginnings of the development of proto-tourism in the territory of the former Austro-Hungarian Empire, the Plitvice Lakes acquired potent, almost mystical features. This primarily functioned to arouse the interest of adventure-seeking visitors, whose departure for an Edenic setting, imaginatively embellished as the 'devil's garden' (*Hortius Diavoli*), fostered a powerful drive to experience primeval nature and experience a brief mental and physical 'break' from the then increasingly intense impact of European urban life. These were anthropological processes actually aimed at the creation of a docile environment from an untamed wilderness (Gissibl, Höhler & Kupper, 2012).

The first tourist brochures, as well as accommodation capacity, speak to the fact that travel to the Plitvice Lakes was a journey full of adventurist challenges, but when visitors reached this place of "the border, triple boundary, demarcation between East and West," they were dismayed. The social class of the trailblazers of tourism at the Plitvice Lakes consisted of distinguished intellectuals, artists, politicians, nobles and wealthier citizens mostly from Zagreb, gathered in an important new civic association, the Society for the Beautification of Plitvice Lakes (Brlić, 2017; Brlić & Bušljeta Tonković, 2017). After some initial successes, that is, an increase in the number of tourist arrivals, the development of tourism activities in this area began.

<sup>&</sup>lt;sup>2</sup> The first tourists at the Plitvice Lakes in the 19th century could count on only a single house to accommodate them.

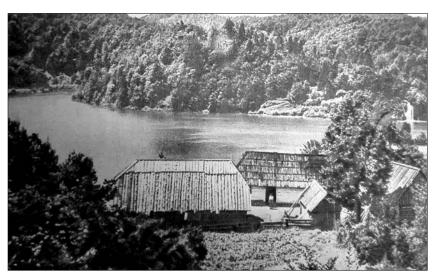


Figure 1 — The Beginnings of Tourism at The Plitvice Lakes, The Perišić Family at Lake Kozjak (Source: Šenoa, 1924: 20)

For scholars and scientists, this area had unquestioned importance for research and conservation, while most of the economic elite of the time saw an economic benefit, generally through the prism of their particular interests, while excessively stressing specific benefits that local communities would also have. The development of planned tourism at the Plitvice Lakes that would be available to the wider sectors of society began with this intention. The first construction plan for the Plitvice Lakes only appeared in 1928, and it was an attempt to enable the construction of tourism facilities, mostly for distinguished members of the Society for the Beautification of Plitvice Lakes, as well as certain wealthier local elite, all under the guise of 'peaceful tourism' (Ivanuš, 2010. p. 125).

Consequently, the number of visitors in the national park grew from the beginning of the 20<sup>th</sup> century onward, particularly thanks to the development of road and rail infrastructure, and economic benefits were no longer exclusively reserved for the Society's top officers. It became clear that the Plitvice Lakes were a tourism resource

<sup>&</sup>lt;sup>3</sup> Here it would be worthwhile to note two such examples. One is tied to Nikola Tesla and his involvement in the idea of exploiting the hydropower of the Plitvice Lakes. Tesla opposed this idea, even though it would have generated considerable power that would have certainly "illuminated" much of Croatia at the time. Another example is tied to the many instances of failure to observe legal provisions. Thus, until the beginning of the Second World War, excessive logging proceeded at the Plitvice Lakes, as well as fishing with the use of dynamite.

<sup>4</sup> One must certainly keep in mind, particularly when speaking of the contemporary phenomenon of overtourism in Plitvice Lakes National Park, that an essential distinction must be drawn between persons who are "only" visitors (one-day outing) and those who are tourists in the classical sense (arrival and at least one overnight stay).

with great potential, so that an increasingly higher number of private investors became involved in the construction of new accommodation facilities with the intention of increasing the number of tourists, and also extending their stay. Parallel to this growth in the number of visitors (Table 1), an idea that gained ground was that the area should be permanently protected such that the Plitvice Lakes are managed reasonably, taking into account the sensitive ecological system.

Table 1 — Number of Visitors at Plitvice Lakes, 1894—2018

(Source: Izvješće Društva za poljepšanje Plitvičkih jezera u Hrvatskoj / Report of the Society for the Beautification of the Plitvice Lakes in Croatia/, 1895. Vidaković, 1980, Izvješće o radu direktora i turističkog ureda TZO Plitvička Jezera 1.1. — 31.12. 2018 / Report on the work of the manager and tourism office of the Plitvice Lakes Municipal Tourism Board, 1 Jan. — 31 Dec. 2018/)

	1894	1927	1938	1960	1973	1996	2012	2018
Number of								
tourists, visitors	1,000	4,000	8,000	92,000	324,000	200,000	1.557,019	1.799,903
Number of								
overnight stays5	-	-	24,000	45,000	220,000	-	-	464,473

The onset of the First World War curbed the growth in tourist and visitor numbers. The process of protecting the Plitvice Lakes was thus prolonged for over 30 years (Brlić & Bušljeta Tonković, 2017). This was then followed by the new tourism guidelines of the Kingdom of Yugoslavia, which kept pace with European processes geared toward mass tourism. Namely, legal, economic and scientific assets were activated in an attempt to spur investment in tourism at Plitvice Lakes. Besides the existing accommodation capacity, new planned construction was launched in order to achieve two aims: the arrival of a higher number of (more well-to-do) tourists and extending the duration of their stay. These two tourism paradigms would remain crucial points of departure until the present. In the interwar period, tourism at Plitvice Lakes continued to grow, but so too did scientific research. It was in fact the research conducted by Ivo Pevalek and his commitment to the study of tufa, which slowed the growth of tourism to some degree, as it underscored the importance of preserving this natural phenomenon.

During the Second World War, the Plitvice Lakes area was the focal point of many conflicts. The Lika Partisan brigade gained strength in this area, and this unit played a key role in the liberation of the occupied territories and became a symbol of courage and protection of the political party leadership headed by Josip Broz Tito. It was precisely the intense tie between the Plitvice Lakes area and the People's Liberation Struggle that formed the axis for a different type of tourism — memorial tourism, which experienced an expansion at Plitvice after the construction of the Memorial Hall of the

<sup>5</sup> These data until the beginning of the Second World War pertain exclusively to accommodation in hotel and tourist units.

6th Lika Brigade in 1981 — that would develop there after the Second World War. 6 Parallel to the construction of luxury facilities for the political establishment, almost 700 hotel and motel rooms to accommodate tourists were also built at the Plitvice Lakes. 7

The latter half of the 20th century was perhaps the most important period in the development of the Plitvice Lakes. In 1949, the area was proclaimed a national park. Thus, a legal foundation was also created for further tourism development, but also the scientific validation of this region (Brlić & Bušljeta Tonković, 2017). This was followed by the intense elaboration of those economic and legal instruments that facilitated the development of tourism resources. Thus, in the 1950s the planned construction of the first large hotel complexes proceeded. The 1960s saw major construction and infrastructure projects that adhered to the new socialist development of Croatia as a whole, thus including the Lika Region that was home to the park. The 1970s were characterized as the glorious decade of tourism at the Plitvice Lakes. The National Park recorded a potent tourism boom at the time (see Table 1), under the leadership of a top expert, Petar Vidaković, in both economics and tourism. In 1979, the National Park was registered in UNESCO's World Heritage List.

Despite positive tourism statistics, certain problems surfaced which had their origin all the way back in the period preceding the Second World War. The first problem was tied to the pollution caused by the construction of roads and the volume of traffic. Namely, in the effort to improve links between the Plitvice Lakes and the rest of Croatia, the tufa phenomenon, the key element in the preservation of biodiversity in the Plitvice Lakes, came under threat. By subordinating all tourism activities to the financial bottom line without any concern for the pressure on the natural environment exerted by tourists, new problems soon emerged, and they were tied to the utilities infrastructure. The government of the time attempted to solve this by constructing tourism facilities (hotels, camps and restaurants) outside of the focal zone of the National Park itself. These facilities were, among other things, linked to the new trunk road. They also reinforced the tourism enterprise Plitvička Jezera, which became one of the economic drivers of Lika as a whole. However, the constant focus on the highest possible number of arrivals did not have a sufficient impact on the life and work of the local community, even though the company itself employed over one thousand people.

<sup>6</sup> Kljaić, S. (1980) "Spomen-dom 4. srpnja 1981.." *Lički vjesnik*. no.19. (654) 1 Nov. 1980, p. 2. It is interesting that this area also had great symbolic resonance during Croatia's Homeland War, so the Plitvice Lakes are also visited to commemorate that event as well.

<sup>7 ... (1953) &</sup>quot;Ipak će se graditi na Plitvičkim jezerima," Ličke novine. no.5, 103, 1953, p. 3.

<sup>8</sup> This problem is still relevant today.

<sup>9</sup> Kljaić, S. (1960) "Plitvice evropska raskrsnica," Ličke novine. no.18 (178) 15 Sept. 1960, p. 3.

<sup>10</sup> The communist authorities frequently extolled the Plitvička Jezera enterprise as one of the most successful developmental entities in Lika. "Što hoćemo." *Ličke novine*. no.1, 1 Jan. 1953, front page.

The development of the National Park did not significantly reduce migration from the Lika region. The economic and political crisis that ensued in the 1980s did not essentially change nor slow down the processes that continued at Plitvice, that is, the economic empowerment of the company, wide-ranging promotional activities, an extension of the season and attracting tourists from foreign countries. At the end of the 1980s, the number of visitors achieved its maximum, reaching 800,000 with over 500,000 registered overnight stays (Vidaković, 1980).

At a time of burgeoning nationalist aspirations, the Plitvice Lakes National Park became a key economic and geostrategic resource to covet. Thus, in 1990, the occupation of the Plitvice Lakes by Yugoslav and increasingly powerful Serbian military and political leaders began. Tourism simply became an alibi for increased military activity, all with the objective of creating a new Serbian enterprise with a new management team. The conflicts that culminated in the so-called 'Bloody Easter' also proceeded inside the company itself, and soon the National Park Management ceased to function entirely, as did any tourism activity.

During the period of occupation (1991—1995), tourist facilities were used to accommodate the Serbian military (Novinari — svjedoci vremena, 2013). Thus, the Plitvice Lakes National Park went from being an exclusive tourism resource under UNESCO protection to a military base. After the completion of Operation Storm, conducted by the Croatian army and police in 1995, Plitvice Lakes National Park once more came under Croatia's territorial sovereignty. Once UNESCO representatives were re-established, it was concluded that no serious ecocide had occurred. Many of the tourism facilities had been devastated, as had the remaining infrastructure, but the eco-system, specifically the tufa system, was no longer in jeopardy. However, as in the aftermath of World War II, this area had been ravaged by uncontrolled theft and destruction of property. One year after liberation, the situation had been entirely stabilized and the National Park began to receive its first post-war visitors. The number in that year reached a figure of 200,000 (Novinari svjedoci vremena, 2013, pp. 392-395). Over the past twenty years, Plitvice Lakes national Park has become an exclusive tourist destination which is annually visited by almost one in every ten tourists in Croatia. In the past several years, Plitvice has been dealing with the phenomenon of overtourism.

#### Seasonal Overtourism in Plitvice Lakes National Park

Plitvice Lakes National Park has been characterized as a day-trip destination. Taking into account the historical sequence of events described above, it is clear that over the past two centuries an imbalance in the dimensions of sustainable development occurred. It may be said that the economic and political dimensions were the central focus, while the environmental and socio-cultural dimensions were weaker. This is why Plitvice Lakes can still be described as a last-chance tourism destination (Cheer, Milano & Novelli, 2019). In order to more lucidly describe the processes that proceeded in the

territory of the Municipality and National Park, we shall employ the carrying capacity approach, naturally in the sense of an ideal-type concept compatible with the concept of integral sustainability and it's four dimensions — ecological, socio-cultural, economic and political. With the growth of the sustainable development concept since 1987, the key role of local communities was acknowledged. Thus, a revised carrying capacity concept included the role of local residents (Mowforth & Munt, 2003 p. 224, as cited in Peeters et al. 2018, p. 26).11

Ecological-environmental capacity refers to the level of tourism development or recreational activity beyond which the environment is degraded or compromised. The status of this component of the carrying capacity concept may be shown through the data on tourist arrivals in the Park.

**Table 2** — Number of Visitors in NP Plitvice Lakes 2013—2017 (Source: *Izvješće o radu direktora i turističkog ureda TZO Plitvička Jezera 1.1.* — 31.12. 2018. / Report on the work of the director and tourist office of the Plitvice Lakes Tourist Board 1.1. — 31.12. 2018)

Most frequent Months	2013	2014	2015	2016	2017	2018
July	252,558	217,569	257,102	274,503	334,081	313,254
August	314,614	292,221	328,294	346,248	384,886	370,067
Year Total	1,188,798	1,184,449	1,357,304	1,429,228	1,720,331	1,799,903

Data on the number of arrivals in the Park are also an indicator of seasonal overtourism, which is the most notable during the summer months (Table 2). Physical-facility capacity refers to the level of tourism development or recreational activity beyond which facilities are saturated, or physical deterioration of the environment occurs through overuse by tourists or an inadequate infrastructural network. The statue of this carrying capacity component is apparent through the problem of excessive construction, which is also noted in the UNESCO report (2017, p. 9) "Due to an increasing demand for accommodation facilities and opportunities for profitable business, the property is experiencing a rapid expansion of developments, with many former farmhouses and other buildings transformed and extended into tourism facilities such as private lodges, dramatically changing the landscape and the visual character of the property." This has been accompanied by a lack of adequate infrastructure, primarily the water supply and sewage networks. Due to the porous karst soil, wastewater seeps into the lakes and sources of potable water.

Social-perceptual capacity refers to the level reached when groups of residents of an area no longer want tourists because they are destroying the environment, damaging the local culture or crowding residents out of local activities. The status of this component is particularly apparent in the 2017 demonstrations staged by war veterans, who were the first to point out the environmental problems that the Park has not dealt with adequately since its very inception. Their demonstration was not aimed at tourists

as such, but rather at the political and economic elites whose main aims were concentrated toward their own economic benefits. The huge number of tourist arrivals and excessive construction were the instruments in their goal achievements. Thus, for example, the news portal Dnevnik.hr carried an article on 12 June 2017 under the headline "Veterans protest against 'apartmentization' of Plitvice," in which it states that "under the guise of economic development for the local population as well, the physical planning documents allow for the unregulated construction of accommodation capacity dictated by several outside developers who will stop at nothing" and adds that "such construction is not accompanied by the accompanying infrastructure, particularly water supply and sewage." 12

Economic carrying capacity refers to the ability to absorb tourist functions without squeezing out desirable activities. This concept assumes that any limit to capacity can be overcome at a cost — ecological, social, cultural or even political. Taking into consideration that every year the Park earns over 12 million Euro from the sale of admission passes alone, 13 and that its own annual revenues exceed 29.5 million Euro, 14 it is obvious that there are financial prospects for the sustainable and reasonable management of the Park's territory. However, sustainable management of the Park is not practical at this time, although there are aspirations to do so, particularly since the instalment of new management. Thus, the local population, often powerless before capital that comes in from the outside, call the Park "a state within a state, a county within a county, and municipality within a municipality." At this moment, we can see profit as an obstacle in the protection of nature and the protection of local communities from the process of overtourism. In resolving this problem, it must be borne in mind that "the call is not solely about expanding the visitor economy; the appeal is for tourism that strikes a balance between economic expansion, economic yield and protection of social and ecological inheritances" (Cheer, Milano & Novelli, 2019, p. 565).

<sup>11</sup> The components of the carrying capacity concept according to Mowforth and Munt, 2003: 224, as cited in Peeters et al., 2018: 26, will be elaborated using the example of Plitvice Lakes National Park.

<sup>12</sup> For more, see: https://dnevnik.hr/vijesti/hrvatska/prosvjed-5-do-12-branitelja-protiv-apartma-nizacije-plitvica-480477.html (accessed on 12 July 2019).

<sup>13</sup> The Slobodna Dalmacija portal, in an article posted on 15 September 2014, reported that "the proceeds from the sale of admission passes in 2013 were HRK 93,039,546.24." For more, see: https://www.slobodnadalmacija.hr/novosti/biznis/clanak/id/246684/najprofitabilnije-hrvatske-atrakcije-su-plitvicka-jezera-krka-i-dubrovacke-zidine-a-dioklecijanova-placa-im-nije-ni-blizu (accessed on 12 July 2019).

<sup>14</sup> Data taken from the document *Financijski plan za 2018. godinu s projekcijom za 2019. i 2020. godinu*. For more on this financial plan, see: https://np-plitvicka-jezera.hr/wp-content/uploads/2017/12/Financijski-plan-za-2018-godinu-s-projekcijama-za-2019-2020.pdf (accessed on 12 July 2019).

Psychological capacity refers to the individual's ability to cope with overcrowding. This capacity is exceeded when a resident and/or tourist is no longer comfortable in the destination area for reasons that may include residents' perceived needs to adapt their habits due to the overwhelming presence of tourists and/or perceived negative attitudes of the locals or other tourists by the a tourist, crowding of the area (traffic jams) or deterioration of the physical environment. State road D1, one of the busiest in Croatia, passes through the Park; it connects the country's interior with the Adriatic coast, which additionally underscores the existence of a problem even in this aspect. The Park's geo-transit location is outstanding, since it is accessible from all parts of Croatia within a time framework that, on the one hand, allows for one-day visits to the Park, but on the other hand, also stay overs for several days with supplemental tourist activities in other naturally attractive parts of the central Croatian Adriatic zone. Such ties between the Park and the rest of Croatia also contributes to the phenomenon of seasonal overtourism.

Individual ability to cope with overcrowding had fatal consequences in the Park. Namely, in the area with the highest concentration of tourists, that is, the pedestrian trails, over the past several years tourists, in order to separate themselves from the crowds and take 'selfie' photographs with the natural beauty in the background, have climbed on nearby crags, which is strictly forbidden. Several such exploits ended in fatalities, while others had to be rescued by the Croatian Mountain Rescue Service. Such events are explained by Cheer, Milano and Novelli (2019, p. 564) as follows: "the whole idea of a National Park is to enjoy nature in solitude — how can you do this when there are dozens of tourists milling around, taking photographs and talking loudly."

#### The Potential of Lika as an Undertourism Destination

In recent years, almost all Croatian counties (except Vukovar-Srijem) are showing an increase in the number of tourist arrivals (both domestic and foreign). In the context of the counties of Adriatic Croatia with well-developed tourism, Lika-Senj County also records significant results in tourist arrivals. In 2018, Lika-Senj County was visited by 789,330 tourists, of whom as many as 94.6% were foreign. 15 On the other side, it also may be concluded that only 4.9% of the tourists who visit Adriatic Croatia arrive in Lika-Senj County, which opens additional possibilities for sustainable tourism development planning. 16

<sup>15</sup> Data source: Tourist arrivals and nights in 2018, DZS (CBS), 2019.

<sup>16</sup> Lika-Senj County recorded 789,330 tourist arrivals and 2,749,230 tourist nights. Compared to its two neighbouring counties, Zadar County and Primorje-Gorski Kotar County, the figures for Lika-Senj County testify to a tourism sector which is in its initial stages of development and which (save for the Plitvice Lakes Municipality on the mainland and the town of Novalja on the island of Pag — see Table 3) does not rely on mass tourism. Data source: Tourist arrivals and nights in 2018, DZS (CBS), 2019.

Table 3 — Tourist Arrivals and Nights in Lika-Senj County In 2018 (Source: Towns in statistics, DZS /CBS/, 2019.)

		Total	Domestic	Foreign
Lika-Senj County	Arrivals	789,330	42,418	746,912
. ,	Nights	2,749,230	129,819	2,619,411
Towns				
Gospić	Arrivals	20,285	4,550	15,735
	Nights	32,575	10,110	22,465
Novalja	Arrivals	254,778	14,039	240,739
	Nights	1,603,840	73,921	1,529,919
Otočac	Arrivals	43,911	2,982	40,929
	Nights	54,517	5,089	49,428
Senj	Arrivals	86,733	5,123	81,610
	Nights	375,426	12,837	362,589
Municipalities				
Brinje	Arrivals	2,869	261	2,608
	Nights	3,066	339	2,727
Donji Lapac	Arrivals	375	154	221
	Nights	979	426	553
Karlobag	Arrivals	36,626	2,721	33,905
	Nights	195,451	7,494	187,957
Lovinac	Arrivals	1,408	572	836
	Nights	4,260	1,358	2,902
Perušić	Arrivals	1,476	361	1,115
	Nights	3,075	747	2,328
Plitvice Lakes	Arrivals	336,461	11,569	324,862
	Nights	468,475	17,340	451,135
Udbina	Arrivals	287	20	267
	Nights	590	36	554
Vrhovine	Arrivals	4,151	66	4,085
	Nights	6,976	122	6,854

The example of Plitvice Lakes in general reflects the problem of focusing a high number of tourists in a single, small, environmentally sensitive area, as well as the problem of retaining these tourists most often for only a single day. In 2018, Plitvice Lakes recorded 42.6% of all tourist arrivals in the Lika-Senj County, but only 17% of overnight stays. For comparison's sake, The town of Novalja recorded 32.3% of tourist arrivals in that same year, but 58.3% of all tourists' overnight stays where in Lika-Senj County (Table 3). These data also testify to the tourism importance of the National Park not only in the county context, but also at the level of Croatia as a whole.

If we concentrate only on data considering the Lika region <sup>17</sup> then we can see that the Plitvice Lakes National Park is the motor of tourism development for all of Lika. In 2018, Lika was visited by 412,068 tourists who accounted 576,126 overnight stays. If Plitvice is excluded, Lika was only visited by 75,637 tourists, who accounted for 107,651 overnight stays. In other words, Plitvice Lakes National Park accounts for 81.6% of all tourist arrivals and 81.3% of all tourist overnight stays in Lika, so it may be concluded that tourism in Lika should develop such that the excessive number of tourists in the actual zone of the Park is reduced by simply re-routing the surplus tourists to other tourist attractions in this region.

Based on the data presented thus far, it is apparent that Lika is dealing with the phenomenon of overtourism in the territory of the Plitvice Lakes Municipality and National Park, while at the county level it is also contending this phenomenon in the territory of the Town of Novalja. The remaining municipalities and towns in the County are attempting to exploit their role as undertourism destinations. These attempts are, however, still in their nascent stages.

#### CONCIUDING REFLECTIONS AND FUTURE RESEARCH PROPOSALS.

It may be concluded that the Lika-Senj County, concrete the area of Plitvice Lakes National Park, has the features of overtourism connected to a rural area. Specifically, it is a case of seasonal overtourism. In this paper, its characteristics and intensity have been shown via the carrying capacity approach. An overview of historical events and the presented and analyzed statistics back the assertion that overtourism is essentially the result of a developmental strategy that has virtually always had and still has (limitless) growth as its ultimate aim.

However, the data also speak in favour of sustainable tourism, which is a variant of undertourism — the other side of the overtourism coin. This also means that developmental dilemmas, if the potential they contain is recognized in time, may be partially reformulated and then contribute to the integral sustainability, in particularly sustainable tourism development.

Despite the urging from UNESCO, a study that would show the impact of tourism, or rather overtourism, on the dimensions of sustainable development (environmental, socio-cultural, economic and political) in the territory of Plitvice Lakes National Park and Municipality does not exist. Thorough research therefore has yet to be conducted. Tourism, as the most vital branch of the Croatian economy's tertiary sector, has the po-

<sup>17</sup> Lika is a traditional region that occupies most of Highland Croatia. The Lika Region refers to the inland towns and municipalities encompassed by Lika-Senj County (so excepting the towns of Novalja and Senj, and the Karlobag Municipality) and the Gračac Municipality, which is part of Zadar County (Southern Lika). It is worth noting that the Lika identity extends beyond strictly-defined administrative-territorial boundaries (Pejnović, 1994; Magaš, 2013).

tential to be the generator of economic (and, related thereto, demographic) revitalization of the entire Lika region. It would therefore be necessary to conduct comprehensive research into the tourism phenomenon and its developmental potential in the Lika Region and the entire County.

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# NEGOTIATING IN A VUCA ENVIRONMENT

#### A b s t r a c t

In view of the globalization of the economy, the increasing use of artificial intelligence, climate upheavals, technological advances, the introduction of disruptive business models, financial crises and frequent health epidemics are most likely contribute to the increasing complexity of negotiating business deals. To obtain a better understanding of the business environment they are operating in, negotiators can apply the VUCA concept (Volatility, Uncertainty, Complexity and Ambiguity). Negotiators can also refer to a new version of VUCA which the writer proposes that better serves the field of negotiation by considering Visualize, Understanding, Creativity and Adaptability. By taking the time to develop and continuously update this new VUCA model, negotiators will be in a stronger position to anticipate the future of their business as well as create value winning solutions.

Keywords: globalization, negotiation, business environment, VUCA concept

Globalization and the digital revolution are disrupting business operations in today's economy. Technological innovation and state of the art communication breakthroughs call for organizations to rethink their structure and capabilities to face new challenges in the digital economy. With greater transparency and an ever closely interconnected world, negotiations will become more demanding and technical requiring multidisciplinary expertise and cross-functional teams as well as greater access to in-company negotiation capability. These challenges call for critical skills both hard and soft ones adapted to sophisticated business models that were less important in traditional negotiations. Consequently, negotiators will be facing complex problem solving situations requiring innovative strategies, in-depth research and a creative mindset. Moreover, companies' competitive advantage in disruptive environments no longer comes from low cost or product differentiation but from new sources of revenue such as their ability to leverage emerging technologies or providing specialized solutions to customers.

As preparation is key to successful negotiations, it is critical that negotiators take the time to develop realistic strategies. Although negotiators have access to numerous preparation tools, no amount of preparation can overcome a faulty strategy. To ensure that the negotiation strategy takes into consideration both internal and external factors, they can consider an innovative management tool known as VUCA (Volatility, Uncertainty, Complexity, Ambiguity). VUCA was developed by the US Army in the 1990s to face extremely dangerous and unpredictable enemies and has been adopted by businesses as a management tool since they too face disruptive political and economic instability.

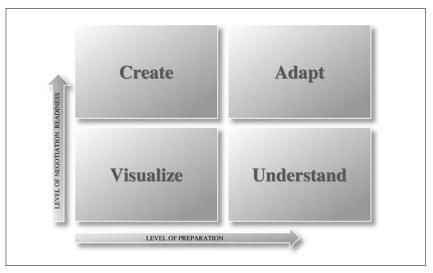


Figure 1 — Modified Negotiators' VUCA

# THE NEGOTIATOR'S VUCA

To improve their readiness to negotiate mutually beneficial outcomes, negotiators should have an overall view of the forthcoming discussions by applying a modified VU-CA (Visualize, Understand, Create and Adapt). As negotiations do not take place in a vacuum but in a dynamic, competitive and disruptive global setting situation, negotiators can extend their understanding of the external/internal business environment influencing their operations by carrying out a VUCA analysis. The negotiators' VUCA consist of the following key variables:

- visualize the negotiated agreement to ensure that it will be doable, profitable and sustainable:
- understand the constantly changing environment and take into consideration the increasing importance of special interest groups and new types of competitors;
- create value by developing multiple options including intangibles enabling a client to claim added value;
- adapt and rethink the client's business model and innovate/promote the client's products/services in a rapidly globalized digital economy.

By taking the time to fully develop and continuously update the 4 key VUCA variables as shown above, negotiators will be in a stronger position to anticipate the future of their business as well as create new opportunities leading to value creative solutions. While applying the modified VUCA model, negotiators need to pay special attention to the human factor by building trust among the parties particularly in crosscultural negotiations.

# VISUALIZE THE NEGOTIATED AGREEMENT FROM THE OUTSET

To prepare effectively, negotiators need to imagine what the negotiated agreement will contain. Once the objectives are established, negotiators can start developing problem solving strategies and appropriate tactics. In addition, they select the best persons to participate in the discussions, set reservation limits and take into consideration the potential role of third parties among others. Having completed this preliminary research, negotiators can best target their preparation by finding out what is important to the other side enabling them to identify common ground that can be mutually advantageous. Besides obtaining authority from senior management to negotiate, they have to carry out internal and exernal discussions to obtain the support of the persons concerned with the negotiated outcome through building coalitions to prevent eventual conflicts. At this phase of preparation, negotiators' capacity to think outside the box can lead to new opportunities by expanding the zone of potential agreement. Whatever strategy is applied it is necessary to re-examine it during the negotiations as changes do take place in today's interconnected global economy.

# UNDERSTAND THE INCREASING INFLUENCE OF INTERESTS/PRESSURE GROUPS

In addition, the role of multi-stakeholders' interests need to be taken into account as they are increasingly influential in negotiations. For instance, more and more products and services are subject to stricter standards by government authorities, international organizations such as the International Standards Organization, the European Union and pressure/interests groups concerning environment, intellectual property, data security, privacy and human rights among others. For example, the recent renegotiated trade agreement between the United States and Mexico includes provisions concerned with standards to protect intellectual property, trade secrets, labor requirements as well as several environmental obligations (USA TODAY, August 27, 2018).

This tendency reflects rising concerns by the public for human rights, safety standards, climate warming, deforestation, corporate social responsibility, governance, use of pesticides, and protection of bio-diversity among others. In recent years, various groups have protested against the deforestation of the tropical forest for the production of palm oil. These groups have encouraged manufacturers to switch to other vegetable oils or to deal only with suppliers adhering to rigorous sustainable sources. Increasingly, these groups insist on accountability, transparency and in some cases traceability. With more third parties/external groups concerned with their own goals and priorities, negotiators have to devote more time to preparation, consultations and communications with them to reduce potential disagreement.

When negotiators are faced with pressure groups, it is best to recognize their interests, acknowledge their concerns and listen to their views, showing empathy and encouraging the development of a working relationship based on mutual trust. Both parties can create mutual beneficial solutions by having open communications and a willingness to work together to resolve their differences. For example, George Mitchell, the US special envoy, was able to reach the Good Friday Pact in 1998 in Northern Ireland after decades of conflict by listening to both sides and displaying patience and empathy throughout the negotiations that lasted over 2 years.

# CREATE ADDITIONAL VALUE FOR MUTUAL GAINS

Due to the Internet and the development of new digital technologies, organizations are now able to access real-time data enabling their negotiators to develop better-informed strategic decisions. As knowledge is power, negotiators with the latest available data will be capable to prepare effectively and faster. This requires each party's ability to extract what information is relevant and how it can contribute to the development of the negotiating strategy. Only firms having the financial and human resources to collect, analyze and translate the latest information will be able to prepare winning strategies. Negotiators from data-oriented cultures are likely to have an advantage when researching and analyzing information to develop their negotiation strategies. While the Internet provides vast amounts of data in a matter of a second, it is difficult to be sure how much is truly accurate, thereby negotiators must check data sources with appropriate subject experts and rely on their own experiences. The other aspect is the hackers and breaches that occur, hence digital interaction needs to be carried out carefully particularly in Europe where general data protection regulation (GDPR) laws are extremely strict regarding any information such as research and development, pricing, terms and conditions, intellectual property rights and so forth should not be discussed digitally.

# ADAPT TO A DISRUPTIVE AND COMPETITIVE BUSINESS ENVIRONMENT

In a highly disruptive and competitive environment, negotiators displaying flexibility, adaptability and improvisation while interacting with the other party can open new opportunities and expand the zone of potential trade-offs. In view of the rapid changes taking place in the global economy, negotiators should spend more time to their future cooperation rather than talking of the past as the past may be less relevant in today's business environment. Another challenge for negotiators is their ability to manage stress in view of increased global competitiveness, better-informed counterparts and pressure from stakeholders seeking optimum outcomes. Ideally, negotiators having both technical and people skills (or access to such skills) are most likely to continue to outperform those with only technical skills.

Despite the fact that digital technologies are transforming how businesses operate, negotiators will continue to do what they know best — negotiate. Furthermore, they will need to network with other functional experts due to the increasing technical and legal aspects of global business deals. Knowing how to negotiate with generic types of negotiations is no longer sufficient. Specialization is becoming necessary. For example, negotiators need to master how to negotiate with supply chains networks, mergers and acquisitions, intellectual property rights and intangibles among others. To negotiate successfully in a disruptive environment, negotiators need to be more proactive, flexible and creative to reach their goals. Knowing how to handle security is becoming a key issue in future contract negotiations. Moreover, negotiators will be required to perform multitasks with a wide range of technical and social skills depending on the nature of negotiations, the existence of a relationship if any and the environment in which the discussions are taking place. In addition, they will need to adapt to constantly changing business circumstances due to unexpected events such as the Coronavirus pandemic that is disrupting the global economy and accelerating further digital integration into business practices and modes of operations.

# CONCLUSION

Due to advances in digital technology, businesses are revising their business models and modes of operations while taking into account entries of new competitors as witnessed by the entry of Tesla that is disrupting the automobile industry. Exponential technologies are creating new products, services and business models at an accelerating rate at a time. When doing business on a global scale it is not only getting more competitive but complex in a volatile setting. By applying the modified VUCA as proposed in this paper, negotiators can increase their level of preparation and their bargaining power while improving their chances of reaching superior outcomes. Furthermore, negotiators will be working under stressful conditions and time pressure due to increasing uncertainties and ambiguities in the marketplace. In fact, organizations operating in the digital globalized economy need to constantly re-examine what business they are in.

The transition to a digital economy requires negotiators to become increasingly data-oriented and informed about new developments, trends and business practices. Moreover, negotiators have to be sensitive to cultural diversity and third parties' interests. Cross-cultural negotiation skills are becoming even more important due to the emerging of new trading nations on the world stage. In fact, communication technology and sophisticated logistics have erased geographical isolation, enabling newcomers to enter the global economy bringing with them their cultural customs, values and ways of doing business. Too often, difficulties arise when negotiators from opposite cultures fail to reach agreement due to cultural myopia, stereotyping or from a lack of effecti-

ve communication that can lead to costly blunders. Although cross-cultural skills are important, the negotiators' background and experience are more critical than those based on stereotype averages.

In the near future, the increasing use of digital communications in negotiations should not replace face-to-face interaction but rather complement it. By building social capital with their counterparts, negotiators can ensure to maintain trust and strengthen personal relationships leading to beneficial and lasting outcomes. However, access to digital technology can be of limited value unless there is basic trust between the parties. By applying the modified negotiators' VUCA model, negotiators should be better prepared to face new realities in the post COVID-19 pandemic. This modified VUCA encourages negotiators to be forward looking, dynamic, and constructive. Finally, cross-cultural, technical, ethical issues and digital technology will increasingly influence global business negotiations.

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# THE ROLE OF THE MEDIA IN ENVIRONMENTAL COMMUNICATION: REPRESENTATION OF THE LEX LNG IN CROATIAN DAILY NEWSPAPERS

# Abstract

Lex LNG (LNG Terminal Act) was adopted on 14 June 2018 despite the fact that it has caused a whole series of controversies. Croatian media has intensively written about the conflict of interest of the authors of the Lex and warned that a floating LNG terminal on the Croatian island Krk is not mapped in the spatial plan of the county. Croatian journalists were pointing to disputed property and legal relations and emphasized an extremely long maritime concession period for low concession fees, as well as a series of open environmental questions and the questionable public interest of this project. Given the fact that the media in environmental communication according to Cox (2010) have a pragmatic (informative and educational) and constitutive role (construction and representation of environmental attitudes as subjects of knowledge), this paper analyses media representations of the Lex LNG and explores the pragmatic and constitutive role of the media in environmental communication. A qualitative and quantitative analysis of the content of the articles from Večernji, Jutarnji and Novi list as well as Slobodna Dalmacija was conducted from mid-January to mid-July 2018 on the topic of the LNG terminal on Krk. In total, 58 articles were analysed. Particular emphasis was on the setting of the media's agenda, the ability or power of the media to focus the public's interest towards certain political, economic and social problems and give them meaning. The results of the research showed that Croatian dailies did not seize the opportunity for constitutive coverage of this topic, which may indicate the general orientation of these newspapers towards pragmatic functions in the field of environmental communication.

Keywords: Lex LNG, environmental communication, media, agenda setting

Lex LNG is a colloquial name for the Liquefied Natural Gas Terminal Act, which was adopted on June 14, 2018, in the Croatian Parliament. The first indications of such an Act appeared in the Croatian media at the beginning of the 2018, that is, in mid-January, when the Ministry of Environmental Protection and Energy launched a public consultation on a preliminary assessment form for the Liquefied Natural Gas Infrastructure Act. The Ministry claimed that this Act would resolve the issuance of a concession for

<sup>1</sup> https://www.sabor.hr/hr/prijedlog-zakona-o-terminalu-za-ukapljeni-prirodni-plin-s-konacnim-prijedlogom-zakona-hitni (4. 11. 2020.)

<sup>&</sup>lt;sup>2</sup> https://esavjetovanja.gov.hr/ECon/MainScreen?entityId=6812 (4. 11. 2020.)

the project of the liquefied natural gas terminal on the island Krk and accompanying infrastructure, as well as property-legal issues (ibid). In January 2018, the Government of the Republic of Croatia declared the construction of a liquefied natural gas terminal on the island of Krk a strategic project in the interest of the Republic of Croatia.3 Lex LNG has been highly criticized in the media and the political public from the very beginning, even before the text of the Act was written. However, despite the fact that this Act has caused a number of controversies, Lex LNG was finally adopted in mid-June. Amongst other controversies, Croatian media and politicians warned that the authors of the Act have a conflict of interest and that a floating LNG terminal is not included in the spatial plan of the Primorsko-Goranska County. They also emphasized disputed property relations, an extremely long concession period for the maritime for low concession fees and a number of open environmental issues. However, although the Members of Parliament (MPs) from the Social Democratic Party of the Republic of Croatia (SDP) submitted an extremely large number of amendments to this Act (360 out of 380 amendments), Lex LNG was adopted with 77 votes "for" and 25 votes "against". 4 As the Croatian parliament has 151 members, this controversial act passed with a very weak majority of votes.

Digital extensions of Croatian daily newspapers with national coverage wrote about this topic from the beginning of the year 2018. This paper is based on a quantitative and qualitative analysis of the Lex LNG media content in the digital extensions of Croatian dailies Jutarnji list, Večernji list, Novi list and Slobodna Dalmacija, and examines the pragmatic and constitutive role of the media in environmental communication. The research covers the period from January to July 2018, that is, the period from the first announcements of this specialized act until one month after its adoption. The research sample focused on articles with the topic of the special Liquefied Natural Gas Terminal Act on the island Krk. A total of 58 articles were included in the research. This paper is divided into four parts: introduction, theoretical frame of environmental communication, research results and conclusion.

# THEORETICAL FRAME OF ENVIRONMENTAL COMMUNICATION

Unlike earlier periods in history, today's world "is characterised both by an information overload", but also "by an acceleration of the pace, scale, and intensity of environmental problems" (European Environment Agency, 1999, p. 4). Environmental communication models have been discussed for decades with the aim to create and implement a unique model that will be a "real tool" for understanding environmental issues / pro-

<sup>3</sup> https://vlada.gov.hr/vijesti/lng-terminal-na-otoku-krku-strateski-je-investicijski-projekt-vazan-za-energetsku-neovisnost-hrvatske/25211 (4. 11. 2020.)

<sup>4</sup> https://www.sabor.hr/hr/prijedlog-zakona-o-terminalu-za-ukapljeni-prirodni-plin-s-konacnim-prijedlogom-zakona-hitni (4. 11. 2020.)

blems / challenges, where "adequate, fast and accessible communication networks" are truly "essential for the improvement of the environment and sustainability standards" (European Environment Agency, 1999, p. 32).

Blewitt (2017, p. 387) emphasizes that the media significantly influences public perception of environmental issues because the media allow us to "actively shape our understanding of the world beyond our immediate experience" and it "directs us toward the world in which we live". From the 1970s, media communication theorists claimed that the media could set an agenda (McCombs & Shaw, 1972). Agenda setting is the ability or power of the media to focus on the interests of the public by certain political, economic and social issues to which they give meaning and significance. Cohen's statement predicted "the press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about" (1963, p. 13), and this gives the media tremendous power and influence. Although the media should convey information objectively and truthfully, the fact is that the ways in which the media deal with certain topics are very often ideologically contextualized. The audience today is aware of the ideological contextualization of the media, so Inglis (1997, p. 194) warns that we perceive any text as "potentially ideological" or even hegemonic because "a newspaper report can be strictly ideological and in that sense untrue". The way in which different media report on the same event often indicates different ideological or interest positions of those media. As environmental issues are often opposed to economic and political interests of powerful groups, environmental topics are highly politicized media topics (Luedecke & Boykoff, 2017). An almost school example of this statement is the global media debate about climate change. Opposition of different political ideologies and the strong influence of economic interests characterize the discourse regarding climate change (Luedecke & Boykoff, 2017). Many professional and scientific articles, as well as books, dealt with climate change narratives in traditional mass media, but also in new media, which, unlike traditional ones, is strongly marked by the possibility of two-way communication, that is, communication from many senders to many recipients, and vice versa. Nisbet and Newman (2015, p. 370-371) emphasize that "in complex policy debates such as those over climate change" some prestige traditional media such as The New York Times and Washington Post "have cut back on news coverage of climate change (...) allowing advocacyoriented media outlets and commentators to fill the information gap". More precisely, careful reporting on the technical details of science and policy have been "replaced by morally framed interpretations" in digital media that "often dramatize and distort the risks related to these issues" (ibid). Such media content does not help initiating an argued media debate that is necessary for real social change.

Very often, researchers' interest was on agenda setting and the framing of environmental issues. For example, Ader (1995, p. 300) claimed that similarly to other types of agenda setting research, environmental agenda setting research also follows the

lead "of examining the relationship between the results of quantitative content analysis of issues in the media and surveys of the public's issue agenda". She also emphasized that environmental media research "have examined the relationship between the public policy agenda, the media agenda, and the public agenda", but lack in "examination of the real-world condition of the agenda item" (ibid). When it comes to environmental media framing, Lakoff (2010, p. 76) argues that one of the biggest shortcomings of environmental communication is "hypocognition", or "the lack of ideas". The reason for such "hypocognition" is our lack of understanding of the environment. He claims that "the environment is not just about the environment", as environment is "intimately tied up" with "economics, energy, food, health, trade, and security" (ibid). These multidisciplinary overlaps "lack frames that capture the reality of the situation" (ibid) which are necessary as a basis for environmental cognitive policy in addition to environmental material policy (79). Lakoff (2010, p. 80) argues that "successful social movements require the coherence provided by coherent framing" and he suggests that the main environmental media frame should follow this sentence: "The natural world is being destroyed and it is a moral imperative to preserve and reconstitute as much of it as possible as soon as possible" (ibid). Similar to Lakoff, Nisbet and Newman (2015, p. 361) warn, "Members of the public rely on frames to make sense of and discuss complex environmental issues".

The narrative of the failure of environmental communication in encouraging the necessary social changes aimed at the implementation of sustainable development dominates in the works of theorists and researchers of environmental communication. The vast majority of papers dealing with environmental communication are motivated by finding effective communication models that will be an important, or even the most important instrument for initiating sustainable social change. This is evident, for example, from the report named "A New Model of Environmental Communication for Europe from Consumption to Use of Information" in which "the traditional communication model" and "an alternative model of environmental information exchange" are opposed. The main difference between the traditional and alternative model is "in terms of its effectiveness to induce cultural change towards sustainability" (1999, p. 1). The alternative or new model is "based on interactivity, participation, plurality of sources and opinions, different representations of reality, and elimination of space, time and variability constrictions" (ibid). The alternative or new environmental communication model uses new technological supports, has new and different representation of knowledge, and offers to society a review of the contents (ibid).

On the other hand, Peeples (2015, p. 39) explains the differences between the American (rhetorical criticism) and European (discourse analysis) models of environmental communication that are less occupied with environmental facts, "but rather focus on understanding how communication functions pragmatically and constitutively". According to Peeples, rhetorical criticism, "is primarily used to explain how communi-

cation functions through the analysis of symbolic acts and artefacts, broadly referred to as the "texts". Discourse analysis has reach that is more extensive, "spanning humanist, critical/cultural, and social scientific perspectives". Peeples (2015, p. 46) concludes that both models "explore the use of symbols and explain how those symbols function within the particular context, often illustrated through a case study". However, rhetorical criticism focuses on "the use of symbols for persuasion", how "to influence the 'audience's' actions and attitudes through tactics such as identification". On the other hand, discourse analysis "explains how larger social systems manifest themselves in a particular text — a macro level of analysis". According to Cox, as the media in "environmental communication" have a pragmatic (informative and educational) and constitutive role (building and representing attitudes about the environment as a subject of knowledge), rhetorical criticism focuses on a pragmatic and discourse analysis on a constitutive role or function (2010, p. 36-37). Cox claims that environmental communication is a symbolic medium that is used to build an understanding of environmental problems, but also to agree on different social responses to them. Cox argues that pragmatic function means educating, warning, persuading, mobilizing, and helping to solve environmental problems. Cox illustrates the pragmatic function of environmental communications with the example of carmakers' media campaigns against higher standards of emission fuel. A good example of pragmatic environmental communication is when an environmental group has a campaign to protect wilderness areas. This communication focuses on specific, isolated cases.

The constitutive function helps to define certain environmental issues as problems. Constitutive communication connects universal values with environmental problems and thus helps audiences to build a representation of the challenges related to sustainability, nature and the environment as objects of cognition (ibid). Cox illustrates constitutive function with the illustration of climatologists who warn of turning points, or points of no return. "They are naming a threshold beyond which warming "could trigger a runaway thaw of Greenland's ice sheet and other abrupt shifts such as a dieback of the Amazon rainforest" (Doyle, 2008, acc. Cox, 2010, p. 22). Many scholars accepted Cox's division of the two main functions of environmental communication, making it the best available model for environmental media content analysis.

# research and discussion of the results

Natural gas is the most environmentally friendly fossil energy source but gas combustion and transport have negative effects on the environment and climate, and the construction of LNG terminals is also invasive towards space. Although the scale of the LNG terminal project is not comparable with the topic of climate change, the construction of the LNG terminal is a project with strong environmental dimension and as such is potent material for highly politicized media interpretation. This is visible from the

media content of the Croatian dailies that were writing about Lex LNG in the first half of 2018 when this specialized Act was discussed and adopted. As it was previously mentioned, the research focused on articles about the Lex LNG from Jutarnji list, Vecernji list, Novi list and Slobodna Dalmacija. The articles were selected according to the keywords Lex LNG and the Liquefied Natural Gas Terminal Act in the period from the begging of January until the end of July 2018. A total of 58 articles were included in the research. Research methods consisted of the quantitative and qualitative analysis of the content of the selected media articles. The analytical matrix included the following elements: number of articles, authors of analysed articles, dynamics of publications, media genres, value orientation of articles and article topics. List of analysed articles is available at the article appendix. The first table shows that Večernji list presented the most, and Slobodna Dalmacija the least interest in this topic.

**Table 1** — Number of articles (58 total) (Resource: author's research)

Newspaper	Number of articles
Jutarnji list	15
Večernji list	23
Novi list	17
Slobodna Dalmacija	3

The second table shows who the authors of the analysed articles were.

**Table 2** — Authors of Articles (Resource: author's research)

Newspaper	Author
Jutarnji list	Boris Orešić (Globus) — 2
	HINA — 6
	Željko Trkanjec — 1
	Jutarnji.hr — 3
	Jasmina Trstenjak — 2
	Robert Bajruši — kolumna — 1
	Luka Benčić — 1
Večernji list	Josip Bohutinski — 3
	Marina Šunjerga — 2
	Tea Romić — 5
	Srđan Hebar — 1
	Borislav Ristić — kolumna — 1
	Ratko Bošković — kolumna — 1
	Mate Mijić — kolumna — 1
	Zvonimir Despot — kolumna — 1
	Tomislav Krasnec — 1

	HINA — 6
	Poslovni dnevnik -1
Novi list	HINA — 7
	P. N. — 3
	Jagoda Marić — 1
	Tihana Tomičić — 2
	Marinko Glavan — 2
	Damir Cupać — 1
	Andrej Petrak — 1
Slobodna Dalmacija	Višnja Starešina — kolumna — 1
	HINA — 1
	Jutarnji list — 1

From this table it is evident that not one of the journalists from the analysed dailies was specialised for the topic. Only one journalist from Večernji list, Tea Romić, has written five articles about Lex LNG. As Tea Romić is a journalist who follows the work of the Parliament, that is, she is the rapporteur of Večernji list for the Parliament, this is not a big surprise. As many as 20 analysed articles were taken from HINA, the Croatian news agency; this also indicates that the analysed media did not give fundamental importance to the topic, that is, they did not build an agenda through strong authorial articles. However, Večernji list had the biggest number of comments so it can indicate agenda setting ambition.

The third table presents results of the dynamics of the publication of the articles.

Month 2018 Slobodna Dalmacija Jutarnji list Večernji list Novi list lanuary February 3 3 3 March 7 7 1 1 1 April 2 4 May 6 7 1 lune 6 July 1 15 23 17 3 In total

**Table 3** — Dynamics of the Publication of Articles (Resource: author's research)

Jutarnji list and Večernji list wrote most intensively about Lex LNG in March. In early March, the Commission for the Evaluation of the Environmental Impact Assessment issued an opinion that the project is environmentally friendly, so media lobbying and protests marked March (16 articles). Večernji list wrote on this topic intensely also in May (6) and June (6), because the Act was adopted in mid-June, and in May

the media lobbying activities of both opponents and proponents of the project were visible. All newspapers showed interest in this topic in June (15 articles), the month when Lex LNG was discussed and adopted. One month after adoption, only Jutarnji list showed interest in the topic.

The fourth table presents the distribution of media genres.

Genre/form	Jutarnji list	Večernji list	Novi list	Slobodna Dalmacija
News	6	6	8	1
Report	2	3	7	/
Reportage	3	3	2	1
Notice	1	5	/	/
Interview	2	2	/	/
Comment	1	4	/	1
In total	15	23	17	3

**Table 4** — Media Genres (Resource: author's research)

Of the 23 texts published in Večernji list, four are comments. Večernji list took over from Poslovni dnevnik an interview with the Russian ambassador Azimov, and also published an interview with Barbara Dorić, director of LNG Croatia. Of the 15 texts published in Jutarnji list, only one is a comment. The texts signed by Boris Orešić were originally published in Globus. One text from Globus is an interview with lawyer Davorin Cmrečki and the other is a report. Jutarnji list also published an interview with the US Ambassador Kohorst. As far as Novi list is concerned, author's articles dominate, 10 or 59% of them. Others are taken from HINA. It is interesting that Novi list does not have a single comment dedicated to Lex LNG, although this topic could be considered as important for Novi list. Slobodna Dalmacija has only one author's text dedicated to Lex LNG, but that text is a comment, the other two are from HINA and Jutarnji list, which indicates the newspaper's lack of interest. Večernji list is more interested in this topic than Novi list and Jutarnji list, and four comments indicate that Večernji list showed the biggest interest for agenda setting on this topic. The treatment of this topic in Večernji list is the most complex because of predominate complex journalistic forms. Jutarnji list has 53% of news and reports that belong to less complex journalistic forms.

The fifth table presents value orientation of the articles towards the project and consequently towards the Lex LNG.

	Jutarnji list	Večernji list	Novi list	Slobodna Dalmacija
Pro LNG	4	6	1	2
Contra LNG	3	9	13	/
Neutral	8	8	3	1

**Table 5** — Value Orientation of Articles (Resource: author's research)

Numerically, negative articles dominate (25), follow neutral ones (20), and the least are positive ones (13). Hanza media group can be considered as pro Lex LNG as Slobodna Dalmacija and Jutarnji list are in favour of Lex LNG. Novi list does not have a single comment dedicated to this topic but dominate news and reports that are mainly negative (13), are very rarely positive (1) or neutral (3) towards the LNG terminal. From the value orientation analysis it is visible that Jutarnji list is pro (4) and neutral (8), and Novi list is contra the floating LNG terminal. As the content of more complex media genre articles in Jutarnji list is pro the project, the policy of Jutarnji list towards the LNG terminal can be valued as positive. Although there are more negative (9) than positive (6) and neutral (8) articles in Večernji list, it is interesting that out of their four comments, only one, that of Ratko Bošković, is against the project. Bearing in mind that the position of the newspaper's policy towards a project can be read more precisely from the position taken in the comments, despite the large number of negative articles about the project, the policy of Večernji list can be considered neutral towards the LNG project and Lex LNG. Slobodna Dalmacija out of three articles has two positive, and one neutral article so it can be concluded that this newspaper is pro the LNG project.

The last table presents topics of analysed articles.

**Table 6** — Articles Topics (Resource: author's research)

Topic	Jutarnji list	Večernji list	Novi list	Slobodna Dalmacija
Lobbying pro	1	5	1	1
Protests and lawsu	its			
against Lex LNG	5	6	10	1
Lobbying contra	1	4	3	/
Interviews with				
ambassadors	1	]	/	/
Gasfin and LNG	4	1	/	/
Decision of				
the EIA Commission	n 1	/	/	/
Inconsistency of op	position			
towards project	1	/	/	1
Government and L				
content and voting	1	5	3	/
Jakovčić's proposa	1			
for LNG	/	1	/	/
In total	15	23	17	3

Jutarnji list and Slobodna Dalmacija criticize the SDP's volatility towards the LNG terminal. The analysis of the articles shows that Jutarnji list gives more space to the presentation of the views of the United States and Večernji list to those of the Russian ad-

ministration. The United States strongly advocates the realization of the project, while Russia expresses reservations. In Jutarnji list, Gasfin is portrayed as an extended arm of Russian gas interests. In one of the four articles about Gasfin in Jutarnji list, the company is accused of being the financier and initiator of the protests of civil associations against the project. Večernji list, on the other hand, claims that the say-so regarding Russian capital behind Gasfin is fake news. Novi list gives the most space to the presentation of the views of the opposition. Novi list lacks criticism of SDP's fickle policy towards the LNG terminal. The emphasis of all articles is on the political dimension of the project. No article has a constitutive function, so it does not help the audience in building a representation of the challenges related to sustainability and environment as objects of knowledge. The articles do not refer to the climate change argument and the necessity of turning towards a low-carbon energy future. In the articles from Jutarnji list, dominate legal, economic and political arguments for the realization of the project are presented, which is especially evident from the interview with lawyer Cmrečki. Jutarnji list rejects environmental arguments. Novi list predominantly presents the views of the project's opponents, but these views are primarily based on political, legal and economic arguments, and only marginally on the environmental one. In its comment, Slobodna Dalmacija criticizes SDP, for its political inconstancy, and openly advocates for the realization of the project as an extremely important geostrategic project. It is interesting that the word protest is often mentioned in the analysed articles, as many as 57 times. The protests are predominantly related to the protests of the citizens of Krk and activists of environmental associations, but also to the protests of the opposition, predominantly the SDP, but also Most and Živi zid.

From the previous analysis of the media content whose topic is the Lex LNG, the thesis that environmental communication causes high politicization is true. Opposition of different political ideologies and the strong influence of economic interests characterize the discourse regarding the LNG terminal project, and consequently the Lex LNG. From the media content analysis it can be concluded that Hanza media group newspapers, Jutarnji list and Slobodna Dalmacija, advocate the interests of the Government or of the powerful energy lobbies associated with the Government. In geopolitical terms, the very negative attitude of these publications towards Russian politics and Russian energy interests is visible. Jutarnji list does not refrain even from accusations that Russia is spreading fake news. Their sympathy for the US administration and US energy interests is evident not only from the interview with the US ambassador, but also from the content of the analysed articles. For example, from the comment of Višnja Starešina in Slobodna Dalmacija, and from the interview with lawyer Cmrečki in Jutarnji list. On the other hand, Večernji list is trying to take a more objective position towards geopolitical energy interests that is evident from the interview with the Russian ambassador and the media space given to Gasfin, but at the same time from the interview with Barbara Dorić, director of LNG Croatia and the fact that three of the four comments are positively oriented towards the realization of the project. From the analysis of articles from Novi list, one can read the opposition's political discourse, especially in advocating the point of view of the strongest opposition party, the SDP. The dominant negative contextualization of the project and Lex LNG indicates the bias of this newspaper.

The way in which the analysed digital extensions of Croatian mainstream newspapers deals with this topic confirms the attitudes of theorists towards whom careful reporting on the technical details of science and policy have been "replaced by morally framed interpretations" in digital media that "often dramatize and distort the risks related to these issues" (Nisbet & Newman, 2015, p. 370-371). The thesis regarding the lack of "examination of the real-world condition of the agenda item" of Ader (1995, p. 300) is also confirmed, more precisely the lack of interest from analysed dailies towards agenda setting for this topic could be the result of their inability to examine the real-world condition of the agenda item. This is connected with "the lack of ideas" (Lakoff, 2010, p. 76) in the analysed articles that are necessary for efficient framing in environmental communication.

# CONCLUSION

In conclusion, all analysed articles have a pragmatic function. Their aims are to warn, persuade and mobilize the public towards the acceptance or rejection of the LNG terminal project. The educational element of the pragmatic function is marginally present, and argumentation is oriented towards political, legal and economic issues, far less towards environmental ones. The analysed articles from Jutarnji list point to less objectivity and greater pro-governmental interests. Večernji list's comments indicate something similar, but the overall review of the articles indicates greater objectivity from this newspaper. Večernji list considers this topic more important, this demonstrates Večernji list's indications of agenda setting. The analysis of the texts from Novi list indicates a negative contextualization and lack of objectivity. Absence of comments in Novi list indicates a lack of ambition to build an agenda, which is surprising because it is a regionally positioned newspaper. Slobodna Dalmacija has shown complete disinterest in this topic. Although this topic could have a constitutive function as it has the capacity to raise general and universal issues related to the future of humankind, media coverage of this topic in analysed dailies did not use this opportunity, which may indicate the general orientation of these dailies towards pragmatic functions in the field of environmental communication. In order to confirm this thesis, however, it is necessary to conduct research that is far more extensive.

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# Appendix List of Analysed Articles

# Večernji list

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# EARLY WARNING SYSTEMS IN CROATIAN ENTERPRISES OPERATING IN INTERNATIONAL MARKETS

### Abstract

Modern business conditions change significantly, and these changes are faster and more intense, with an increasing influence on the company's business. The challenge facing the company and company management is to consider and predict the future and make timely decisions to prepare the company for future business and thus ensure the vitality of enterprises. While predicting the future, envisioning where the potentials for success will arise or what will be the sources of threats and failures. The proper introduction and continuous implementation of an early warning system by analysing the signals and indicators from the environment is of great importance. This paper represents a theoretical and practical contribution toward understanding early warning systems in Croatian companies operating in international markets. The research problem in this paper is the efficacy of Croatian companies in international business. The subject of the research is an early warning system's contribution to increasing the effectiveness of Croatian companies in the international market. The paper begins by discussing contemporary business conditions and then explains the conceptual definition of an early warning system. Following this, the results of an empirical survey are presented, highlighting that while examining the development of early warning systems in Croatian companies operating in international markets, a low level of system development was found. That is, a system was developed only in large companies.

Keywords: early warning system, risk management, international business.

Modern business conditions are characterized by the dynamics and complexity of the environment (turbulence) and increasing differentiation within the company. Such business conditions make it difficult both to manage the company and make business decisions yet increase uncertainty in every business segment. Consequently, the company's management is increasingly focused on the issue of business risk management (Andrijanić, Gregurek, & Merkaš, 2016). Accordingly, the increase of the company's value and its long-term survival as a target function of its existence is more and more endangered or exposed to various forms of business risks. All of the above, along with a

number of other reasons and causes, has an effect on the success of Croatian companies in international markets or rather unpreparedness for international market competition, which in turn leads to a trade deficit for the Republic of Croatia.

The question is whether one of the reasons why Croatian companies are not significantly present in international markets with their products and services is the nonuse of early warning systems as a way of the early detection and prediction of future events as well as better preparation of companies for business in international markets. A change in the approach to business, especially strategic risks in international business, and the implementation and/or correction and supplementation of an early warning system can significantly contribute to the effectiveness of Croatian companies and their better preparedness for international competition. Assumptions for the broader application of risk management and early warning signals in Croatian companies include the need to expand the cognitive horizon of corporate managers in the highest positions and are closely related to the "problem of a lack of management" or a lack of management with advanced skills.

The subject of the research is the potential increase in the efficiency and effectiveness of Croatian companies operating in international markets and the contribution of an early warning system as one of the ways to predict the future and thus to manage strategic business risks. This paper aims to investigate the current situation, that is, to establish the degree of development of early warning systems used in business risk management in Croatian companies operating in international markets. Through a series of questions, it will be examined whether there are any implemented early warning systems in terms of the company's size, the legal form of the company, the ownership of the company, the sector of the economy and the headquarters of the company. As per the stated goal and subject of the research, the hypothesis is: Croatian companies operating in the international market understand the importance and contribution of an early warning system and have implemented and operationalized an early warning system.

To fulfill the goal of working with cabinet methods of researching secondary sources, the existing early warning systems in the countries of developed economies were considered and established, identifying business risk management instruments through available professional and scientific literature. A descriptive method was used, as well as methods of analysis, synthesis, and deduction.

A primary survey was conducted on a sample of Croatian companies operating on the international market, using survey methods and mathematical-statistical methods. Using the mathematical-statistical method, based on a sample of data, the primary indicators of descriptive statistics (quartiles, arithmetic mean, standard deviation, asymmetry coefficient) were calculated. The correlation between observed variables was analyzed by correlation and regression analysis.

The primary research, the results of which are presented in this paper, is part of a broader investigation conducted for the purpose of preparing a doctoral dissertation on "Early warning systems for strategic risks in international business". The questionnaire consisted of 44 questions, 6 questions related to independent variables on general data from the respondents and 38 questions about dependent research variables, of which 12 questions were about the functionality and development of an early warning system.

# THEORETICAL SETTINGS OF THE EARLY WARNING SYSTEMS

In contrast with national early warning systems, this paper focuses on early warning systems for strategic risks at the level of companies operating in international markets. Hence, the topic of this paper belongs to business economics, that is, business economics as a particular discipline of economics. Early warning systems in the business environment have evolved, they have emerged from early warning systems that have been developed and used for military and/or government purposes. Already in The Art of War, six hundred years before Christ, Sun Tzu emphasized that numbers are not as important for winning a war as is knowing what and/or the way an opponent is thinking, to put oneself in one's opponent's position (Tzu, 2009). As modern business conditions and competitive market struggle have quite similar features with military operations, some authors use terminology and have adapted some methods from military strategies in early warning systems in business operations. In addition to military sources, early warning systems in the business environment have often taken their goals, processes, and activities from similar government systems.

Regarding early warning systems (germ. *Frühaufklärung*), many authors generally point out that their goal is to prevent surprises. According to Labaš (2011), Aguilar stands out as one of the first authors to deal with the economic aspects of early warning systems with his book "Scanning the Business Environment" (Aguilar, 1967). Early warning systems should focus on the timely detection and identification of trends that may lead to business threats. The company needs to be protected or led to extraordinary opportunities that the company needs to take advantage of. Timely cognition means that the company has enough time from the moment of cognition itself, to implement changes and prepare for the event, as a consequence of the observed trend, until the moment of occurrence of the event itself.

Hedin, an expert in Business Intelligence, gives a very general definition: "an early warning/opportunity detection system is a risk management system aiming to avoid surprises and identify opportunities in a proactive, continuous way" (Hedin, 2005, as cited in Košutić, 2012, p. 36). The above definition covers all areas of operation of such a system, showing an early warning system as being part of a risk management system. It is interesting to note in particular the perception of opportunities, as if early warning

indicators should not identify in themselves both potential threats and opportunities. The noticeable more frequent focus of early warning systems on threats comes in part from the fact that "threats can be more accurately identified and analyzed, and more critically evaluated than opportunities, although the future of the company lies precisely in seizing the opportunities offered" (Ziegenbein, 2008, page 416).

The mission of an early warning system is to avoid surprises, that is, to minimize strategic risks. Gilad considers strategic risk to be a risk "arising from the mismatch of a company's strategy with the market conditions" (Gilad, 2004, p. 15). It is also the risk that is most neglected in the company, as it is the responsibility of top managers who are too busy to deal with something so vague. Another problem with strategic risk management, and thus with a vital early warning system, is that adapting a company's strategy to changing market circumstances requires a waiver of current profits in favor of long-term ones. Here, managers are faced with the challenge of aligning their existing rewards and bonuses with the need to remain among the leading corporate managers. The next problem is that changes are not always so apparent, and it is not easy to predict when some harmful data will become a trend that will grow exponentially (Gilad, 2004).

Observed according to the levels of management, operational and strategic early warning systems differ. Operational early warning systems mainly deal with quantitative information and are focused on short-term goals such as making a profit, maintaining the company's liquidity and so forth. A strategic early warning is aimed at building the company's success potential for an indefinite period.

Unlike most other authors, Ziegenbein believes that in operational activities, businesses actually "find that it is already too late", and the essential early warning systems are strategic and aim to detect trends (Ziegenbein, 2008, p. 411). Strategic early warning systems, that is, early warning systems for strategic risks, in addition to quantitative data, also consider qualitative data features that are those features that cannot be quantified but are important for the company's operations. They are focused on long-term goals, primarily on the company's long-term survival by achieving the target business function of the company in the form of the continuous growth of the company's value. In strategic early warning systems, the essential components are early signals, which are most often "quiet" and "weak" signals in the business environment monitoring system.

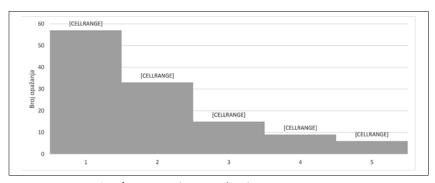
Early warning systems are specific information systems whose task is to provide management, primarily, top management, with information that will indicate potential dangers, threats and opportunities. Early warning systems should have strong interconnections and effective communication channels between all elements. The early warning system's task is to detect potential changes at the earliest possible stage so that management has enough time to make changes in the company and thus prepare the company for future threats or taking advantage of emerging opportunities. The system includes various methods and instruments, it is necessary to determine in advance the areas

of continuous environmental monitoring, to define early warning indicators that need to be continuously monitored. It is essential to decide on the target values and tolerance thresholds of early warning indicators and to define the information processing.

Gilad also problematizes the question of who suffers, respectively who essentially loses in an adverse event for the company. Are they those who manage, the managers, or the entrepreneurs who have raised other people's capital, or are they the owners, the investors who have invested a certain amount in some entrepreneurial activity? According to Gilad, investors are, in fact, those who lose in such circumstances, and often investors, including some sophisticated investment banks and venture capital funds, have lost everything (Gilad, 2004). The question can be further problematized by considering whose money the banks and venture capital funds invested in and who is ultimately the loser. According to Gilad, a wise investor, that is, an owner or shareholder in European terms, should continuously ask before investing, but also while holding the portfolio, how the company controls strategic risks and perceive strategic opportunities, and how it identifies changes at an early stage. If the answer is vague, one should withdraw from that investment as soon as possible (Gilad, 2004).

# analysis and interpretation of research results

Using an empirical research approach of conducting an online survey, the primary data were collected and analyzed by mathematical-statistical methods. In accordance with the research goal, a survey questionnaire was formulated consisting of 44 questions structured in four parts: general data on business organization, the functionality of the existing early warning system, components (structure of elements) of the early warning system, and necessary assumptions of the early warning system model sustainability. The introductory part of the questionnaire contains questions about general information regarding the company: the legal form of the company/organization; the county in which it has its registered office; in which sector of the economy it operates; to which group in terms of income the company belongs; ownership structure of the company; and the position the person completing the questionnaire holds in the organizational structure of the enterprise. The second part of the survey, the functionality of the early warning system, contains questions: about the existence and development of a risk management system and an early warning system concerning the understanding of what everything should include; where the early warning system is organizationally located; whether incentives to establish the system come primarily from top management; whether the company has sufficient resources to implement the system; whether there is adequate practical and useful quality education in the field of early warning systems on the market; whether the early warning system is primarily focused on threats or opportunities. The questionnaire uses a Likert scale with rating scales ranging from (1), completely undeveloped to (5) fully developed or from (1) strongly disagree to (5) strongly agree. The answers to the questions from the second part of the ques-



**Graph 1** — Development of Early Warning Systems (Source: Author's processing according to Kereta, 2020)

tionnaire were used to determine the current state of early warning systems in companies operating in international markets.

The primary survey was conducted through an online survey in Google Forms, and a link to the online survey was sent to 380 businesses via email. The questionnaire was completed by 120 respondents from Croatian companies operating in international markets, making the response rate of 31.6% considered high and relevant. Primary source data were collected by empirical research conducted during the period between May and June, 2019, which limits the results of the research to that point in time.

Based on the respondents' answers on the assessment of the state of the early warning system in their organizations, the results of all respondents are presented in the form of graphs, and the pivot tables show the respondents' answers to the dependent variable (state of the early warning system).

At the level of all respondents, 47.5% of respondents answered that their early warning system is completely undeveloped, and 27.5% stated that it is partially undeveloped, which indicates a high 75% of respondents whose early warning system is completely or partially undeveloped. These results lead to the conclusion that Croatian companies operating in the international market generally do not know or apply the procedures, methods and techniques used in early warning systems, nor do they follow silent signals that indicate strategic changes in the environment.

In the primary survey, only 12.5% of the respondents from the total sample answered that the risk management system is fully or partially developed in terms of understanding what it should include, which is in fact an extremely low percentage and indicates the lack of a systematic approach to early signal detection in Croatian companies operating in the international market. This refutes the hypothesis that Croatian companies operating in the international market understand the importance and contribution of early warning systems and have implemented and operationalised an early warning system. Although based on the answers to this one question, a conclusion

can be drawn about the level of development, that is, the implementation of an early warning system by analysing the situation regarding the independent variables.

Table 1 — Development of an Early Warning System According to the Legal Form of the Company (Source: Author's processing according to Kereta, 2020)

# Is there an Early Warnings System in your company / organization and how developed is it in terms of your understanding of what it should include?

1 — Fully undeveloped, 2 — Partly undeveloped, 3 — Neither developed nor undeveloped, 4 — Partially developed, 5 — Fully developed

What is the legal form of your company?						
	1	2	3	4	5	Σ
Simple Limited Liability Company (LLC)	3	1		]		5
Limited Liability Company (Ltd.)	46	23	11	3	2	85
Joint stock companies (PLC)	3	3	4	4	3	17
Limited partnership (LP)				1		1
Craft	4	2				6
Other	]	4			]	6
Σ	57	33	15	9	6	120

At the level of all respondents, as many as 75% answered that their early warning system is undeveloped or partially undeveloped. It is interesting to note that only 35.3% of joint-stock companies answered that their system is undeveloped or partially undeveloped. Almost all (90.9%) of the crafts and simply limited liability companies answered that their system is undeveloped or partially undeveloped, from which it can be concluded that larger companies/organizations, such as joint stock companies, pay more attention and have formal systems of early warnings as shown in Table 1.

**Table 2** — Development of an Early Warning System According to the Headquarters of the Analyzed Companies (Source: Author's processing according to Kereta, 2020)

Is there an Early Warnings System in your company/organization and how developed is	it
in terms of your understanding of what it should include?	

1 — Fully undeveloped, 2 — Partly undeveloped, 3 — Neither developed nor undeveloped,

4 — Partially developed, 5 — Fully developed

In which county of the Republic of Croatia						
does your company have a registered office?	1	2	3	4	5	Σ
Zagreb County	9	5	6	]	3	24
Sisak-Moslavina		]	1		1	3
Primorje-Gorski Kotar	3	]		2		6
Istria	1	]		1		3
Dubrovnik-Neretva	]			1		2
City of Zagreb	20	11	6	4	2	43
Other counties	23	14	2			39
Σ	57	33	15	9	6	120

Observing the answers to the question about the development of early warning systems by the counties where the companies' headquarters are located, it can be seen that respondents fully or partially agree with the statement that their early warning system is developed mainly in the City of Zagreb and Zagreb County, that is, 70.6%. Two in Primorje-Gorski Kotar county and one in each of the following counties: Sisak-Moslavina, Istria, and Dubrovnik-Neretva county. The answers to this question can also be related to the fact that the Republic of Croatia is highly centralized so that the majority of economic activities take place in Zagreb and its surroundings.

**Table 3** — Development of an Early Warning System by Sector of the Economy (Source: Author's processing according to Kereta, 2020)

Is there a developed Early Warnings System in your company/organization and how developed is	it
in relation to your understanding of what it should include?	

1 — Fully undeveloped, 2 — Partly undeveloped, 3 — Neither developed nor undeveloped, 4 — Partially developed, 5 — Fully developed

In which sector of the economy does your company						
operate: (according to the NKD 2007)?	1	2	3	4	5	Σ
Industry	6		4		1	11
Construction (building industry)	4	3	3	]		11
Wholesale and retail trade	13	7	2	2	1	25
Information and communication industry (ICT)	7	7	1			15
Financial and insurance industry	6	]	4	4	4	19
Other activities	21	15	1	2		39
Σ	57	33	15	9	6	120

Observing the answers to the question about the development of early warning systems classified by sectors of the economy, of the respondents who fully or partially agree with the statement that their early warning system is developed, 53.3% are in financial activities and insurance, and 20% in retail. The greater development and use of early warning systems in financial activities and insurance can be explained by the fact that these are highly regulated industries, and regulators and regulations themselves require a special approach to risk management (Basel III, Solvency II). Early warning systems are most often part of a broader risk management system.

Observing the answers to the question about the development of an early warning system classified by company size in terms of revenue, respondents who fully agree with the statement that their early warning system is developed are only coming from large companies. Respondents who partially agree with the statement that their risk management system is developed are located in large enterprises (55.5%) and in microenterprises (44.5%). It can be concluded that the implementation and enforcement of an early warning system require significant organizational, human, and financial resources, which can be easily provided by large companies.

**Table 4** — Development of an Early Warning System According to the Size of the Analyzed Companies (Source: Author's processing according to Kereta, 2020)

Is there a developed Early Warnings System in your company/organization and how developed is it in relation to your understanding of what it should include?

1 — Fully undeveloped, 2 — Partly undeveloped, 3 — Neither developed nor undeveloped, 4 — Partially developed, 5 — Fully developed

To which revenue group does your company belong?						
	1	2	3	4	5	Σ
Micro (less than 10 employees and total annual turnover						
less than 2 million euros or balance sheet						
less than 2 million euros)	31	7	5	4		47
Small (less than 50 employees and total annual turnover						
less than 10 million euros or balance sheet						
less than 10 million euros)	15	12	5			32
Medium-sized (less than 250 employees and						
total annual turnover less than 50 million euros or						
balance sheet less than 43 million euros)	7	11	2			20
Large company	4	3	3	5	6	21
Σ	57	33	15	9	6	120

**Table 5** — Development of an Early Warning System According to the Form of Ownership of the Company (Source: Author's processing according to Kereta, 2020)

Is there a developed Early Warnings System in your company/organization and how developed is it in relation to your understanding of what it should include?

1 — Fully undeveloped, 2 — Partly undeveloped, 3 — Neither developed nor undeveloped,

4 — Partially developed, 5 — Fully developed

Ownership structure of your company									
	1	2	3	4	5	Σ			
Private company in majority or full domestic ownership	50	23	10	5	1	89			
Private company in majority or full foreign ownership	7	8	4	4	4	27			
A majority or wholly state-owned enterprise		2	]		1	4			
$\Sigma$	57	33	15	9	6	120			

Looking at the answers to the question about the development of their early warning system in accordance with the ownership structure, in private companies in the majority or full foreign ownership, 29.6% of respondents fully or partially agree with the statement that their early warning system is developed, while in private companies in the majority or full domestic ownership, 6.7% of respondents fully or partially agree with the statement that their early warning system is developed. It can be concluded that early warning systems are much more developed in foreign-owned companies, which is a consequence of the transfer of quality practices and models from developed economies to economies in transition such as Croatia.

# CONCLUSION

Early warning systems are extremely important for companies, especially today, when there is great dynamism and business complexity. There are day-to-day changes in business that can occur within the company or in its environment, so internal and external factors affect the business. Some factors can be influenced by the company, while the company must adapt to others. Some of the factors are customers, suppliers, competitors, employees, and creditors who are considered business factors, while technological, economic, social, environmental and political factors are general environment factors. This is where an early warning system helps businesses to recognize and anticipate changes and thus influence or prepare their businesses identifying situations where they need to adapt and get the best out of the circumstance. Early warning system signals provide managers with reliable information about the direction and extent of expected changes inside and outside their companies, making it easier to anticipate and manage business risks.

According to the research results, an early warning system has been fully or partially implemented in only 12.5% of Croatian companies operating in international markets, thus refuting the hypothesis. The situation is particularly poor in micro and small enterprises, which predominate in the structure of the Croatian economy, where only 5.06% of respondents answered that they have a partially established early warning system. It is important to note that the situation is partly better in large companies where 28.6% of respondents answered that their system is fully developed, and 23.8% that their system is partially developed, and in joint-stock companies were 41.2% of respondents answered that their system is fully or partially developed. Companies that represented the more significant percentage of companies that have a fully or partially developed early warning system are mainly located in the City of Zagreb and Zagreb County and operate in the financial sector, insurance and retail trade industries.

Entrepreneurs and managers require more education about such systems and its advantages so that as many companies as possible can improve their business and be ready for future events. With the introduction of an early warning system, managers and entrepreneurs would have information on future trends. They could prepare a strategy in time to help them prevent risky situations, and they could also take advantage of opportunities that they would not have otherwise identified in time without such a system. Scientifically based early warning systems and business risk management can increase Croatian companies' efficiency and effectiveness and accelerate the Republic of Croatia's economic development. Changes in the approach to business risks, as well as the implementation and regular application of early warning system activities and/or continuous improvement of existing early warning systems, can significantly contribute to the success of Croatian companies, and thus their better preparedness for a competitive market.

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# FOREIGN LANGUAGES AND HIGHER EDUCATION CURRICULA OF HEALTH STUDY PROGRAMMES IN CROATIA—STUDENT NEEDS AND THE CURRENT STATUS OF LANGUAGE COURSES

# Abstract

The aim of this study is to examine the availability of studying foreign languages in higher education institutions offering study programmes for health professionals. Firstly, the study provides an overview of the languages offered by the institutions and their syllabi — the number of lessons, lesson types, number of ECTS credits they carry and learning outcomes. Secondly, the study presents the results of a survey conducted among language lecturers at these higher education institutions in order to ascertain the lecturer's opinions and attitudes regarding the language needs of students and the status of foreign language courses at their institutions. Having in mind the importance of preparing students for continuing their study abroad, the demands of internalization, the European labour market, free labour mobility, and tourism (for example, health tourism as its growing branch), the general value of foreign language skills cannot be overstated.

Keywords: foreign languages, health study programmes, student needs, survey, lecturer attitudes

The processes of internalisation and globalisation have made the world much closer and interconnected, and in such an environment, languages are key to communication. As languages undoubtedly enrich our lives and broaden our knowledge of the world and cultures, it is necessary to emphasize that "language competences contribute to the mobility, employability and personal development of European citizens, in particular young people, in line with the objectives of the Europe 2020 strategy for growth and jobs" (Conclusions on multilingualism and the development of language competences, 2014). What is more, the European Commission has set forth the notion that besides speaking their mother tongue, people should also have command of at least two foreign languages. The Council of the European Union includes the multilingual competence into one

of the eight key competences for lifelong learning which are intended to help sustain current standards of living, support high rates of employment and foster social cohesion in the light of tomorrow's society and world of work (Council recommendation of 22 May 2018 on key competences for lifelong learning, 2018). Therefore, since we have to be prepared and able to communicate in a multicultural and multilingual community (Košuta, Patekar & Vičević Ivanović, 2017), learning a foreign language should be an important priority at all levels of education, especially the tertiary level, since it usually provides an entrance into the world of work and a professional career.

# BACKGROUND

Foreign languages have long been taught at the tertiary level in Croatia. They are taught either as a general language or, more commonly, as a language for specific purposes (LSP). LSP is generally used to refer to the teaching and research in language in relation to the communicative needs in facing a particular workplace, academic or professional context (Basturkmen & Elder, 2004). Such courses prepare students in terms of the skills and terminology they will need for effective communication in target professional situations (Munby, 1978).

The knowledge of foreign languages has become indispensable for students and future health professionals, which has become even more evident in recent years with the demands of internalization, student mobility, labour mobility, and even health tourism. It improves academic achievement, career opportunities (for example, looking for a job abroad) and ultimately leads to better care for patients (foreign patients).

In view of the incontestable importance of foreign languages, we wanted to investigate the availability of foreign language or LSP courses in health study programmes in the Republic of Croatia in terms of the level of education (undergraduate, graduate), teaching hours, ECTS credits, year of study and whether they are obligatory or elective courses. Additionally, we wanted to look at those courses from the perspective of the lecturers to examine their view of the status of the courses they teach.

# AIM

The aim of this study is to examine the availability of studying foreign languages in higher education institutions offering study programmes for health professionals and the lecturers' views on foreign language courses. Firstly, the study provides an overview of the languages offered by the institutions and their syllabi — number of lessons, lesson types, number of ECTS credits they carry and learning outcomes. Secondly, it presents the results of a survey conducted among language lecturers at these higher education institutions in order to ascertain the lecturers' opinions and attitudes regarding the language needs of students and the status of foreign language courses at their institutions.

# METHODOLOGY

# Methodology

The study was designed in two phases. The first phase involved collecting data through an online search on the number of higher education institutions offering health study programmes, the foreign language courses they offered, the status of the course (obligatory, elective), number of ECTS credits, number of teaching hours, the level of studies and the year at which the courses are taught. Data was collected from the official websites of the institutions.

The second phase involved conducting a survey among lecturers at the aforementioned higher education institutions by sending a questionnaire created for the purpose of this study. The questionnaire was created using the Google Forms online tool and it comprised of questions on demographic data, the type of courses taught, course materials, lecturers' opinions and attitudes on several aspects of their courses, students' opinions and working conditions.

# Respondents

The survey was conducted according to the guidelines for using surveys in language programmes (planning an evaluation project, developing a survey instrument, administering the survey, and analysing and using survey findings) developed by John McE. Davis (2011). The study included 14 respondents from 8 higher education institutions in Croatia offering health study programmes. All respondents were informed of the purpose and manner of conducting the survey, indicating that their participation was voluntary and anonymous. The participants received the link to an online questionnaire via email. Their responses were collected in the period of one month, between 13 May and 15 June 2020.

# Results and Discussion

The study was conducted in two phases. The first phase consisted of collecting data through an online research on the official websites of the higher education institutions which offer health study programmes. The aim of this research was to collect data on the number of higher education institutions offering health studies, the type of health studies they offered, the type of foreign language courses, whether the course was obligatory or elective, the number of ECTS credits those courses carried, the number of teaching hours in each course, the level of studies and the year at which the courses are taught.

# Results — Online Research

The results obtained through the online research include 15 higher education institutions in the Republic of Croatia which offer medical and health study programmes. The results are presented in two tables and have been separated into the results for institutions offering medical studies and the ones offering health studies. As can be seen in Table 1, foreign languages are predominantly required coursework throughout all six years of integrated studies of Medicine at the Universities of Zagreb, Split, Rijeka and Osijek.

Table 1 — Institution of Higher Education and Foreign Language Status — Medical Studies

University of Zagreb, School of Medicine	Integrated Undergraduate and Graduate Study of Medicine	All 6 years of studies, Medical English 1-6	20 hours per year/ 0 ECTS
University of Split, School of Medicine	Integrated Undergraduate and Graduate Study of Medicine	All 6 years of studies, Medical English	20 hours per year/ 0 ECTS
Josip Juraj Strossmayer University of Osijek, Faculty of Medicine	University Integrated Undergraduate and Graduate Study of Medicine	All 6 years of study, Medical English 1-6	20 hours per year/ 1 ECTS
University of Rijeka, Faculty of Medicine	Integrated Undergraduate and Graduate Study Programme	All 6 years of studies, Medical English 1-6	20 hours/1 ECTS

Only two institutions (Faculty of Medicine Osijek and Faculty of Medicine Rijeka) have at least one ECTS credit point, while in the other two institutions (School of Medicine in Zagreb and School of Medicine in Split) these courses carry no ECTS credit points.

Table 2 — Institution of Higher Education and Foreign Language Status — Health Studies

University of Zadar, Department of Health Studies	Undergraduate University Nursing Studies	1st and 2nd year, ESP 1-4	60 hours per year/ 4 ECTS
	Graduate University Nursing studies	1 st year, ESP (elective)	30 hours/2 ECTS
University of Dubrovnik	Undergraduate Professional Study of Nursing	1st and 2nd year, ESP 1/1-2/2	30 hours per year /2 ECTS
	Graduate Professional Study of Nursing and Clinical Nursing	There are no foreign language classes	
Josip Juraj Strossmayer University of Osijek, Faculty of Medicine	University Undergraduate Study Of Medical Laboratory Diagnostics	1st and 2nd year of study, Medical English 1and 2	No information available on the official website.
	University Graduate Study of Medical Laboratory Diagnostics	2nd year,English in academic and professional communication	No information available on the official website.
	Postgraduate doctoral study of biomedicine and health	There are no foreign language classes	
Juraj Dobrila University of Pula, Faculty of Medicine	Undergraduate Professional Study of Nursing		No information available on the official website.

University of Split, University Department of Health Studies	Undergraduate University Study of Nursing	1st and 2nd year, English Language 1 and 2	30 hours seminar and 10 hours work with a mentor per year/1,5 ECTS
	Undergraduate University Study of Physiotherapy	1st and 2nd year, English Language 1 and 2	30 hours seminar and 10 hours work with a mentor per year/1,5 ECTS
	Undergraduate University Study of Midwifery	1st and 2nd year, English Language 1 and 2	30 hours seminar and 10 hours work with a mentor per year/1,5 ECTS
	Undergraduate University Study of Radiological Technology	1st and 2nd year, English Language 1 and 2	30 hours seminar and 10 hours work with a mentor per year/1,5 ECTS
	Undergraduate University Study of Medical Laboratory Diagnostics	1st and 2nd year, English Language 1 and 2	30 hours seminar and 10 hours work with a mentor per year/1,5 ECTS
	University Graduate Health Study of Nursing	There are no foreign language classes	
	University Graduate Health Study of Physiotherapy	There are no foreign language classes	
	University Graduate Health Study of Radiological Technology	There are no foreign language classes	
University of Rijeka, Faculty of Health Studies	Undergraduate Professional Study of Nursing	1st and 2nd year, Foreign language (ENG) 1 and 2	30 hours per year/ 2 ECTS
	Undergraduate Professional Study of Physiotherapy	1 st year, English language 1	30 hours per year/ 2 ECTS
	Undergraduate Professional Study of Radiological Technology	1st and 2nd year, Foreign Language (English) 1and 2	40 hours per year/ 3 ECTS
	Undergraduate Professional Study of Midwifery	There are no foreign language classes	
	Dislocated Undergraduate Professional Study of Nursing Karlovac	1st and 2nd year, English 1and 2/ German 1 and 2	30 hours per year/ 2 ECTS
	Undergraduate University Study of Environmental Health Engineering	1st and 2nd year, English in Environmental and Public Health 1 and 2	30 hours per year/ 2 ECTS

	Graduate University Study of Environmental Health Engineering	1st year, English/ 2nd year, English/ German/Italian	30 hours per year/ 1,5 ECTS
	Graduate University Study of Nursing — Promoting and Protecting Mental Health	There are no foreign language classes.	
	Graduate University Study of Nursing-Management in Nursing	There are no foreign language classes.	
	Graduate University Study of Pysiotherapy	There are no foreign language classes.	
	Graduate University Study of Clinical Nutrition	There are no foreign language classes.	
	Graduate University study of Midwifery	There are no foreign language classes.	
	Postgraduate (doctoral) study programme in Biomedicine	There are no foreign language classes.	
	Postgraduate (doctoral) study programme in Health and Ecological Engineering	There are no foreign language classes.	
	Doctoral School in the Scientific field of Biomedicine and Health	There are no foreign language classes.	
University of Applied Health Sciences Zagreb	Undergraduate Professional Study of Nursing	1st year, English/ German (elective)	30 hours per year/ 2 ECTS
	Undergraduate Professional Study of Physiotherapy	1st year, English/ German language	45 hours per year/ 3 ECTS
	Dislocated Undergraduate Professional Study of Physiotherapy in Pakrac	1st year, English/ German language	45 hours per year/ 3 ECTS
	Undergraduate Professional Study of Environmental Health Engineering	1st year, English/ German language	60 hours per year/ 4 ECTS
	Undergraduate Professional	1 st year semester,	60 hours per year/
	Study of Laboratory Medical Diagnostics	English/German language	4 ECTS
	Study of Laboratory Medical	English/German	
	Study of Laboratory Medical Diagnostics Undergraduate Professional Study of Radiological	English/German language  There are no foreign	

	Graduate Professional Study of Environmental Health Engineering	There are no foreign language classes.	
	Graduate Professional Study of Nursing (Clinical Nursing/ Public Health/Psychiatric Nursing/Management in Nursing	There are no foreign language classes.	
	Graduate Professional Study of Physiotherapy	There are no foreign language classes.	
Libertas International University	Undergraduate Professional Study of Physiotherapy	1st, 2nd, 3rd year, English language 1-3	30 hours per year/ 2 ECTS
Bjelovar University of Applied Sciences	Undergraduate Professional Study of Nursing	1st year, English language 1and 2	15 hours and 1 ECTS per semester
Poliytechnic Ivanićgrad	Undergraduate Professional Study of Physiotherapy	1st and 2nd year, English/German language	30 hours per year/ 2 ECTS
University North in Varaždin	Undergraduate Professional Study of Nursing and Physiotherapy	There are no foreign language classes	
Croatian Catholic University (Universitas Studiorum Catholica Croatica)	Undergraduate University Study of Nursing	There are no foreign language classes.	

The analysis of foreign language courses at institutions of higher education which offer study programmes for health professionals shows us that foreign languages are usually taught as obligatory courses during the first year of undergraduate study. Even though these courses are usually part of the first-year curricula, a certain number of institutions recognize the importance of such courses and offer them during the second year as well. There is only one institution which has a foreign language course in the third year of studies (Libertas International University). The language that is predominantly taught is English, but some institutions offer the choice between English and German. At the University of Rijeka, at the Graduate University Study of Environmental Health Engineering, students can choose between English, German and Italian.

The courses carry a different number of ECTS credit points (up to 4 — this depends on the number of teaching hours) and the number of teaching hours ranges from 30 to 60 a year. The usual number of hours per year is 30 with the corresponding number of 2 ECTS credit points Some institutions — Faculty of Medicine in Zagreb and Split — do not award any ECTS credit points to their foreign language courses.

The exceptions to this are two higher education institutions which do not have language courses in their undergraduate study programmes (University North in Varaždin and Croatian Catholic University (Universitas Studiorum Catholica Croatica). There

are also institutions which did not include language courses in all of their study programmes curricula such as the Undergraduate Professional Study of Radiological Technology at the University of Applied Health Sciences in Zagreb and the Professional Study of Midwifery at the Faculty of Health Studies, University of Rijeka.

As far as graduate studies are concerned, they do not offer language courses and only two institutions are the exceptions (University of Rijeka — Faculty of Health Studies/ Graduate University Study of Environmental Health Engineering and Josip Juraj Strossmayer University of Osijek, Faculty of Medicine/University Graduate Study of Medical Laboratory Diagnostics).

Additionally, what also needs to be pointed out is that the School of Medicine in Zagreb, the School of Medicine in Split and the Faculty of Medicine in Rijeka offer the possibility of studying medicine in the English language, while the Faculty of Medicine in Osijek offers the study of medicine in German. This certainly provides the possibility of an easier continuation of studies and training abroad and involves very good prior knowledge of foreign languages for students who opt for such studies. We should take into account the fact that the requirement for enrolment in such a study is passing an international language proficiency test (B2-C1) or taking exams in English during their State Matura Exam. Furthermore, those institutions also offer foreign citizens the opportunity to study in Croatia.

#### RESULTS — SURVEY

The second phase of the study involved conducting an anonymous survey among lecturers at the aforementioned higher education institutions. This was done by means of an online questionnaire designed for the purpose of this study. The questionnaire was created using the Google Forms online tool and the lecturers were invited via email to fill in the questionnaire.

The questionnaire consisted of 25 questions. The first 15 questions were used to gather demographic data and the information on the lecturers' years of work and place of work, type and the name of the higher education institution they worked at, the language they taught, the type (elective, obligatory) and name of the course, the number of ECTS credit points the course carries, the level the lecturers taught at (undergraduate, graduate), the year of study, the study programme and the material the lecturers used. The next 10 questions were composed of statements, and the respondents needed to mark the intensity of their agreement or disagreement with the statement on a 5-point Likert scale. The last question was an open-ended question in which respondents could voice their opinion on what they are particularly satisfied or dissatisfied with in their institution.

# The Respondents

The questionnaire was completed by 14 respondents from 6 higher education institutions in Croatia offering health study programmes. These institutions were as follows:

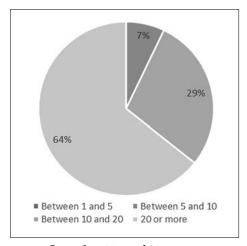


Figure 1 — Years of Experience

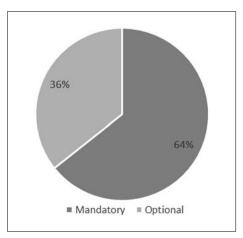


Figure 2 — Mandatory vs. Elective courses

University of Applied Health Sciences in Zagreb, the University of Zadar, Faculty of Health Studies University of Rijeka, School of Medicine in Zagreb, University of Split, and University of Dubrovnik. The responses were collected in the period of one month, between 13 May and 15 June 2020. The participants were predominantly female (85.7%), with their ages ranging from 34 to 64 years. Most of the participants had 20 or more years of experience in teaching (64.3%), whereas only 28.6% had 10-20 years of experience, and only 7.1% between 5 and 10 years of experience.

The responses to the question regarding which language the respondents teach are equivalent to the results of the online research we conducted, as seen in the tables above — they predominantly teach English (71.4%), followed by German and Italian (7.1% respectively), and 14.2% of participants teach both English and German.

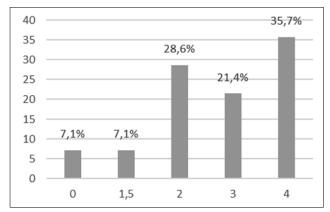


Figure 3 — ECTS credits

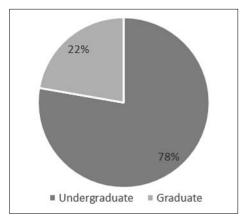


Figure 4 — Undergraduate Vs. Graduate Level

Most lecturers teach a mandatory course (64.3%), although the number of ECTS points awarded per course varies greatly: 4 points (35.7%), 3 points (21.4%), 2 points (28.6%), 1.5 points (7.1%), or even zero points (7.1%). The number of courses the participants teach is also significantly different: 5 courses (21.4%), 4 courses (14.3%), 3 courses (28.5%), or 1 course (35.7%).

All lecturers teach at the undergraduate level, with 28.6% of them also teaching at the graduate level. Most participants (85.7%) teach first-year students, while percentages for other years of study vary: 42.9% teach second-year students, 28.6% third-year students, 35.7% fourth-year students, and 21.4% fifth-year students.

The participants were also asked to assess the type of materials they use for their work, whether self-made or pre-existing, and the results showed that most participants (92.9%) fall in the former group. Of those who use self-made materials, 50% claim that they spend more than four hours per week on their production, while 36.7% spend two to four hours, and 14.3% one to two hours.

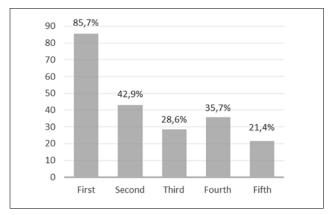


Figure 5 — Year of Study in Which Respondents Teach

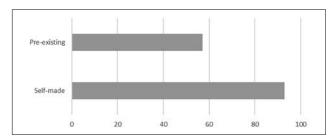


Figure 6 — Pre-existing vs. Self-made Materials

After the initial 15 questions the respondents were asked to assess their agreement to 10 statements on a 5-point Likert scale.

# #1 Number of Lessons and Learning Outcomes

In the first question, the lecturers were asked to assess their agreement with the following statement: "The number of teaching hours of the course I teach is sufficient for achieving its learning outcomes." The lecturers overwhelmingly said that they somewhat disagreed with the statement (44%): 20% entirely disagree, 20% somewhat agree, 8% neither agree nor disagree, and only 8% entirely agree with the statement.

# #2 Language Courses and Years of Study

The second question was dedicated to the years of study in which lecturers teach. As mentioned above, most lecturers teach only first-year students (85.7%), with the remaining years of study represented by much smaller percentages ([2] 42.9%, [3] 28.6%, [4] 35.7%, and [5] 21.4% respectively). Most lecturers (71.4%) said that they believe languages should be taught in all years of study, both at the undergraduate and graduate levels. 16% said that they somewhat agree with this statement, whereas other answers received no responses.

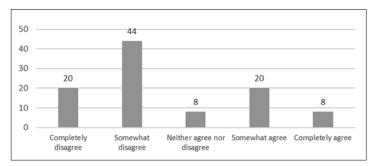


Figure 7 — The Number of Teaching Hours of The Course I Teach is Sufficient for Achieving its Learning Outcomes

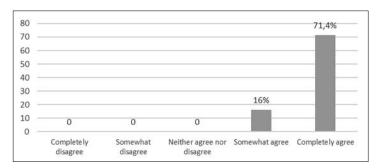


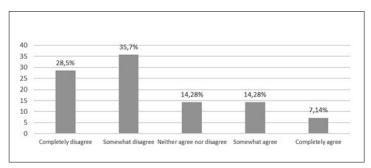
Figure 8 — I Believe That Languages Should Be Taught on All Years of Study

# #3 Language Courses and Attribution of Importance

The third and fourth questions both refer to language courses and attribution of importance. In the third question, the lecturers were asked to assess whether sufficient importance is attributed to language courses in the universities where they teach. Two options, "I completely disagree" and "I somewhat disagree" received an overwhelming number of responses (28.5% and 35.7% respectively, or 64.2% of all responses), whereas the remaining three options received much fewer responses: 14.28% ("I neither agree nor disagree"), 14.28% ("I somewhat agree"), and only 7.14% ("I completely agree") respectively.

# #4 Students and Attribution of Importance to Language Courses

In the fourth question, the lecturers were asked to assess student attitudes toward language courses. Whereas in the previous question most lecturers claimed that the universities where they teach do not give enough importance to language courses, the responses were inverted in the case of students. According to 50% of participants, they somewhat agree with the claim that the students who they teach attribute sufficient importance to language courses. Other options received much fewer responses: 14.28%



**Figure 9** — In the Institution Where I Work Sufficient Importance is Attributed to Language Courses.

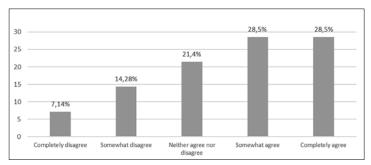


Figure 10 — I Believe That the Institution Where I Teach Should Offer More Foreign Language Courses Than it Currently Does

("I completely disagree"), 14.28% ("I somewhat disagree"), 14.28% ("I neither agree nor disagree"), and 7.14% ("I completely agree") respectively.

# #5 Student Motivation and Language Learning

The fifth question focused on student motivation. When asked to assess the statement "I believe that my students are sufficiently motivated for learning languages", the participants overwhelmingly answered that they somewhat agreed with the statement (57.14%). Other options received fewer responses: 14.28% ("I completely disagree"), 14.28% ("I somewhat disagree"), and 14.28% ("I neither agree nor disagree") respectively. Interestingly, the option "I completely agree" received no responses.

# #6 Number of Language Courses Offered to Students

Continuing with the focus on students, the sixth question asked the participants to assess their agreement with the following statement: "I believe that the university where I teach should offer more foreign language courses than it currently does". Most participants agree with the statement, either partially (28.5%) or completely (28.5%), whereas only 7.14% completely disagree and 14.28% somewhat disagree. A comparatively large percentage of respondents neither agree nor disagree (21.4%).

# #7 Individual Languages and Attribution of Importance

Since several of the universities where the participants teach offer more than one foreign language, it was the aim of this survey to also explore the lecturers' attitudes towards their institutions' attribution of importance to individual languages. When asked to assess their agreement with the statement "The university where I teach gives sufficient importance to all languages offered to students", participants overwhelmingly said that they somewhat disagreed (50%), whereas the remaining options received significantly fewer responses: 7.14% ("I completely disagree"), 7.14% ("I neither agree nor disagree"), and 21.4% ("I somewhat agree"), and 7.14% ("I completely agree") respectively.

## #8 Teaching Conditions

The focus of the final question was on the participants' satisfaction with conditions in which language lessons are conducted. This question encompassed such conditions as technical equipment and support, ability to produce and copy material, the availability of textbooks and the ability to order or access new material. When asked to assess their agreement with the statement "I believe that the conditions in which lectures are held are good", the participants overwhelmingly chose either "I completely agree" (50%) or "I somewhat agree" (28.57%), although some participants did not agree with the statement: 7.14% ("I completely disagree") and 21.4% ("I somewhat disagree") respectively. Only 7.14% neither agree nor disagree.

# #9 Optional Question: Likes and Dislikes

The last question offered invited to write about aspects of their university which they are either particularly happy or unhappy about. Only two responses were received. One respondent wrote that they are particularly pleased that their university has a centre for foreign languages which gathers all foreign language lecturers and represents their interests, as well as the fact that the centre has a book of regulations and rules of procedure, a developed strategy, a platform on Merlin, and a solid cooperation with the university administration. The same respondent is particularly displeased with the role of lecturers and their form of advancement, as well as legal acts, work evaluation for lecturers on the state level, the size of student groups (which the respondent claims are too large), and inability to order quality textbooks (the respondent claims they independently research and produce teaching material, which is not valued). The other respondent who wrote about their impressions claimed that language courses should have more lessons and smaller student groups (currently groups comprise 35-40 students for practice lessons, while lectures can have up to 100 students, which the respondent assesses as too large and definitely inappropriate for learning languages).

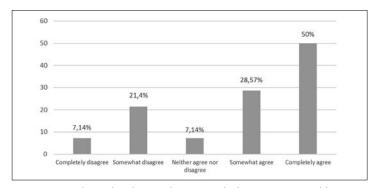


Figure 11 — I Believe That the Conditions in Which Lectures Are Held Are Good

Even though the respondents mostly agreed with the statement in the survey about having good working conditions, in the last question respondents emphasized some setbacks they encounter in their lectures. A parallel could be drawn with the study on the working conditions of foreign language teachers by López-Gómez and Albright (2009) which shows that "although they must meet the same training and certification requirements as other instructors, foreign-language teachers end up working under far more difficult conditions. Numerous teachers reported being responsible for an unwieldy number of students while lacking textbooks, a dedicated classroom, or time and space to prepare for classes" (p. 778).

#### CONCIUSION

The results of the study enable us to draw several conclusions. Firstly, the participants' answers show their general dissatisfaction with the attention paid to foreign language courses in the organization of curricula for health study programmes. The numbers of lesson hours afforded to such courses are assessed as insufficient to teach all the specificities of a foreign language for health professionals (on average they have 30 lesson hours per year). The majority of respondents also believe that languages should be taught in all years of study, both at undergraduate and graduate levels, thus stressing the importance of studying foreign languages. Secondly, the responses show that language courses are not accorded enough importance by their institutions, as reflected by the data on lesson hours and years of study mentioned above, whereas the participants believe that the students themselves attribute sufficient importance to language courses. The final conclusion that can be drawn from the responses is that foreign language lecturers should be included in curriculum planning for health study programmes and their work be valued more by improving their status and the status of the language courses they teach.

Hopefully, this study can serve as a starting point for further research into the position of foreign language lecturers and the courses they teach in health study programmes, as well as for a comparison between health and non-health related study programmes regarding the position of foreign language courses within curricula. Such studies could work towards drawing attention to the need for better foreign language learning promotion, increase in the number of teaching hours and semesters in which languages are taught, as well as improve the status and advancement opportunities for foreign language lecturers in higher education in general, an area that is sorely in need of further work.

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# SECURITY AS AN INFLUENTIAL FACTOR ON TOURIST DEMAND: THE EXAMPLE OF THE CITY OF ZAGREB

#### Abstract

The need for security is one of the basic human needs. Security in the tourism sector is not motivated solely by global reasons because no one can guarantee absolute security. For this reason, it is often emphasised that security is a precondition for growth and development of every economic activity. The realization of economic processes, especially processes in the tourism industry cannot be realized without economic security. The attractiveness of a tourist destination can also be affected by negative consequences when there is a lack of safety which can be found from the personal to national level. Therefore, attractiveness of a tourist destination is affected by various threats, risks or crisis. By increasing the number of employees and achieving an increasing share in GDP in the overall economy of the Republic of Croatia, one can conclude that tourism is one of the most important economic activities and economic powers that generates further growth and development. This is why safety in tourism has become a necessity that needs to be secured for the tourist and within the tourist destination. Tourism security should be provided from the start of travel, during the whole stay in a tourist destination until return to the starting location. The purpose of security in tourism is not only to provide the protection of tourists but also to ensure the safety of the tourist destination. The process of providing the service is not a one-off period but it is permanent and covers different services and products. This paper aims to show how much the security factor affects the tourist demand for the destination, in this case the City of Zagreb.

Keywords: security, tourism, destination, management, City of Zagreb

According to the data published by the World Travel and Tourism Council (WTTC), the tourism industry in 2019 accounts for 10.4% of the world's GPD, making it one of the largest economic sectors worldwide. With 8.9 trillion US dollars, tourism establishes itself as one of the fastest-growing industries of the world, being surpassed only by the manufacturing sector. Even so, it is far ahead of other important sectors such as financial services, health or technology.

The World Tourism Organization (2020) states that in the background of a global economic slowdown, tourist spending in 2019 continued to grow. 1.5 billion interna-

tional tourist arrivals were recorded in 2019, globally. A 4% increase on the previous year, which is also forecast for 2020, confirming tourism as a leading and resilient economic sector, especially in view of current uncertainties. However, in 2020, the world tourism industry faced the challenges of restrictions and even travel bans as a consequence of the closure of borders caused by the COVID-19 pandemic. Restricting travel due to the COVID-19 pandemic has a negative impact on the tourism industry, whose activity in the new conditions should primarily focus on the safety of tourists. Responses to the security challenges of this activity should be implemented consistently, in proportion to public health threats and based on local risk assessment, which includes each part of the value chain of tourism — public bodies, private companies and tourists, in accordance with overall guidelines and recommendations of relevant institutions.

The safety of tourists should be implemented during the entire time of travel and stay in the tourist destination. The essence of security is to provide protection to tourists and the security of their basic rights as well as the security of the tourist destination because the process of providing the service is not one-time but lasts a long time and includes various services and products. This is especially true for all safety measures arising from the risk of COVID-19. In these challenging times, it is necessary to prescribe such security measures that will minimize the negative consequences of the effects of restrictions on travel or tourism.

#### SECURITY OF THE TOURIST DESTINATION

The ending and calming of international conflicts, the stabilization of economic conditions and positive international developments have contributed to changes in global world processes. Increased integration of the world and the creation of a process in which capital, goods, technologies, ideas and people are gradually entering into an operation of global proportions has had its impact on tourism.

The Cambridge Dictionary (2020) defines security as the protection of a person, building, organization, or country against threats such as crime or attacks by foreign countries. Each culture, country or any type of human organization develop their own conception of what is safe and dangerous (Korstanje, 2017). Bilandžić (2014) states that security is one of the basic life functions, and at the same time interest, goal and value, but also the state and conscious will or activity (system) of both the individual and the social community, nation, state and international community.

The need for security is one of the fundamental human needs. Security in tourism is not motivated only by global reasons, nor is there absolute security in tourism. The security activity of a country is carried out in an organized manner, through a security system. The task of this system in the tourism industry is to achieve an acceptable and sustainable level of security and it has a dual function: a) safety guarantees the unhin-

dered fulfilment of tourist needs, and b) prevention in case of the incorrect 'satisfaction' of tourist needs. The security of a tourist destination depends on the following factors: a) the physical aspect of security, b) personnel security aspect, and c) system security aspect.

The issue of security in tourism primarily refers to the personal safety of tourists and the protection of their property, but it also includes the possibility to be oriented to environmental protection, understanding the characteristics of the local system, protection of social conventions and finally the safety of shopping and consumer services. However, it must not be forgotten that indicators of a safe tourist destination derive from the general security of the country and the tourist destination itself. The image of the city as a tourist destination depends on the quality of tourist products that include not only natural and cultural heritage, economic environment but also social and political climate and civic security.

Tourism and security are mutually conditioned not only through national security but also through economic security and stability with the focus on the security of the individual in the chosen destination. In the modern world, we face many dangers that affect the life of individuals and social communities in various ways. Sources of security threats are part of the human environment and are usually defined as "phenomena, processes, substances and certain living beings whose existence endangers people, social orders, material goods and ecological systems". We see security today in relation to the past and the ways in which it was provided in a context and in relation to the dangers that were then dominant. In security nowadays, we look very often at its relation to the past and ways to ensure it is in context considering the dangers that were then dominant (Mihalinčić, 2020).

Security is the interest, goal, and value of the individual, the nation, and the state including the immediate experience of humanity at all stages of its development. It involves ensuring values and conditions that are vital to society. As a complex and multi-layered concept, security is the historical context of changing content but always focused on the protection of basic life functions. It is at the same time an interest, a goal and a value, but also a state and a conscious will or activity (system) of both the individual and the social community, the nation, the state and the international community. We define national security through values that fall into this category and it aims at strategies that are realized through the country's skill in applying resources to protect national interests so that within national security, the security of a tourist destination finds its place. Tourism and security are interdependent not only through national security but also through economic security and economic stability and the security of the individual in the chosen destination. According to Tatalović et al. (2008), a national security system consists of state institutions and organizations that are directly and often exclusively in charge of national security affairs including other supporting institutions and organizations that are important for some aspects of national security.

Therefore, it is constantly emphasized that security is a prerequisite for the development and growth of any economic activity. The realization of economic processes, especially processes in the tourism industry, cannot be realized without economic security, security of facilities (corporate security) and security of people / tourists. As tourism is the most insecure industry, its exposure to any kind of threat, risk or crisis results in direct negative consequences at all levels of security, from human to corporate to national / economic security. The effectiveness of a security system is maintained through the ability of the system to protect the core values of the community from all threats. Kordić et al. (2015) state that tourism is sensitive to crisis, the one caused by economic factors, and also to crises caused by non-economic factors.

In answering questions about the safety of a tourist destination, the answers should be sought in the indicators of a safe tourist destination. For example, what are the possibilities of reducing tourist-oriented crime activities? What kind of support can be provided to victims of crime and terrorist activities? With the advent of the COVID-19 pandemic, tourist destinations in collaboration with the state need to think how to provide tourists with access to their health care systems and guarantee the that the tourist destination is traffic/transport connected with other cities and countries.

#### SAFETY AND SECURITY FACTORS

Security is a key factor which determines tourism sector competitiveness. There is a high probability that tourists refrain from traveling to dangerous countries or regions, as this factor makes it less attractive for development in these destinations. Every travel relates to different threats, risks and dangers. Most of the risks can be reduced or avoided through the proper education of travellers, health promotion, the prevention of risks and protection.

Key factors which determine tourist exposure to risk (World Health Organization, 2012) include:

- a) mode of transportation
- b) destination(s)
- c) duration and season of travel
- d) purpose of travel
- e) standards and accommodation, food hygiene and sanitation
- f) behaviour of traveller
- g) underlying health of the traveller

However, while visiting the tourist destination there are other risk that must be taken in account:

- a) occurrence of infectious diseases
- b) access to a health care system during the tourist visit in tourist destinations
- c) natural disasters

- d) social / civil unrest, war and terrorism risks
- e) thefts and crimes
- f) cultural / social differences
- g) destination / product security
- h) travel risk (cancelation of transport)
- i) level of personal data protection.

Health protection and safety risks, especially those connected with tourism destinations and tourism companies, are related to business risks. Tourism product is complex and comprises of a wide range of service elements. It is being consumed on the spot, while being produced, and requires interaction not only between the personnel and natural, physical environment (facilities, equipment etc.), but also with the tourists who actively participate in creating tourism products. Accordingly, professional, health, and safety risks are being multiplied, which increases adverse e?ects on the business goals and strategies of tourism companies, as well as on employees and tourists themselves (Kordić et al., 2015). During the COVID-19 pandemic, the number of tourists and world travels have drastically decreased. Uncertainty about the unknown disease and time for a cure to be discovered led to the cancellation of planed trips, conferences, and other events. Additionally, travel risk that emerged due to cancelation of trips and the lockdown of countries resulted with the cancelation of numerous flights and other forms of transport led to uncertainty about possible departures and returns of potential tourists. This resulted in a way that tourists were not willing to travel so that they do not find themself in unwanted situation where they cannot return to their homes.

The tourism market is sensitive to social or political instability. In accordance with this instability, a significant decline in the number of tourist arrivals occurs during periods of war or other conflicts. The negative e?ects of war on tourism are not necessarily confined to the actual war zone or period of conflict. The decline in arrivals is, in large part, due to global uncertainty, associated with both the prelude and aftermath of a particular incident. Deliberate targeting of tourists and tourist facilities by terrorists is an increasingly disturbing trend that leads to less tourist destination visits which can have serious economic and socio-political consequences for countries where this sector makes a significant contribution to the GDP. Special attention to travellers and tourist safety was intensified in the 80s, along with the development of the trend of the increased number of dangerous situations tourists were facing. The problem of safety and security became the problem of the tourism institution and the entire country, since guaranteed safety increases the likelihood of visits to a particular destination (Kordić et al., 2015).

#### MFTHODS AND DATA

During 2019, as many as 1.454,019 tourists visited the City of Zagreb and made 2.638,962 overnight stays, which was a 3,7%, and a 5,06% annual rise according to fi-

gures provided by the Zagreb Tourist Board. Research carried out by the Zagreb Tourist board, Institute for Tourism, researchers and others during the period from 2008 until 2019 show that tourists perceive the City of Zagreb as a safe destination. With the appearance of the uncertainty factor caused by the appearance of the infectious disease COVID-19, we can conclude that the pandemic COVID-19 was the main reason for the decline of tourists visiting the City of Zagreb in 2020.

For the research purpose of the work, a survey was carried out on a sample of 150 tourists in period of April until July 2020. The survey is aimed at investigating tourists' views of security and safety factors related to the City of Zagreb. The countries of origin of the tourist visiting the City of Zagreb are presented in Table 1.

**Table 1** — Number Visiting Tourists and Their Country of Origin (Source: Authors' research)

Germany	25
USA	21
Slovenia	20
Italy	16
Czech Republic	15
Hungary	14
Poland	12
Bosnia and Herzegovina	10
Twain	9
China	8

Table 2 presents tourist satisfaction regarding transport possibilities and Zagreb's transport connections with other cities.

**Table 2** — Transport Possibility and Connections of Zagreb With Other Cities (Airplane, Train and Bus in %) (Source: Authors' research)

Cannot say	0
Minimum	4,07
Satisfactory	31,24
Very good	50,49
Excellent	14,21

Table 3 — Presents Tourist Opinion About Possible Cancellation of Current Trip Due to Travel Risk (Source: Authors' research)

Cancelation of travel — Travel risk (in %)	
Low	25,59
Average	42,98
High	31,43

Table 4 — Likelihood of Tourist's Future Travelling Outside Their Place of Residence Despite All the Dangers and Risks During the COVID-19 Pandemic (Source: Authors' research)

Likelihood	%
Higher	26
Equal	46
Smaller	28

Tourists' opinions regarding possible reasons for abandoning or cancelling future travel during the COVID-19 pandemic are displayed in Table 5. This table presents possible risks regarding possible travel risk that presumes that a potential means of transportation will be cancelled; possible health reasons that present a fear of becoming infected with the COVID-19 virus during a tourist visit, and economical reasons which imply that travel cancellation or illness may result in increased travel costs.

**Table 5** — Reasons for Abandoning/Cancelling Future Travel During the COVID-19 Pandemic (Source: Authors' research)

Number of answers	
Travel risk	89
Health reasons	67
Economical reasons	112

The opinion of tourists regarding their safety in accommodation during their visit to the city of Zagreb is shown in the Table 6.

**Table 6** — Safety in Accommodation During Visits to Zagreb (Source: Authors' research)

Opinion about security in accommodation (in %)			
	Hotel	Hostel	Private accommodation
Cannot say	2	0	0
Minimum	0	0	8
Satisfactory	44	25	27
Very good	21	11	12
Total	67	36	47

Table 7 presents tourists' assessment of the level of security support in shops, accommodation facilities, attractions and restaurants in the city of Zagreb.

Table 7 — Tourists' Assessment of The Level of Security Support in Shops, Accommodation Facilities, Attractions and Restaurants in The City of Zagreb. (Source: Authors' research)

Tourists' assessment of the level of security support in shops accommodation facilities, attractions and restaurants (in %)		
Cannot say	3,56	
Non-existent support	0,6	

Minimal support	4,32
Average support	35,05
Very good support	31,29
Excellent support	25,18

**Table 8** — Level of Personal Data Protection (Source: Authors' research)

Level of personal data protection (in %)	Payment by card	Bank transfers	Shopping online
Cannot say	6,16	7,56	28,83
Low standard	5,89	6,71	26,89
Average standard	59,67	46,6	37
High standard	28,28	39,22	7,28

**Table 9** — Tourists' Perception Regarding Their Personal Safety During Their Stay (Source: Research of authors)

Personal security (in %)	
Cannot say	0
Not safe	3,2
Average	21,34
Very good	43,78
Excellent	31,68

The presence of services for protection and saving lives such as police, fire and rescue services, and health care services (hospitals and clinics) is extremely important for deciding on a tourist destination. Attitudes of tourists about this safety component are shown in Table 10.

Table 10 — Attitudes of Tourists and Their Opinions Regarding Protection and Saving (Source: Research of authors)

Did you notice:	Fire and Police (in %)	Medical assistance rescue services (in %)	(hospitals and clinics) (in %)
They were not noticed	15,41	39,76	2,8
Insufficient number	22,41	6,32	37,21
Average number	52,11	35,1	49,54
Above average	6,64	14,9	8,81
Extremely high number	3,43	3,92	1,64

Safety cameras in traffic and in public places indicate the level of safety being implemented. Opinions of tourists on their number are shown in Table 11.

 $\textbf{Table 11} - \textbf{Insight Regarding Security Cameras in City of Zagreb} \ (\textbf{Source: Research of authors})$ 

Security cameras	Traffic cameras (in %)	Public places cameras (in %)
Cannot say	15,41	21,85
Does not exist	2,52	5,88
Minimum number	6,72	26,89
Average number	50,14	28,57
Above average	25,21	16,81

Table 12 — Tourists' Perception of the City of Zagreb as a Safe City (In%) (Source: Research of authors)

Yes it is	No it 's not	Cannot say	
93,94	0	6,06	

The attitude and opinion of tourists on safety as an important factor in the attractiveness and success of the City of Zagreb as a tourist destination are presented in Table 13.

Table 13 — Importance of the Safety Factor for the Attractiveness and Success of Zagreb as Tourist Destination (%) (Source: Research of authors)

Extremely important	92,11
Important	7,89
Neutral	0
Less important	0
Unimportant	0

While prevention measures related to the COVID-19 pandemic during the lock-down period had an effect and has led to the gradual opening of tourist destinations and enabled the opening of state borders that allowed tourists to travel abroad. This resulted in the organization of activities that took place in open areas, for example the summer season of tourism at the Adriatic coast. However, it is much more uncertain to organize cultural, sports and other manifestations and events for them to be safe for their visitors, performers and organizers. Despite the many challenges faced by the tourism industry during 2020, security remains a fundamental human need. The City of Zagreb realizes the concept of achieving its security through security standards and security organization based on the harmonization of national standards, laws and health regulations. Even today, tourism is a key development determinant of Zagreb, due to the opportunities provided by natural and heritage resources, geo-traffic position and proximity to sources of demand and a rich tourist tradition.

During the COVID-19 lockdown period (March — May 2020), only 8 hotels were opened in the City of Zagreb. By the end of June 2020, 28% of 2019 tourist arrivals and

35% of overnight stays were realized in Zagreb, and despite a certain recovery trend in June for Zagreb tourism, this is still the most difficult and challenging year, commented Martina Binenfeld, the director of the Zagreb Tourist Board. From the beginning of the year to the end of June in Zagreb there were 168 thousand tourists in Zagreb, of which around 110,000 were foreign tourists. Croatia Airlines has registered a 67% decline in passenger numbers during the first eight months. Zagreb Airport, in first 8 months, reported a total of 719.358 passengers. Negative effects that the COVID-19 pandemic reflects on Zagreb tourism suggests that all these activities are subject to reducing their number and their cancelations due to health and security reasons.

Although the tourism industry of the City of Zagreb faced many challenges during the COVID-19 pandemic in 2020, the results of the research indicate that tourists perceive Zagreb as a safe city. This is indicated by research data. We emphasize the most important: 44% of surveyed tourists staying in hotels rated the security of accommodation as satisfactory, and 21% as very good. Private accommodation also recorded a good result (27% satisfactory and 12% very good). Hostels follow (25% satisfactory and 11% very good). Assessment of tourists on a security level of support in the shops, restaurants and attractions at a high level. Namely, 25.18% of them rate this support as excellent, 31.29% as very good, and 35.05% as satisfactory. Only 4.32% of respondents estimate that the level of security support is minimal, and 3.56% cannot assess them.

The protection of personal security and the protection of personal data is assessed by tourists as high. The presence of services in all forms of assistance regarding the protection and saving of lives such as police, protection and rescue services and the availability of health care are also highly rated as one of the city's safety factors. The high level of sense of security resulted in the perception of the surveyed tourists that the City of Zagreb is a safe city and 93.94% of them think that Zagreb is.

92.11% of the respondents estimated that security is an extremely important factor for evaluating the attractiveness of a tourist destination and that affects it success. Security standards are based on an integrated approach to security systems based on organizational coordination of all relevant components of the security system, which is aimed at achieving the necessary integration in acting against security risks. Maintaining security is a challenging task for all the components involved, but without security there is no successful tourist destination.

While prevention measures related to the COVID-19 pandemic during the lock-down period had an effect and has led to the gradual opening of tourist destinations and enabled the opening of state borders that allowed tourists to travel abroad. This resulted in the organization of activities that took place in open areas, for example the summer season of tourism at the Adriatic coast. However, it is much more uncertain to organize cultural, sports and other manifestations and events for them to be safe for their visitors, performers and organizers.

#### CONCLUSION

The conducted research shows that Zagreb is still perceived as a safe city. Given the risks caused by the COVID-19 pandemic, Zagreb needs to develop new forms of tourist offerings, revise existing ones, and develop new models of connecting and cooperating with domestic and international tourist operators and subjects. This new system of cooperation should be based on the implementation of and compliance with measures of physical / social distance, observance of protective measures in public spaces, measures of general hygiene and individual's health care. Drawing a clear line between what is acceptable in the context of inherent instability, and what is a threat, crisis or risk, is by no means easy. Tourism is not only a "soft target" during the COVID-19 pandemic but also one of the most insecure economic areas. Tourism is one of the least secure economic activities that is affected by the COVID-19 pandemic. No one whose economy and income depend heavily on tourism should ignore this.

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# TRANSFORMATION OF THE OLD MEDIA INDUSTRIES UNDER THE PRESSURE OF A POSTMODERN SOCIETY

#### Abstract

The "old media" industries developed in parallel with the development of modern society in the 20th century. Within the "old media" industry, individual media industries or media sectors have evolved as a result of the divergence of production processes and distribution channels. The aim of this paper is to highlight the changes that have taken place in the media industry in the 21st century, as a consequence of the digitization of content production and distribution. The digitalisation and convergence of the production process has directly influenced the development of "new media" industries. Post-industrial society was a direct support for the disruptive action of new media industries within the already existing media market. Comparison of the revenue of the old media industry, the gaming industry and the music streaming industry raises the question of the comparison and calculation of revenues of different sectors of the media industry.

Keywords: gaming industry, media industry, music streaming industry, post-industrial society.

The media industry has come a long way from its inception to its second youth. It is not possible to determine the day of her birth, but it can be determined that it all began almost 500 hundred years ago. Gutenberg invented a floating-point machine and a poem was printed. Printing knowledge in bound volumes will mark the end of manual rewriting. The oldest industries in the media industry family. What began with the printing of the poem and then the Bible continued with the printing of books that were intended for emerging civil society. Printing enabled the spread of the Enlightenment, and thus indirectly, knowledge among the population who could not afford expensive hand-made editions of books. The winds of change were blowing and a new age was unstoppable. Early modernism, and then modernity, wiped out the old world. The foundations of a new order were being formed. Enlightenment and Protestantism underpin liberalism. Feudalism is the old man in the robe, while capitalism knocks on the door.

Printing marked the turning point and appearance of modernity. The word was more powerful than the forts and cannons of the Middle Ages. As the aphorist Georg

Friedrich Lichtenberg later wrote: More than gold, the lead has changed the world. And more than lead in the musket, the lead in the printer's type case (Kunczik, 2014, p. 20). Knowledge was spreading, but for the emergence of the media industry it was necessary to wait for the development of all other industries. Only the full development of capitalism will open the door to the young media industry. The first public schools opened in the UK as the book needed a reader. The newspaper, as it is understood in the contemporary context, has been waiting for 250 years. Journals only became accepted at the end of the 19th century. The twentieth century, the second industrial revolution, rail and electricity will mark the expansion of the media industry. Newspapers and magazines will reach the farthest reaches, and later the radio will connect consumers nationally with perfect precision. Television and broadcasting will take the media industry to the end of the modern day.

In 1947, members of the Frankfurt School, Theodor Adorno and Max Horkheimer, published a book entitled Dialectics of the Enlightenment. Already in the second paragraph, he will refer to the Enlightenment and modern, and indirectly, to the media that have contributed to the development of modern society. Adorno and Horkheimer, as well as other members of the Frankfurt School, are followers of the Hegelian tradition of understanding culture. However, they will be the first to create the notions of a "cultural industry" (Hesmondhalgh, 2013, p. 24). The term cultural industry is the result of commodification of cultural products. The media industry will lead the way. The term cultural industry in the singular will very soon take its form in the multiplication, that is, cultural industries. According to many, the most significant product of the cultural industry is the audience converted into goods sold to advertisers (Fiske, 2001, p. 35).

The media industry has appeared in the lap of modernity, and the modern is the story about the development of capitalism. It is the history of Manchester and the working conditions in the first factories. As Eagleton (2005, p. 148) will define later, modern history is an Enlightenment fairy tale of material well-being, liberal values, human and civil rights, democratic politics and social justice, but it is also a nightmare of slaughter. Already in the Enlightenment, the monetization of pleasures and misery (at least as opportunities), the budgeting of human activities in terms of benefits and costs, occurs (Bruckner, 2008, p. 101). The state of society and production relations that emerged then, with minor or major shifts, would continue until the end of the 20th century. By the end of the modern and the end of the classic media industry. This period will remain recorded as described by Marx, that is, as the capitalism of the production phase (Vercellone, 2007).

#### MEDIA INDUSTRY IN TRADITIONAL WAY

The media industry is not monolith but rather a conglomerate of different industries that have the creation of mediated content as a common activity (Kung, 2008, p. 1).

The term "media industry" covers a huge slice of territory ranging over print, sound, screen, and digital bits in space, in Venus as various as corporate communications, advertising, web sites, novels, films, recordings, and music being shared from person to person via the Internet (Hilmes, 2009, p. 1). Companies now compete with one another across markets and in different industries in the media economy (Albarran, 2010, p. 3). Media encompasses all goal-orientated technical means or instruments for the procurements of information in print, visual, or auditory forms as well as the organizational and institutional entities behind them that generate and provide this information (Wirtz, 2011, p. 15).

We can explore the media industry as a means of production or analyse the ownership of particular media corporations. In this context, we analyse the media industry using the political economy of the media. Some authors view the economy as the determining factor not only of the media, but also of the society itself — this is found in the classic Marxian approaches to the (new) media [...] (Siapera, 2012, p. 39). This paper will analyse the media industry in the context of the revenue it generates. Why are corporations fighting for so much dominance, spending their operating time and billions of dollars in wild battles for mergers and acquisitions, managerial stock buybacks and stock market takeovers. There is only one answer: money and influence (Bagdikian, 2000, p. 5).

Revenues generated by the old media industry are recorded as revenues of the national (regional) media industry and are composed of two basic factors: a) revenue from the sale of products and b) revenue from the sale of advertising space (advertising). In this context, we are talking of the two-sided market of the media industry. Picard (1989, p. 17) was the first to mention the term "dual product" markets, which highlights the dual character of media products. The media product is aimed at monetization on the market, but also towards the market of advertisers. Doyle (2013, p. 13) extends the definition of the term "two-sided markets" by defining media output as a product that is also sold in two directions in the market. The services that media companies provide usually take the form of a service package of information and entertainment on one hand, and advertising space on the other. Both of these partial services are traded on different markets but they are both related to the same target consumer markets (Wirtz, 2011, p. 28).

## NEW MEDIA INDUSTRY AND POST-INDUSTRIAL SOCIETY

New media are based on computing technologies, use digital information, and usually involve a connection to an open digital communication network (Kung, 2008, p. 10). What is meant by "new media" varies somewhat, but generally it includes the Internet, video and computer games, and mobile devices including iPods, PDAs, and telephones. (Marshall, 2009, p. 81). Technology has become the word most closely assisted with new media (Hendricks, 2010, p. 5). The classical media industry used the medi-

um as a means of transmitting a message from the centre to the audience. The Internet and digitalisation of content have heralded the end of mass media as they existed over a 500-year period.

The adoption of digital technology enabled content to be shared among many different platforms. Media companies now distribute content to multiple platforms and devices (Albarran, 2010, p. 69). Using the same content distributed across platforms, the new media industry is using a zero marginal cost model (Lozic, 2019a, Rifkin, 2015). Post-industrial society has created the foundations for the development of a platform economy and the distribution of multimedia content (Parket et.al., 2016, Moazed & Johnson, 2016). Across the media, many firms have responded to digital convergence by adopting a multi-platform strategy in relation both to productive and to exploitation of their content assets (Doyle, 2013, p. 29). The convergence was taking place in three main areas: content (media) computer platforms (information technology) and communications (telecom and broadband operators). A subset of industry — level convergence is corporate convergence — whereby companies from one sector acquire or ally with other firms, or start new ones, in another of the converging industries (Kung, 2008, p. 93). The post-industrial society no longer embraced the mass media model. Postmodernism is built on the individual approach and sharing of peer-to-peer information.

#### **METHODOLOGY**

The research will use data from already published sources on the financial results generated by the "old" media industry, and the music and video games industries. The financial results of the old media industry were taken from Marketline Industry Profile reports published on the EBSCO On-line Database. The data were processed and prepared for publication in the categories according to the categories needed to compare the results of media industry research by specific geographical regions. For the specific needs of the work, three individual countries belonging to the Mediterranean (France, Italy and Spain) were selected to focus on regional issues. An analysis of the structure and results of the video game industry is published by the specialist agency New-Zoo.com. Information on the financial results and revenue structure of the global music industry is taken from a specialized IFPI agency that collects and publishes data on the global music industry. The results of the classic media industry research will be compared with the results of two new media industries.

#### **HYPOTHESIS**

Analysing the revenue trends of new and old media industries, we want to confirm the following hypotheses:

1. The old media industries in the Mediterranean follow the trends of the European media industry.

2. New media industries are taking over most of the revenue in the global market.

#### KEY FINDINGS

The research results are divided into three main groups. The first group includes the results of the Old Media Industry Survey, and within this, the results of the European Media Industry Survey of the three Mediterranean countries. The other two groups are the results of research into the global music industry and the global video game industry.

#### OID MEDIA INDUSTRY

The old media industry has made its peak with broadcasting and cable television. Waldfogel (2018, p. 107) points out that as early as 1992, Bruce Springsteen sang the audience's saturation with a television program in "57 Channels (And Nothin 'On)." The old media was heavily dependent on advertising revenue, which was dominated by television. Baudrillard (1986) stress America's fascination with television and commercials in America. The end of the century brings a complete turnaround. Lyotard will define this as the end of great stories. An analysis of the performance of the old media industry was made according to Marketline reports published on EBSCO databases. Table 1 presents the survey results that compare global media industry revenues with those of the European media industry, or the three Mediterranean countries. The revenue of the old media industry is divided into four basic categories: a) broadcasting and cable; b) publishing; c) film and entertainment; and d) advertising. In 2016, the global media industry generated revenues of \$878.1 billion. The average revenue increase was 1.6% per year. Revenue growth is declining, which speaks to the saturation of the old media industry globally. The trend of declining revenue trends of the global media industry is shown in Figure 1.

The European media industry made an average increase in revenue over the analysed period of 0.1% annually. The results of the analysis indicate a complete halt to the rise in revenue of the European media industry. In the three Mediterranean countries, which are the focus of our research, the old media industry has entered the mature stage. Survey results for France showed that there was no average revenue growth over the five-year period analysed. Revenues fluctuate around \$29.4 billion annually, and total annual revenue can be expected to begin to decline. Italy's media industry revenue is steadily declining. In the analysed period they fell by an average of 1.6% per year. Spain has the worst performance of the three Mediterranean countries. In the five-year period analysed, revenues declined at an average of 2.9% annually. In 2013, revenue fell 9%, which is an extremely large fall in revenue for all types of industries. The income trend for Mediterranean countries is shown in Figure 2.

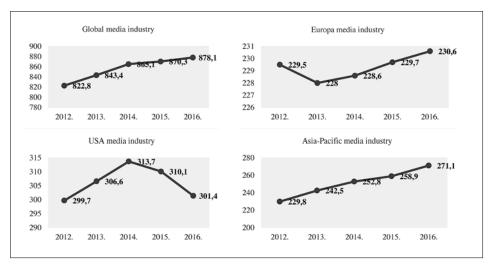


Figure 1 — Comparison of the Old Media Industry Revenue by Region (Us\$ Bill.) (Source: own illustration)

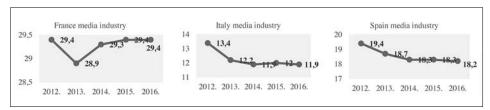


Figure 2 — Comparison of the Revenue of the Old Media Industry in the Mediterranean Region (Us\$ Bill.) (Source: own illustration)

**Table 1** — Media Industry Revenue in Europe (And Mediterranean Countries) (Us\$ Bill.) (Source: Marketline, EBSCO, own illustration)

	Gl	obal								
	m	edia	Eu	лоре	Fr	ance	lto	aly	Sp	oain
	\$	%	\$	%	\$	%	\$	%	\$	%
Year	billion	Growth	billion	Growth	billion	Growth	billion	Growth	billion	Growth
2012.	822,8		229,5		29,4		19,4		13,4	
2013.	843,4	2,5%	228,0	-0,7%	28,9	-1,7%	18,7	-3,6%	12,2	-9,0%
2014.	865,1	2,6%	228,6	0,3%	29,3	1,4%	18,3	-2,1%	11,9	-2,5%
2015.	870,3	0,6%	229,7	0,5%	29,4	0,3%	18,3	0,0%	12,0	0,8%
2016.	878,1	0,9%	230,6	0,4%	29,4	0,0%	18,2	-0,5%	11,9	-0,8%
Average		1,6%		0,1%		0,0%		-1,6%		-2,9%
r			0,4154		0,2736		-0,9739		-0,9037	
r					0,8096		-0,2005		-0,0047	

USA		Asio	a-Pacific	Cl	China		
Year	\$ billion	% Growth	\$ billion	% Growth	\$ billion	% Growth	
2012	299,7		229,8		78,4		
2013	306,6	2,3%	242,5	5,5%	88,6	13,0%	
2014	313,7	2,3%	252,8	4,2%	96,3	8,7%	
2015	310,1	-1,1%	258,9	2,4%	99,6	3,4%	
2016	301,4	-2,8%	271,1	4,7%	109,2	9,6%	
Average		0,2%		4,2%		8,7%	

Table 2 — Global Media Industry Revenue (Us\$ Bill.) (Source: Marketline, EBSCO, own illustration)

The results of the analysis of the correlation between global media industry revenue trends and media industry trends in other geographical areas are explained by the Pearson correlation coefficient in Table 1. The 0.4145 correlation coefficient shows a very weak relationship between global media industry revenue trends and European media industry revenue trends. The results of a study of the correlation between Mediterranean countries' incomes and the global media industry show global trends in the media industry. France has a correlation coefficient of 0.2736, which is relatively weak or insignificant. Italy and Spain have very strong correlations of the opposite direction. Revenues in these countries are declining, which is in contrast to the trend of the global media industry.

Table 2 shows the survey results of the old media industry in the USA, Asia-Pacific and China. The three geographical areas have been separated into a separate analysis to highlight the fundamental changes affecting the global media industry. The US media industry is the largest media industry in terms of revenue. In addition to generating the highest revenue, it also determines trends and trends within the media industry. In the analysed period, it achieved an average growth of 0.2% per year. However, a more important indicator is the trend in revenue within the industry. Media industry revenue in the US has been steadily declining over the last two analysed periods. Comparing with Europe, where revenues have stabilized and have a barely positive upward trend, in the USA revenues are beginning to decline. We can expect such a trend at the European level as well. In more economically developed countries in Europe, this trend has already begun. The Mediterranean countries have a negative trend in the income of the old media industries.

Media industry revenue in Asia-Pacific and China are growing at an average of 4.2% and 8.7%, respectively. Growth rates are high compared to the US and Europe, but revenues are lower than in the US and somewhere around the level of European revenues. Revenues in the global market are slowing sharply as market growth in the Asia-Pacific cannot offset the decline in the US and stagnation in Europe. Within the Asia-Pacific market, there are significant differences in revenue trends. China and India are growing at significant rates, while traditional markets in Japan and Australia have

seen revenue decline in recent years. The analysis of income levels in Asia-Pacific and China shows the beginning of year-on-year fluctuations in income levels. It is the first sign of market saturation. Reducing television consumption was a clear indicator of media marginalization (Bard, 2003, p. 142). The reduction of TV is not the result of explosive cultural innovation but more of a natural transformation into something new. Just as the telegraph turned into a telephone (Low, 2013, p. 60).

Revenue fluctuations point to increasingly fierce competition in the Asia-Pacific markets and a significant impact of zero sum game. The size and absorption of the market has reached its upper limit and the struggle for distribution within the segment begins. Revenues will grow slowly for more several years, and then we can expect the first upheavals in new markets primarily in China. By analysing the research results in the three Mediterranean countries, comparing the results with the regional and global markets, we can confirm the first hypothesis. Media industry revenue in Europe is fluctuating and is only maintained by revenue growth in Russia and the UK. In other countries, revenues have reached an upper limit and fluctuate around that limit. The European media market (the 'old media industry') is saturated and there is no growth potential. The audience has changed their habits and the new media industry has taken over generations of adults along the Internet.

#### GLOBAL MUSIC INDUSTRY

While the problem of broadcasting and print media have gained the most attention in terms of recent popular coverage, the recorded music industry was the first to feel the effects of a new age of media driven by digitalization and the Internet (Bellamy & Gross, 2010, p.109). Until the 2000s, the recorded music industry had been mostly marked by technological breakthroughs that boosted physical sales that grew steadily from 1984 on, and reached a peak in 2006 (Simon, 2019). We will take the post 2006 period into the music industry results survey. First, the intention is to reduce the impact of the sales of music on vinyl and cassettes before this period and secondly, since 2006, there are results from the revenue generated from the streaming segment.

The digitalization of music evolved through a series of transformation phases, each phases has involved rearranging of the socio-technical infrastructure of music, affording new modes of production and consumption, similar to previous shifts in music technology (Fuentes et.al., 2019). The music industry confirms McLuhan's claim that "media is a message". Each new phase of technology development within the media industry has directly influenced the way music is distributed and used. Many changes related to the digitalisation of music precede digitization in other industrial sectors (Irene, 2014). With the development of the smartphone, users carried the music with them and did not depend on the use of devices of the old media industry. Modern gadgets have become a common part of everyday life (Denegri-Knott, 2015).

Digital music provides the ability to overcome some of the limitations of physical recordings by extending their length and extending access to recordings. However, what used to be the social/cultural aspect of listening to music has diminished by allowing access to a large basis of already recorded music (Arditi, 2017). Streaming services are different from these traditional products. A song broadcast via a service is not permanent because access ceases after the subscription expires (Hiller & Walter, 2017). Postmodern society also implies the absence of a gatekeeper or editor of a music program. Instead of listening to music content from the mass media, they created their own listening lists. The development of streaming services and personal music catalogues enabled the "music to go" model (Dholakai et.al. 2015; Sinclar & Tinson, 2017). The development of music technology has led to increased mobility and accessibility and has progressively afforded consumers increased control over music content (Dholakia et.al., 2015).

The streaming model was first used in big-data processing of real-time data such as stock market data, weather forecasts, sports scores and the like (Maheshwari, 2019). Streaming platforms, primarily Spotify and Pandora, have taken over the music industry. We define Spotify as a digital service or platform that mediates service between end providers and customers, something similar to Netflix or Hulu (Skog et.al., 2018). Streaming technology and combining content on-line and off-line represent the third wave of digital disruption (Evans, Schemalensee, 2016). Spotify was recognized as exactly what music fans were waiting for, and their long-sought-after dream of "Heavenly Jukebox" was fulfilled — a service that would make every song available, free and legal (Sun, 2019). Once again, global recorded music revenues climbed in 2018, reaching a high not seen in over a decade. What's spurring this growth? Streaming, of course (MyIntyre, 2019). Streaming music revenue has become a dominant part of the music industry's revenue.

Table 3 — Global Recorded Music Industry Revenues 1999-2017 (us \$ bill.) (Source: Lozić, 2019b.)

				Performance	Synchro-	
	Physical	Digital	Streaming	right	nisation	Sum
1999	25,2					25,2
2000	23,4					23,4
2001	23,8			0,6		24,4
2002	21,9			0,7		22,6
2003	20,1			0,8		20,9
2004	19,5	0,1		0,9		20,5
2005	18,1	1,0		0,9		20,0
2006	16,3	2,0	0,2	1,0		19,5
2007	14,1	2,7	0,2	1,2		18,2
2008	11,9	3,4	0,3	1,3		16,9

2009	10,4	3,7	0,4	1,4	0,3	16,2
2010	8,9	3,9	0,4	1,4	0,3	14,9
2011	8,2	4,2	0,6	1,4	0,3	14,7
2012	7,6	4,4	1,0	1,6	0,3	14,9
2013	6,7	4,3	1,4	1,8	0,3	14,5
2014	6,0	4,0	1,9	1,9	0,3	14,1
2015	5,7	3,8	2,8	2,0	0,4	14,7
2016	5,5	3,2	4,7	2,3	0,3	16,0
2017	5,2	2,8	6,6	2,4	0,3	17,3

**Table 4** — Music Industry (Source: own illustration)

2006 -2017	Physical	Streaming	Sum
Equitation	Y=14,701*0,9012x	Y=0,1453*1,3919x	Y= 0,1266x2 —
			1,6405x + 19,68
R2	0,9689	0,9793	0,9645
S	-9,8%	39,2%	-0,9%
R	-0,6784	-0,0377	-

The business model of the new media industry, in the music industry segment, has completely changed over time, with music corporations selling media content stored on a physical carrier in a mortar and brick shop. In addition, the payment method for using media content has also been changed. (Csathy, 2019). Streaming platforms are global corporations that operate from a single hub in the global marketplace, so it is not possible to accurately define revenue by country as it used to in the old media industry. Table 3 presents the results of the Global Music Industry revenue survey. Data are sorted by age and structure. The total revenue of the music industry declined from 1999 to 2014. 2015 saw the first recovery in the music industry's revenue compared to the previous period. Total revenue was falling as physical content carrier revenue fell. Revenues from streaming platforms are growing steadily.

Table 4 presents the results of the Global Music Industry Trends Survey. The period of 11 years from 2006 to 2017 was analysed, that is, the period from the emergence of streaming platforms to the end of the analysed period. Revenue from physical content carriers dropped an average of 9.8% annually from 2006 to 2017. Total revenue declined by 2014 to begin recovering in 2015. The average annual decline in revenue was 0.9%. Streaming revenue grew at an average annual rate of 39%. The rise in streaming revenue directly affected the trend in total revenue. Pearson's correlation coefficient shows a relatively weak correlation between the movement of physical carrier income and total income. The correlation between total streaming revenue is 0.0377, meaning that there is a slight correlation of negative direction.

#### GIOBAL VIDEO GAMING INDUSTRY

Video games is a specific kind of digital entertainment in which the gamer interacts with a digital interface and is faced with challenges of various kinds, depending on the plot of the game (Zackarssion & Wilson, 2012, p. 5). Video games, as an evolution of the analogical game, as a digitalization of the game, have become the most relevant contemporary emergent cultural form, in terms of consumption and business volume (Escribano, 2012, p. 201). Although video games are software, they are more than software, and too often they and their producers remain lumped into the same categories as software developers. Assumptions are made about what compromises a game and its production process, which continues to hold the video game industry and the art of game production back from its full potential (O'Donnell, 2012, p. 30).

	2013	2014	2015	2016	201 <i>7</i>	2018
Mobile	17,6	21,7	30,0	36,9	46,1	70,3
Console	27,9	27,0	27,8	30,8	33,5	34,6
PC	30,0	32,8	33,7	31,9	29,4	32,9
Sum	75,5	81,5	91,5	99,6	109,0	137,8

Table 5 — Video Gaming Revenue 2013 — 2018 (US\$ bill.) (Source: Lozić et.al., 2018.)

Video games occupy a (pop) cultural niche competing most directly with the movie and music industries for the consumer's time and money (Egenfeldt-Nielsen et al., 2016, p. 16). Video games develop special relationships with pop culture as well as with post-modern social processes. Although evolved from arcade games to large screens and consoles, video games are part of the post-industrial development cycle. Those days, a mobile game was typically one of three things (Manning & Buttfield-Addison, 2017, p. 4): a) a simple game, with carefully chosen interactions, graphics, and controlled complexity, because the game design was best supported by these facets; b) a much more complex affair, available for anything ranging from specialized mobile game consoles to smartphones; and c) a mobile port of a game that debuted on a console of a PC. The phenomenon of video games can be analysed from a number of different perspectives. These include enjoyment, socializing, collaborating, competing, seeking recognition, escaping from routine and other reasons (Liu, 2017).

The results of the global video industry revenue analysis are presented in Table 5. Revenues are divided into segments into three main groups. The period of 6 years and 2013 to 2018 was analysed. The gaming industry's total revenue grew from \$75.5 billion at the start of the analysed period to \$137.8 billion. In 2018, revenues were up 82.5% from the initial observed period. Such revenue growth has not occurred in any segment of the old media industry or in any geographical area. In addition to the exponential growth in revenue of the overall gaming industry, there is a significant trend in the distribution of revenue within segments. In the first analysed period, the PC seg-

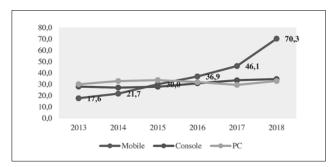


Figure 3 — Video Gaming Industry Revenue by Segments (US\$ Bill.) (Source: own illustration)

ment generated the highest revenues. PC segment revenue increased until 2015 and is the largest of all segments. In 2016, revenues in the PC segment fell, and for the first time revenues in the mobile segment were the highest. Comparing 2016 in all three analysed groups of media industries, it is important to emphasize that revenues of the old media industry in the US fell by 2.8% compared to the previous year, revenues of the European media industry grew by a lean 0.4%, while media revenues for Mediterranean countries' industries stagnated (France) or fell (Italy and Spain). In 2016, the total revenue of the music industry grew by 8.8% over the previous year. Streaming revenue was up 67.9%.

	Mobile	Console	PC	Sum
Equitation	Y = 17,039* 1,3077x	Y = 26,443* 1,0536x	Y=0,1804x <sup>2</sup> + 0,9732x+31,004	Y=73,209* 1,1200x
R2	0,9879	0,8614	0,0879	0,9587
S	30,77%	5,36%	-	12%
R	0,9996	0,9184	0,1516	-

**Table 6** — Video Gaming Industry (Source: own illustration)

The trend of segment revenue movement is shown in Figure 3. PC revenues were the highest in the first analysed period. With the development of the global gaming industry, PC segment revenue has grown and then declined. Console segment revenue grew, but at a slower pace than the overall market growth. The biggest transformation took place within the mobile games segment. In the analysed period, revenues grew by 299.4%. In 2016, the total revenues from mobile games were higher than the individual revenues of the Mediterranean countries we analyzed. Mobile games revenue was higher than Scandinavia's total revenue in the old media industry. The total revenue of the gaming industry in 2016 was more than double the revenue of the old media industry in Germany as the largest media market in Europe. The same year, Germany had \$43 billion in media industry revenue, \$29.9 billion in the UK, \$77.3 billion

in Japan. The total revenue of the gaming industry was higher than that of the highly developed markets of the old media industry.

Table 6 shows the results of the research of gaming industry trends by segments. The overall revenue growth of the global gaming industry was an average of 12% per year. The average annual growth of mobile segment revenue was 30.77%. The console segment growth averaged was 5.36% year over year as the PC gaming market entered its mature phase. Revenues are fluctuating, and we've seen that with the old media industries. Low (2013, p. 77) emphasizes that our sexuality, ethnicity, habitat, age and income no longer shape our barriers. We are all screenagers, happy addicts to a screen-based international pursuit. The results of the Pearson coefficient analysis indicate a very strong relationship between the movement of total revenues and revenues of the mobile and console segments. The PC gaming segment has a slight correlation with the trend in total revenue as the connection coefficient is only 0.1516. In the last analysed period, revenues in the PC segment also recovered, but are still below the level of the growth of total revenue.

#### CONCLUSION

The comparison of the revenue trends of the old and new media industries has raised questions about how similar these markets are and how different they are. In the market of the old media industry, the audience was created at a time when there was no Internet. New media industries are built with high technology and the audience has already used technological solutions that allow the distribution of media content. Mason (2016, p. 52) recalls Michel Foucault's assertion that we will become "entrepreneurs of ourselves." As defined by Levi-Strauss (Bauman, 1984, p. 48), structure characterizes the system. It is composed of elements, none of which can be changed without causing change in all other elements. Post-industrial society has built new structures within which a new model of the media industry has developed. In the context of the hypotheses, we could conclude: The research results showed that we can fully accept the first hypothesis. Revenues of the old media industry in Europe grew by an average of 0.1% annually over the five-year period analysed. Revenues of the Mediterranean countries follow the same trends. Revenues from the media industry in France have reached a point of saturation, while in Italy and Spain they have been declining throughout the period analysed.

As part of the new media industry, the music industry completely erases the framework within which the classical media industry has moved. The revenue generated by the music industry in the post-industrial period consists of a number of different media segments. The video game industry has developed alongside the software industry and the development of a post-industrial society. In the last analysed period, the total

revenue was \$137 billion, growing at an average rate of 12% annually, which is higher than the growth of the old media industry in China.

The total revenue of the gaming industry in the mobile segment reflects the true picture of postmodern societies. Revenue is growing at an average rate of 39% per year. As with the music industry, consumers carry their content on a mobile phone or tablet. Gaming is also possible when they're not at home in front of the big screen. The technology and the habit of using a small screen has completely changed the geometry of the media industry.

The old media industry in the Mediterranean has reached the stage of saturation and revenues are stagnating. The trend of stagnant and declining revenue follows the overall trends in the USA and Europe. Postmodern society has already been formed in the Mediterranean countries and media users' habits have changed. Comparing the results of the old media industry research with the music industry and video game industry research reveals profound changes that have swallowed the media industry. The old media industry, which has grown up around broadcasting and big screens, is giving way to a new industry leaning on smartphones and tablets. The media industry created in modern times is slowly leaving and giving way to postmodern media usage habits.

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## CROATIA AND CROATIAN IDENTITY IN GERMAN LANGUAGE TOURISM TEXTBOOKS

#### Abstract.

This paper examines the use and communicative potential of narratives regarding Croatian identity found in textbooks for Tourism Management written in German by Nevenka Blažević (Deutsch im Tourismus 1 and Deutsch im Tourismus 2). This paper aims to analyse the use of metaphors within the narratives regarding Croatian identity. The purpose is to develop a model for analysing the possibilities of image building within foreign language textbooks. Foreign language textbooks are in focus because they have two levels of audience. The first audience is explicit, they are the ones who learn a foreign language from a textbook. The second is implicit, and these are all those with whom the "first audience" comes into contact using that foreign language. In the second group we also include foreigners visiting our country, that means users of tourist services and therefore potential promoters of the nation's image and culture. The qualitative content analysis was conducted on the stratified systematic sample from the above-mentioned textbook. The key findings from this research show that the potential of the emotional and value impact of the information about certain topics in analysed textbooks, which can be realised by using ontological metaphors, has not been realised.

Keywords: nation, state, image, German as a foreign language, narrative in textbook

The main focus of this paper is on the interrelationship between German language textbooks and the promotion of the nation and furthermore tourist branding of individual locations. The foreign language textbook is in focus because it has two different potential types of audience. The first audience is explicit, they are the ones who learn a foreign language directly from that textbook. The second is implicit, and these are the ones with whom the "first audience" comes into contact using that foreign language. In the second group we also include foreigners visiting our country, which means users of tourist services and therefore potential promoters of the nation's image and culture. The starting presumption is that in the Croatian-speaking area, foreign language textbooks in tourism are not used enough as a source of information about land, heritage and tradition, but also as a source of persuasive rhetoric.

Considering that today's students will be the future employees of tourism, by conscious learning and later using particular narratives about Croatia and Croatian identity they become part of the strategic planning of the communication promotion strategy. Therefore, the strategic language planning of soft power mechanism could in future include foreign language textbooks. In addition to the above, the motivation for this work was first to analyse the current situation with using a foreign language textbook as a tool for the country's promotion, and after then to encourage further action in the same direction. Namely, according to Ooi (2015, p. 1) "soft power is transmitted through culture, political values, and foreign policies in geopolitical competition. It is about winning the hearts and minds of people around the world. Soft power, exemplified through tourism, is most effective when it is insidious." Since the tactics of blending a foreign language textbook and a tool of soft power for a country's promotion is an innovative step in developing new opportunities, it is important to analyse all perspectives regarding this topic.

This paper consists of three parts. The first theoretical part is comprised of short explanations of the basic terminology connected to narratives and metaphors. The central and main part of the paper offers a more detailed description of the research, starting with a methodological explanation and leading to the presentation and discussion about the research results. The paper ends with a conclusion containing a generalised view of the analysis results and guidance for further research.

#### THE THEORETICAL FRAMEWORK

#### Narratives as a Tool of Learning a Foreign Language

The texts found in German textbooks could provide factual information about Croatia and Croatian identities, but also stories about some specifics built on opinion-based informing (Fulton, 2005). Specific narratives of a nation are construed as important components of broader discourses of national identity. Discourses of national identity involve storytelling. Since the research in this paper is based on the analysis of texts from German language textbooks for tourism and hospitality, this part of the theory is focus on the use of narratives in such textbooks. Texts with information about Croatia, its identity and heritage, which contain narratives, promote the country, thus giving information about Croatia in a more concrete and memorable way.

The form of narrative structure is defined within the frames of the narrative theory as a sequence of causally related events which occur in a specific time and space (Bordwell & Thompson, 1990, p. 55). Narratives are commonly defined in different ways, as "a story with a beginning, middle and end that reveals someone's experiences" (Manning & Cullum-Swan, 1998); "an original state of affairs, an action, or an event, and the consequent state of events" (Czarniawska, 1998), "any form of communication" (Barthes, 1966), or "the main mode of human knowledge" (Bruner, 1986).

Specific narratives of a nation are construed as important components of broader discourses of national identity. Discourses of national identity and heritage are a part of 'story telling' by promoting an image of the country. The news found on Internet portals provides factual information about some country, but also stories about some specifics built on opinion-based reporting (Fulton, 2006). According to Lule (2001, p. 18), "news stories offer sacred societal narratives with shared values and beliefs, with lessons and themes, and with exemplary models that instruct and inform." He differentiates between seven master myths on which the narratives in the news stories are based, and they are: the victim, the scapegoat, the hero, the good mother, the trickster, the other world and the flood. Within foreign language textbooks, there could be used narratives based on master myths according to Lule (2001), specifically the narratives around heroes and good mothers.

Analysing the use of narratives for promotions purpose, there are a few possible strategies for how to use a narrative about a country, its identity and culture in a foreign language textbook. One strategy is from the learner's perspective. Those who learn a language from such books, will establish a better knowledge of the use of narratives about a destination, heritage and tradition. This means that they consciously learn narratives that they will later use in conversation with strangers, which leads to deeper empathy for the learning process, but also content. The other strategy is from the perspective of tourists. People do not actively seek, but rather passively take in, information about other countries (White, 2012; Lee, 2009). When information is given in strategically thought-out narratives, the positive and/or negative impressions translate through these narratives into familiarity and likeability. Therefore, the texts or grammar exercises can be used to transmit an image of the country by using the metaphors of personification and narratives based on stereotypical master myths (Lule, 2001). As part of texts, destination and nation branding thus can be used as effective soft power tactics. The third strategy is to write in textbooks about mega events organized in one country or about mega successes, as for example Croatian success at the World Cup 2018. The fourth strategy could be the texts or grammar exercises are based on information dealing with comparisons of various destinations and local destinations, or comparisons of, for example, German tradition and Croatian and the like.

#### Metaphors as Part of Narratives

Conceptual Metaphor Theory (CMT) developed by George Lakoff and Mark Johnson came into existence with by their book *Metaphors We Live By* (1980/2015). According to Lakoff and Johnson (1980/2015), metaphors are dominant in everyday life, both at the level of language use and at the level of thinking and reasoning. Within this paper, conceptual metaphors are observed through the perspective of role in the formation of narratives, but also through the perspective of the role in learning new words and phrases. Research on the use of metaphors in foreign language teaching (Roche & Roussy-Parent,

2006) has demonstrated that conceptual metaphors are good for learning vocabulary and are an effective tool in language teaching. According to Brandini, in the educational field a "wide range of studies have been developed that have used metaphor as an instrument for investigating the representation and opinions of teachers regarding a range of different conceptions such as teaching and learning (Brandini, 2015, p. 274).

A conceptual metaphor reflects the process of mapping a source domain onto a target domain. A source domain is more concrete, unlike a target domain which is more abstract. In our communication, a target domain, or part of it, can be perceived through part of a source domain (Lakoff & Johnson, 2015, p. 3-5). The process of mapping is on the language level seen through the use of lexemes.

In this paper, the focus is on the source domain PERSON<sup>1</sup>. This source domain motivates the use of lexemes as a tool for understanding and perception of different target domains. Also, the mapping process of personification enables the reviving of abstract themes (as a country, hotel service or part of cultural heritage as well) that then become bearers of narratives about heroes, victims, and others for storytelling in textbooks.

In recent literature related to narratives, metaphors are considered to be effective formulas to build a narrative on the language level. According to Lule (2001), information wrapped in stories are part of every humankind, therefore stories or particular narratives could be successful tools for learning the foreign language. It can be concluded that metaphors based on personification could be considered as the most frequent metaphor in narratives based on empowering an image and reputation of a state and nation. A mapping process from the source domain PERSON, therefore, has the potential to transfer a range of assumptions that are usually associated with the source domain on political issues and to evoke interpretation and suggest a course of evaluation of the target domain (Musolff, 2010). Using categories inherent to people, we interpret phenomena, associations, social movements and so forth based on our motivations, goals, activities and characteristics (Lakoff & Johnson, 2015). Therefore, metaphors, such as nation, party or cultural heritage is a 'person', have the largest capacity to transmit an association evoked by the potential for a catalogue of emotions towards friends and family and towards our experience.

#### THE RESEARCH

Research Sample and the Analysis Method

The research was conducted using texts from the textbooks *Deutsch im Tourismus 1* and 2 (German in Tourism 1 and 2) by Nevenka Blažević. These textbooks were cho-

<sup>1</sup> According to the concept of writing conceptual metaphors, they are written in block letters, but smaller than the given format of other words.

sen because they are the only ones that are originally Croatian (published and written in Croatia) and are currently used to teach German in tourism and hospitality university programmes.

The qualitative content analysis was conducted on the stratified sample from the abovementioned textbook. The stratified systematic sample contains all parts of the texts from the above-mentioned foreign language book, but divided into subsamples, according to the "type of person" which are referred to by the lexeme and according to the target domain, or the topic on which the lexeme is transferred. Therefore, stratified sampling allows us draw more concrete findings. Our sample is systematic, because it includes all identified lexemes that indicate the use of the metaphor Croatia (n), identity, cultural heritage or the tourism topic is a 'person'. The data was analysed involving the following two steps. The first step included the identification of lexemes that could indicate the use of above-mentioned conceptual metaphor. And the second step was the process of connecting the identified lexeme and the target domain by deriving a potential narrative from that synergy.

#### The Research Aim and Questions

The primary aim of the paper was to establish whether the texts used to teach students and future tourism workers language for professional purposes are also used to promote the country and identity. The second goal of the research was to identify which narratives about a state and a nation are dominant in the published texts. We assumed that the texts will also contain information about Croatian identity, tradition and tourism. Therefore, the article's second aim is to find whether the texts actually contain any narratives about Croatian tourism and in which way the narratives about the state and the nation are connected with the narratives about tourism. That narratives should be compared with the possible use of strategies for the use of a narrative about country, identity and culture in foreign language textbook as a tool for soft power, as described in 2.1. The analysis further identifies which conceptual metaphors are the base of the dominant narratives. Our analysis was structured in such a way as to answer the following questions:

- 1. Are the texts in the textbook used to highlight the characteristics of Croatia, identity and heritage in a way that only conveys information, or do they add emotional value to certain information?
- 2. Is the potential of metaphors based on personification used for the purpose of transferring emotional / value information?
- 3. Which narratives are predominantly present with metaphors related to the selected target domains?

#### FINDINGS AND DISCUSSION

The first phase of the research was an analysis of the content of both textbooks. The results indicated insufficient use of texts for the promotion of Croatia. In the textbook German in Tourism 1, 80% of the analysed content refers to topics that are directly related to German-speaking countries, while the content relating to Croatia is mainly in the form of information leaflets about selected accommodation facilities. The textbook *German in Tourism 2* is thematically more focused on the presentation of tourist destinations, and one whole chapter out of a total of seven is dedicated to Croatia. The texts are predominantly informative. It can be posited that the promotion potential of the texts in German was not realised at the macro level of the textbook, meaning that potential employees in tourism were not given a narrative about Croatia which they could later use in direct contact with tourists.

The second step was an analysis related to the identification of the potential of metaphors based on personification for the purpose of developing narratives about Croatia. In both textbooks, a total of 14 lexemes were identified which indicate the ontological metaphor that 'Croatia is a person', and that 'identity, destination or cultural heritage is a person'. These lexemes are used to affirmatively emphasise certain characteristics of selected topics. Examples of the uses of these lexemes are:

- (1) Kroatien venezianischer Charme der Adria. (Venetian charm of the Adriatic) (Blažević, 2004, p.45)
- (2) Kroatien ist für die Touristen aus aller Welt anziehend, vor allem wegen seiner Adriaküste, die die Küste der tausend Inseln genannt wird. (Croatia attracts tourists from all over the world, mainly because of its Adriatic coast, which is called the coast of a thousand islands.) (Blažević, 2004, p.77)
- (3) Österreich, Italien und Kroatien waren die groâen Gewinnerinnen im Urlaubsgeschäft. (Austria, Italy and Croatia were the big winners in the holiday industry.) (Blažević, 2004, p.18)

The key findings from this research show that the analysed texts are dominated by metaphors based on personification that are frequently used as affirmative references to the Republic of Croatia and Croatia's identity. These parts of the narrative are in direct synergy with the notions of states and identities, for example through the use of lexemes a *friendly* person, an *open* person, a *helpful* person, but there is no integration into a fuller story.

#### CONCLUSION

This paper examined the use and communicative potential of narratives regarding Croatian identity found in textbooks for Tourism Management written in German by Nevenka Blažević (*Deutsch im Tourismus 1 and Deutsch im Tourismus 2*) in order to de-

velop a model for analysing the possibilities of image building within foreign language textbooks. The goal was to analyse the use of metaphors within the narratives regarding Croatian identity, culture and destinations. The foreign language textbooks for tourism students have the potential to transmit knowledge about country in forms of storytelling to the double audience level — the first level consist of the learners, and the second level consists of those with whom the learners come into contact by using that language.

Since the Croatian economy could more or less only count on its tourism, foreign language books could serve as one of the tools of soft power in image promotion. Although one would have expected narratives concerning framing country, destination and heritage as a person that could attract attention, the analysis showed that this potential is not used. Research results show that the potential of the emotional and value impact of the information about certain topics, which can be realised by using metaphors, has not been realised.

In conclusion, it can be stated that there is no strategic link between state and nation image branding and the language units that potential tourism professionals can later utilise in communication processes. Textbooks are primarily written for the purpose of teaching grammar and semantics, but there is no consideration given to linking the communication framework and practical applications with a higher goal in mind.

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# THE RELATIONSHIP BETWEEN MOTOR ABILITIES AND KINEMATIC CHARACTERISTICS AND THE RESULTS OF THE 60m HURDLE—RUNNING

#### Abstract

The purpose of this paper is to, based on measuring, determine the influences of some motor abilities and specific kinematic parameters on the result of the 60m run with hurdles. For this purpose, on the sample of 10 female cadets aged 11-12, every cadet run twice in the same conditions, and we treat every result as an entity, in summary 20 entities. In this paper, female cadets are competing in hurdle running, we applied a set of three motor tests and set of specific kinematic parameters. The set of motor tests was used to assess basic motor abilities. The set of specific kinematic parameters depicts average values (in all five hurdles) of crossing over the hurdles, leaning of the body, angle of the swing leg (knee), height of the center of mass, horizontal velocity, flight duration over the hurdles. We applied regression analysis which, from the set of motor abilities, isolated standing long jump variable in addition to the flying start on the 20m run as significant variables, while in kinematic parameters we isolated the crossing over the hurdles, leaning of the body, angle of the swing leg (knee) and flight duration over the hurdles as significant variables. Based on the obtained results, we may draw a conclusion that the obtained results are influenced by basic motor abilities and some kinematic parameters specific in hurdle running.

Keywords: athletics, hurdles, kinematics, cadets

Hurdles are one of the most complex athletics disciplines regarding motor abilities and technical skills and it is characterised by cyclical, fast and strong moving. The main problem in hurdle running is crossing over a hurdle which requires a high technical skill. Top results in this discipline necessarily involve a high technique level, coordination, rhythm, speed, equilibrium and power (Babić, Katovic, & Ivancevic, 2015) in addition to flexibility which is crucial, particularly in the hip area. Running involves ten or five hurdles depending on the discipline (60m, 100m, 110m, 400m).

Hurdles are crossed over by hurdle steps. The main goal of hurdle running is economy in moving with a minimum loss of speed. In order to introduce the hurdle running technique and for the purpose of easier analysis, we may distinguish the following segments in a hurdle run: start, running to the first hurdle (starting acceleration), jumping over the first hurdle, running between hurdles (running on the track), and the finish (crossing the finish line).

Running to the first hurdle is performed in 7 or 8 steps. The eighth or the ninth step is already jumping over the hurdle. The last step before the hurdle must be shorter than the previous one. It is a mistake to make this step longer since it makes it more difficult to perform the take — off, attack and jumping over correctly. Efficient running to the first hurdle involves optimum rhythm, sooner body opening, the last step being shorter than the previous one, efficient hurdle start progression, setting the take — off leg on the optimum spot before attacking the hurdle (Krzeszowski, Przednowek & Wiktorowicz, 2014).

The motor ability of explosive power, which is a good base for every sport, is necessary for achieving success in athletics disciplines, but besides this, speed, strength and coordination are necessary as well. Based on the quoted facts, it can be concluded that vaults are very difficult and complex disciplines, and it is necessary to influence many factors to achieve success and elite results (Tončev, 2001). Motor abilities are complex and very elaborate, genetically conditioned, with high coefficients of innateness (speed, coordination, balance, precision), and one has to be well acquainted with them to be able to work on their increase (Nićin, 2000; Smajlović & Likić, 2011). The aim of this study is, based on measuring, to determine the influences of some motor abilities and specific kinematic parameters on the result of the 60m run with hurdles in female cadets.

#### WORKING METHODS

#### The Sample of Subjects

The sample of subjects in this study included the population of 10 athletes, competitors from the younger cadet category (aged 11-12) who run twice in the same conditions. Every result is treated as an entity, summary 20 entities. All cadets participate in hurdle running competitions.

#### The Sample of Variables

Variables to assess specific motor abilities are standing long jump (RSDM), 20m run with a flying start (R20ML), 20m run from a low start (R20MNN). The result for standing long jump (RSDM) represents the distance from the subject's top of their toes to the distance set by the back part of their foot. The jump is performed from the surface slightly tilted and the respondent lands with both feet (RSDM). The result for 20m run from a flying start (R20ML) represents the time that the subject crosses 20 metres in as short time period as possible. The respondent crosses a 20 — metre distance in full sprint before the starting line, and time is measured by two sets of photo cells positioned at the starting and finishing line.

The result for the 20m run from a starting block (R20MN) represents the time that the subject achieved after leaving the electronic starting block, and crossing the finish

line. The result is measured so that he crosses the distance from an electronic starting block after the audio signal to the finishing line in as short as time period as possible. Two sets of time measuring photo cells are positioned at the starting and finishing line. The set of specific kinematic parameters depicts average values (in all five hurdles) of crossing over the hurdles (AMDH), leaning of the body (AMNTP), angle of the swing leg (knee) (AMKZKP), height of the center of mass (AMVCMP), horizontal velocity (AMHB) and flight duration over the hurdles (AMTF).

The total distance of jumping over the first hurdle is the distance crossed from the moment of separating the take — off leg from the horizontal surface while attacking before the first hurdle to the moment of contact of the swinging leg and horizontal surface while descending behind the first hurdle (AMDH), body tilting on the hurdle (AMNTP), total flying distance from take — off before the hurdle to contact with the ground with the swinging leg after descending behind the hurdle (AMTF), flying speed horizontal component at the moment of jumping over the hurdle (AMHB), mass center height on the hurdle (AMVCMP), angle of intersection of two lines: the first line is determined by two points: knee and the foot, and second line is determined by knee and iliac crest (AMKZKP). The 60m hurdle run result was taken as a criterion variable.

To assess the kinematic parameters, we have used the following equipment: six sets of photo cells for measuring movement dynamics on the competition track, the Opto jump optical measurement system for determining kinematic parameters in running, an electronic starting block to measure the start reaction time and the SVHS 100HZ camcorders. We conducted a 2D analysis by using Kinovea movement structure analysis software. The camcorder was positioned vertically onto the first hurdle from a 5m distance on a tripod 1.20m tall. The analysed space was calibrated by a referent framework (180x180x180 cm).

#### DATA PROCESSING METHODS

To process the obtained data, we used the Statistica ver. 12 programme package (Stat Soft, Inc. TULSA, USA). According to the objectives of this research, we will be using the following methods: the calculation of basic descriptive parameters for all the variables, normality distribution variables will be tested by the Kolmogorov-Smirnov test. To determine the influence between motor abilities and kinematic parameters in the 60m run with hurdles, we will be using multiple regression.

#### RESULTS AND DISCUSSION

Table 1 presents basic descriptive parameters for all the studied variables, arithmetic mean (AM), the lowest (MIN) and the best (MAX) result, standard deviation (SD). The Kolmogorov-Smirnov test has shown normal distribution in all the variables.

5.29

0,29

	AM	MIN	MAX	SD
R60	10,98	10,02	11,85	0,50
AMHD	289,74	277,60	303,20	7,48
AMNTP	46,51	36,40	56,60	6,90
AMKZKP	159,07	137,60	172,60	10,72
AMVCMP	119,68	114,11	124,89	3,45
AMTF	0,41	0,35	0,48	0,04
AMHB	4,95	4,63	5,88	0,29
MSDM	210,60	197,00	223,00	9,24
R20ML	2,74	2,58	2,98	0,14

**Table 1** — Basic Descriptive Parameters

AS (arithmetic mean), MIN (lowest result), MAX (best result), SD (standard deviation), Skewness (curvature measure), Kurtosis (flatness measure)

**Table 2** — Regression Analysis

4.43

	b*	t	p-value
AMHD	-0,56	-4,82	0,0003
AMNTP	0,23	2,25	0,0422
AMKZKP	-0,29	-2,70	0,0180
AMVCMP	-0,16	-1,36	0,1968
AMTF	0,62	4,76	0,0004
AMHB	-0,19	-1,43	0,1773

R = 0.95; R2 = 0.90; Adjusted R2 = 0.86; F(6.13) = 20.62; p < 0.00001;

Std. Error of estimate: 0,186; b\*-un standardised regression coefficient,

t — value of testing the significance of regression coefficients, p — significance level

Table 2. presents results of regression analysis on the average values (in all five hurdles) on the criterion variable 60m hurdle race. The result analysis reveals there is a significant influence by the set of 6 predictor variables and results for the 60m run with hurdles. We isolated 86% of the explained variance with the multiple correlation coefficient R=0.90 (Table 2). In the predictor variables set, the greatest influence on the criterion variable is flight duration over the hurdles (AMTF) with b=0.62, followed by crossing over the hurdles (AMDH) with b=-0.56.

While leaning of the body (AMNTP), angle of swing leg (knee) (AMKZKP), was significant as well. The obtained results of the regression analysis reveal that during this phase, the subjects should work on their technique to achieve a better result, while in seniors the significance of these variables may be explained by the best performance they can achieve and by reaching a constant, that is, by losing as little time as possible while jumping over the hurdle and making flying optimum regarding the take-off

R20MNN

4.97

distance before the hurdle and the distance between the leg and the crossed-over hurdle. This variable reveals that cadets with a higher horizontal speed and lower body mass center achieve better results when crossing over the hurdles, that is, they do not lose much speed while jumping over the hurdles.

Table	3	<ul> <li>Regression</li> </ul>	Anal	ysis
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	b*	t	p-value
MSDM	-0,58	-2,57	0,043
R20ML	0,73	4,24	0,005
R20MNN	0,42	1,70	0,139

R = 0.93; R2 = 0.86; Adjusted R2 = 0.79; F(3.6) = 12.46; p < 0.0055;

Std.Error of estimate: 0,222; b\*-un standardised regression coefficient,

t — value of testing the significance of regression coefficients, p — significance level

Table 3 presents results of the regression analysis of motor tests on the criterion variable 60 meter hurdle race. In the set of predictor variables, the 20m run with flying start (R20ML) has the greatest influence on the criterion variable with b=0.73 in addition to standing long jump (RSDM) with b=-0.58. These results are expected and logical. The 20m run test with a flying start is a motor test for assessing maximum running speed and the basis for its realization is the mechanism responsible for maximum fast involvement of agonists, antagonists and synergists which is essential. The same mechanisms and musculature are responsible for efficiency in hurdle running. Standing long jump motor test measures explosive power, that is, additionally measures maximum fast generating of extension muscle force in the ankles, knees and hips. At the moment of take-off and hurdle attack, the same musculature is engaged as in the test mentioned before. Similar information was obtained in running and jumping research (Pavlović, Milićević, Vrcić & Pupiš, 2016; Radulović, Mihajlović, Gusić & Pavlović. 2016; Blažević, Babic & Coh, 2011).

#### CONCIUSION

The aim of this research was to establish the influence of specific kinematic parameters on the results of the 60m run with hurdles in female cadets. We applied the set of three motor tests and 6 kinematic parameters. For the criterion variable, the parameter was the 60m run with hurdles result. We measured results in the 10 best cadets in the Republic of Croatia. The results were processed by multi-regression analysis which revealed there is a connection between the predictor set of variables and criterion. Regression analysis of the set of kinematic parameters depicts average values (in all five hurdles) of crossing over the hurdles, leaning of the body, angle of the swing leg (knee), height of the center of mass, horizontal velocity, flight duration over the hurdles and the revealed parameters essential for efficiency in the 60m run with hurdles.

These are crossing over the hurdles, leaning of the body, angle of the swing leg (knee), and flight duration over the hurdles. In the set of motor variables, the significant variables were standing long jump and 20m flying start. The results are in accordance with the results obtained in older subjects. The results will enable us the insight into the movement structure of younger female cadets and can serve as guidelines for planning and programming training and for a better selection as well.

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#### MANAGERIAL INCOME POLARIZATION ALONG THE HUNGARIAN NUTS4 SYSTEM

#### Abstract

The authors analyze the geographical polarization of Hungarian wages by focusing on managerial income differences. This part of the International Standard Classification of Occupations (ISCO) was selected based on the prior assumptions, according to which there are significant differences in their salaries, which is closely connected to the economic potential of a given geographic location. The calculations were applied to show the differences along with two theoretical viewpoints. First of all, the NUTS4 breakdown is sufficiently detailed but not too fragmented; that is why it is possible to properly represent the regional disparities. On the other hand, the database was analyzed based on the ISCO. The examination of each class separately served as a benchmark to identify the unique characteristics of managers. A selected range of indicators based on the international literature was involved and ran on the Hungarian Wage Tariff Database of 2016. The managers have the highest average income, and that at the same time, they have the largest standard deviation. However, those working in Agricultural and forestry occupations have larger-thanaverage differences. The difference between the richest and poorest regions for managers is 1.238 times, which can be considered moderate regarding the other occupations. This is also supported by the Lorenz curve and the Gini index. The weighted relative standard deviation shows a similar inequality for managers and those working in Agricultural and forestry occupations (17.91 and 17.92 respectively), which are the largest in the examined database. Based on the logarithmic standard deviation, managers face the most extensive level of variance (0.0097). Along with the selected indicators, it can be seen that the salary differences are the biggest in the case of the managers by NUTS4. These figures are closely connected to territorial differences of GDP, which is supported by the graphic representation.

Keywords: polarization, NUTS4, income

The basis of our research was the increase in income differences that we can realize in the labor markets of most developed countries. This started in 1980, and it is still increasing. Acemoglu and Autor (2011) were among the first authors who investigated the wage differences in the United States between 1980 and 2009. They realized that the demand for employees with higher wages increased at a higher level than the need for employees with middle or low wages. This was an exciting finding because since the beginning of the 20. century the wage differences decreased until the 1970s (Goldin & Katz, 2008). We can find various reasons behind this phenomenon. Dickens and Katz

(1987) showed that the wages of different occupations are highly correlated between industries. This means that if a field is highly paid in one sector, it involves a wage premium in other industries as well. Significantly, there are better-paying industries as well, which means that if someone looks for a job in a highly paid industry, then in the same occupation, he or she will receive higher wages. These findings were a significant first step in our investigation because we decided to analyze the wage differences between different occupations in Hungary.

#### DATABASE

In our investigation, we used the data of the Hungarian Wage Tariff database, 2016. There are hundreds of thousands of Hungarian employee data every year. The records do not contain demographic information about individuals such as marital status or number of children because it consists of data in connection with the analyzed companies. Because of that, the database contains more detailed information about the location, industry, or geographical, territorial data of the company. We analyzed the Hungarian NUTS 4 system, which involves 175 micro-regions. During the investigation, we used gross wage to show the differences. The database consists of data from 186,568 companies and 906,900 records of employees.

#### **RESULTS**

In the article, we introduce the geographical polarization of Hungarian wages. The primary focus was to show the managerial income differences from a lesser analyzed point of view. This part of the International Standard Classification of Occupations (ISCO) was selected based on the prior assumptions, according to which there are significant differences in their salaries, which is closely connected to the economic potential of a given geographic location. The calculations were applied to show the differences along with two theoretical viewpoints. First of all, the NUTS4 breakdown is sufficiently detailed but not too fragmented; that is why it is possible to properly represent the regional disparities. On the other hand, the database was analyzed based on the ISCO. The four-digit data was aggregated to one digit to have a proper level of classification. The examination of each class separately served as a benchmark to identify the unique characteristics of managers.

0.	Armed forces occupations
1.	Managers
2.	Professionals
3.	Technicians and associate professionals
4.	Office and management (customer services) occupations
5.	Commercial and services occupations

Table 1 — ISCO System (Source: Own editing based on Magyar közlöny, 2010)

6.	Agricultural and forestry occupations
7.	Industry and construction industry occupations
8.	Machine operators, assembly workers, drivers of vehicles
9.	(Elementary) Occupations not requiring qualifications

Many different indicators measure the regional differences (Nemes, Nagy & Németh, 2005; Panzera & Postiglione, 2020). We used the following:

- range: shows the difference between the minimum and maximum average income in the NUTS4 breakdown;
- relative range: we compare the difference between the minimum and maximum average income in the NUTS4 breakdown to the average. As a result, the salient differences between the variances in each category are evened out;
- dual-index: the quotient of the above-average income and the below-average income. The value shows the income scissors that exist between the average income of the average rich and moderately poor micro-regions;
- Lorenz-curve: shows the income concentration, displaying the cumulative relative frequency of the population on one side of the square and the cumulative relative frequency of the income on the other side;
- gini-coefficient: shows the size of the area between the Lorenz curve and the diagonal of the square. The greater the difference between the two lines, the more true it is that income inequalities develop.

In addition, we used two of the indicators that can be represented on a map at the NUTS4 level. One of the most commonly used indexes in empirical analyzes of the Williamson hypothesis is the relative weighted standard deviation. The other indicator is the logarithmic standard deviation, or Atkinson index (Atkinson 1970), which is one of the most widely used indices to measure income inequality. For both, the specific indicator used is per capita income.

$$V = 100 \left[\frac{1}{\bar{y}} \sqrt{\frac{\sum (y_i - \bar{y})^2 f_i}{\sum f_i}} \right] \qquad LA = \frac{1}{n} \sum_{i=1}^n \left[\log \left(\frac{y_i}{\bar{y}}\right)\right]^2$$

V — relative weighted standard deviation; LA — logarithmic standard deviation; yi — per capita average income (HUF);  $\bar{y}$  — weighted average of yi; fi — number of population; n — number of territorial units

Along with the selected indicators, it can be seen that the salary differences are the biggest in the case of the managers by NUTS4. With the highest average income, the differences are significant; however, it should be emphasized that similar polarization can be seen in the case of the Agricultural and forestry occupations. These figures are closely connected to territorial differences of GDP, which is supported by the graphic representation.

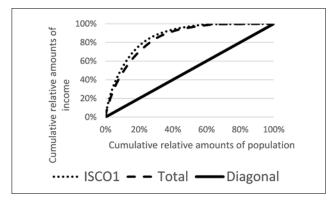


Figure 1 — Lorenz Curve of the Income of Managers and All of the Other Employees

Based on the Micro-Regional Breakdown, 2016

(Own editing based on Hungarian Wage Tariff database of 2016)

**Table 2** — Territorial Inequality Measures of Average Income Per Capita Along with ISCO, 2016 (Source: Own editing based on Hungarian Wage Tariff database of 2016)

FEOR	0	1	2	3	4	5	6	7	8	9	Össz.
Range	44,954	280,236	123,612	137,366	123,496	70,779	178,980	111,667	98,518	53,339	163,384
Relative range	0.214	0.838	0.483	0.864	0.862	0.539	1.450	0.774	0.684	0.551	1.030
Duál index	1.240	1.238	1.100	1.165	1.245	1.065	1.351	1.285	1.177	1.228	1.401
Gini coefficient	0.994	0.731	0.803	0.678	0.755	0.609	0.540	0.588	0.629	0.437	0.689
Average income	187,563	399,335	283,544	175,897	157,642	135,342	118,038	151,217	150,363	96,255	195,917

In Figure 1., you can see the Lorenz curve of the income of managers and other occupations. You can see that the income and territorial differences of managers are higher than the average. The Gini indicator shows the level of differences. The most balanced are the occupations that do not require qualifications with its 0.437 value. The concentration of managers' income is the fourth highest with its 0.731 value, which is in the middle field, but at the same time, it surpasses the average with a minimum level. It shows that the managerial income differences are higher than the basis concentration of occupations.

We show the differences realized along logarithmic standard deviation and relative weighted standard deviation in the same figure. The income differences are identical along the NUTS4 breakdown in the case of managers and Agricultural and forestry occupations based on the relative weighted standard deviation. The most balanced is in the case of commercial and service occupations. Still, it is almost the same in the case of professionals and machine operators, assembly workers and drivers of vehicles.

The logarithmic standard deviation and the weighted standard deviation is at the same level for the whole database. The logarithmic standard deviation is a more traditional and common indicator. Based on this measurement, the most prominent differences can be realized in the case of managers.

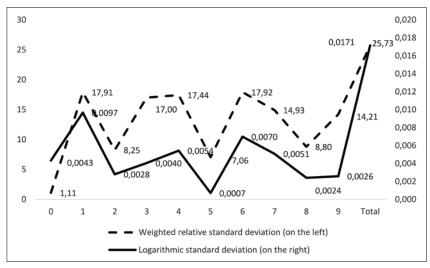


Figure 2 — Logarithmic Standard Deviation and Relative Weighted Standard Deviation Along ISCO, 2016 (Own editing based on Hungarian Wage Tariff database of 2016)

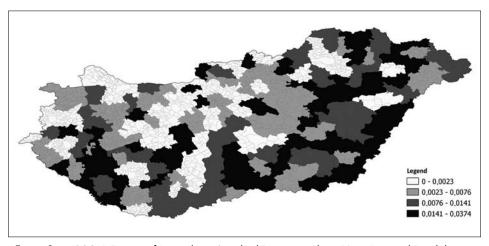


Figure 3 — ISCO 1 Factors of Logarithmic Standard Deviation Along Micro-Regional Breakdowns, 2016 (Own editing based on Hungarian Wage Tariff database of 2016)

In Figure 3, you can see the factors of logarithmic standard deviation along the NUTS4 breakdown. The darker area shows the most significant differences in absolute value, which means it shows that the employees are in a relatively better or worse position in those areas. It is not surprising that in the southwestern and eastern regions, it mostly shows the negative differences compared to the average while in the northwestern and central areas, it delivers higher wages. It concludes our previous hypothesis, which said that the income of managers is higher in more developed regions, while it is lower in a less developed area.

#### CONCLUSION

A selected range of indicators most commonly used in the international literature was involved and ran on the Hungarian Wage Tariff Database of 2016. Based on the results, it can be concluded that managers have the highest average income and that, at the same time, they have the largest standard deviation. However, those working in agricultural and forestry occupations have larger-than-average differences too. The difference between the richest and poorest regions for managers is 1.238 times, which can be considered moderate in regards to other occupations. This is also supported by the Lorenz curve and the Gini index. The weighted relative standard deviation shows a similar inequality for managers and those working in agricultural and forestry occupations, which are the largest in the examined database. Based on the logarithmic standard deviation, managers face the most extensive level of variance.

#### FUTURE RESEARCH

As you could see in this article, we analyzed the indicators along with ISCO 1, but we plan to do it along with all ISCO 4 levels as well. It will give us a clearer picture of the background of the presented differences. Besides this, we plan to repeat the research of Frey and Osborne (2013) and Blinder (2007) on Hungarian data, which will help us analyze the effects of technology on the Hungarian labor market polarization.

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### RELIGIOUS PRACTICES OF RENOWN CROATIAN ATHLETES IN THE DIASPORA

#### Abstract

In today's modern world, it has been proven that faith and spirituality help the emergence of psychophysical fulfilment, improve emotional and cognitive functions, and help the individual to accept and understand themselves and others (Miller-Perin & Mancuso, 2015, p. 24). The combination of the athletes' tangible physical abilities as well as their intangible exceptional mental preparedness also outlines faith. Athletes who are great believers here in the material world pay homage to 'God' for something currently intangible and unfathomable and that is, going to heaven. Success at sporting events and any other competition requires superior physical fitness, but also a combination of many other factors that are often not recognized. For these athletes, God plays a big role in sports competitions, especially when they get injured or when things don't go according to plan. They view God as responsible for keeping them on the right path (Oakley, 2015, p. 26). Croatian Athletes in the diaspora very gladly testify their religion in many interviews. Their religious practices do not deviate from their cultural and religious heritage, which they developed in Croatia or from their parents if they were born outside of Croatia. The fact that this is the case, which showed in every famous and successful Croatian athlete, demonstrates a strong link to their home country of Croatia and it is also an indicator that it is difficult for athletes, as well as others, to distance themselves from their native country, both physically and mentally.

Keywords: Religion, Mediterranean, Athletes, Diaspora, Sport, Migration

#### THE CORELATION BETWEEN SPORT AND RELIGION IN SOCIETY

Since the dawn of time, religion has been one of the main components of an individual's personal identity and their social relations. Many empirical research studies connect religion with people's responsibilities and their behaviour in general (Mazereeuw-van der Duijn Schouten, Graaflan, & Kaptein, 2013, p. 448). The ancient Olympic Games are probably the oldest example of the connection between sport and religion. The first Olympic Games were organized in 776 BC, in honour of Zeus (Romano, n.d.)1, the chief god of the Greek pantheon of gods. The Greeks then attached mythological significance to the Olympic Games. The exceptional importance that these sports games

<sup>1</sup> https://www.penn.museum/sites/olympics/olympicorigins.shtml

had on ancient Greece is shown by the fact that during the Olympic Games there was an "Olympic truce" between the sometimes warring Greek city-states. The truce allowed athletes from all Greek states to travel to the competition without fear of death. This example vividly shows how sport and religion have long been linked and mutually influence social development and events. The Olympic Sports Games in ancient Greece were held in honour of the gods and had a direct impact on society for the sake of Olympic peace that would ensue during the Games. It should also be noted that during this short-lived Olympic peace, a permanent peace would often be agreed, which would be negotiated by the leaders of the warring parties during the Games. Even wars were interrupted because of Olympism and its principles in ancient Greece.

"Olympism is a philosophy of life, exalting and combining in a balanced whole the qualities of body, will and mind. Blending sport with culture and education, Olympism seeks to create a way of life based on the joy of effort, the educational value of good example, social responsibility and respect for universal fundamental ethical principles. The goal of Olympism is to place sport at the service of the harmonious development of humankind, with a view to promoting a peaceful society concerned with the preservation of human dignity".2

The universal value of religion and sport lies precisely in the fact that they connect people regardless of their culture, life situation, material status, nationality, or race. There are many examples of what all sports organizations and teams have in common with many religions: They both have places and buildings where they hold their events; Sports have stadiums and arenas where competitions are held, while religions have churches and temples where believers regularly come to perform their religious duties; Both in sport and in faith, one strives for improvement and perfection in one's body, mind and spirit; Sport places emphasis on physical training and the discipline of physical development, while religions place more emphasis on discipline and spiritual development; Both sport and religion have an established hierarchy; In sports, they are presidents of sports federations, club presidents and coaches, while religions have bishops, pastors, priests and rabbis; Both have events that celebrate common values; In sports, competitions celebrate great preparation, hard work and achievements, while religious rites celebrate communion and redemption.

Sport and religion also have their rites and rituals before and after major events. In sports, it is about playing the anthem, talking at half time, parades and congratulations and shaking hands after the game while in religions, there are baptisms, processions and sermons. They both have their heroes celebrating for their heroic achievements. Athletes are elected to the houses of fame and are constantly written about through sports journalists, coaches and fans, while religions have a sacred status of indivi-

<sup>&</sup>lt;sup>2</sup> Extract taken from the Olympic charter; https://www.olympic.org/documents/olympic-charter

duals who achieved their status deservingly, and religious writers, ministers and believers constantly write about them. Sport and religion also inspire very strong emotions in people and play a significant role in their lives. Sport allows people to explore their potential, while faith helps people find their meaning<sup>3</sup>.

The fact that sports and religion have much in common is also noticed by sciences such as sociology, psychology and anthropology. 4 While analysing religious practices of renown Croatian athletes in the Diaspora, all of them have kept their Catholic faith as their religion, even when going abroad. Their religion was traditionally passed down through their family. Research done among athletes has shown that 93% of athletes are religious (Spehnjak & Kučiš, 2015, p.44), despite many changes that have happened with people's lives in modern society. Taking into account that sport and religion are two factors which are present in social circles for the majority of people in modern societies (Jona & Okou, 2013, p.46), and that many sports have their roots in faith (Scholes & Sassower, 2014, p. 13), it is not surprising to see religion being an important part of (Croatian) athletes lives, especially when they come from the Diaspora. To achieve success in their specific sporting field, athletes must sacrifice lots of things, especially at a younger age. Having religion as part of their lives can often make it easier for them to succeed, since many coaches are also religious, which in return makes the athletes and coaches communicate and understand each other better (Storch, 2001, p.348) while preparing for a sporting event which brings better chances of success. Religion and sport are symbolic systems that emphasize similar values and goals, including overcoming personal desires in favour of shared accomplishments. As in faith, the emphasis is on togetherness and cooperation, and personal sacrifice for the betterment of the collective (Womack, 2005, p.35). Like religion, sport should learn the value of true social cooperation that would positively influence reality for all involved. From a humane perspective, sport can be a real school of health, mental hygiene, self-control, sociality, discipline, freedom, creativity, pleasure, fun, joy, purification (catharsis), competition, celebration; it can simply be a lifestyle that has above all value in and of itself (Marjanović, 2017, p.1202).

The similarities between religion and sport don't stop there, as social aspects can also be seen in postulates that they both possess. One of the important characteristics of every religion is its postulates. Respect for the postulate shows respect for what is sacred and what mediates holiness for people, places and objects. On the other hand, every sporting event has its own postulates in its own way. The game is played according to specific rules, at a specific time, with a specific goal. The celebration of the goal is accompanied by its own way of celebrating. The cheering of the fans takes place according to almost identical schemes, and all this is accompanied by views of the sky,

<sup>3</sup> https://www.psychologytoday.com/blog/the-human-beast/200911/is-sport-religion

<sup>4</sup> http://sociology.iresearchnet.com/sociology-of-sport/sports-and-socialization/

folded hands, moments of ecstasy and songs composed just for the occasion. We have also witnessed large and frequent religious gestures by the players. There is almost no player who, when the game starts, does not have some kind of private ritual of his own. All of this shows us, that sports and religion are intertwined in people's lives, and Croatian athletes in the Diaspora are no exception.

Saint pope John Paul II has often emphasized the importance of playing sports for the health and upbringing of young people:

"Sport is certainly one of the most important phenomena that transmits important values through universal language. He can be the bearer of high human and spiritual ideals if practiced in a spirit of respect. Sport reveals not only a person's physical abilities but also his intellectual and spiritual capacities. Sport not only relies on physical strength and muscle endurance but also has a soul. Athletes have a great responsibility. Their vocation is to make sport an opportunity for cooperation and dialogue, for overcoming language barriers, for contributing to the development of culture and the fight against racism, and for the development of a civilization of love."5

Religion is often one of key factors when people are making decisions on how to act in certain situations, which gives them a compass on how to behave in certain situations despite their basic instincts sometimes telling them otherwise. To be successful in any sport requires a huge amount of sacrifice on the part of the athlete, and hard training and exercise even though the goal may seem unattainable. This is especially true for athletes that come from or work in the Diaspora. What pushes these athletes toward that goal is faith, both in God and in their abilities, and the fact that their work will pay off for them. In order to overcome all the challenges that athletes face, and achieve the desired goal, physical strength and preparedness alone does not suffice. Great importance, if not greater, belongs to the spiritual and psychological part of the athlete, that is, the ability of the mind to withstand everything that is put before the athlete as an expectation and burden<sup>6</sup>.

#### RENOWN CROATIAN ATHLETES IN THE DIASPORA AND RELIGION

Many top Croatian athletes from the Diaspora have frequently publicly testified to their faith, whether by concrete statements or pilgrimages to famous sanctuaries — emphasizing the great role religion had on their way to success. Renown Croatian athletes from the Diaspora have expressed their views regarding religion during their intervi-

<sup>5</sup> http://uss-ivanapavla2.hr/novost-4/

<sup>6</sup> Prvi srpski kongres sportskih nauka i medicine sporta: Zbornik sažetaka, Časopis udruženja za medicinu sporta Srbije, 2003, Beograd

ews with the media. Luka Modrić — the world's best soccer player in 2018, the winner of the Golden Ball, silver at the Football World cup, winner of 3 Champions Leagues, after breaking the 10-year-old dominance of Cristiano Ronaldo and Lionel Messi in winning the Golden Ball stated:

"This is an incredible feeling. Not only because of the two of them (Ronaldo and Messi), but also because of all other famous players who were competing for this award. During my career I have always been aware that hard work and faith in difficult moments are key to success. The best things never come easily".

Marin Čilić is a Croatian tennis player with great success. After winning the US Open Grand Slam he said:

"I would like to thank all my supporters who have come in great numbers and who have supported me all these years — when it was good and when it was difficult. I also wish to thank my parents. Without them I surely would never have succeeded. And thank God and Holy Mother Mary who have shown me the way and bestowed me this gift."8

Zlatko Dalić, the manager of the Croatian national football team who won silver at the World Cup in Russia in 2018 stated:

"Faith gives me strength; I always have a rosary in my pocket and pray before the game. I thank God for every day, because he gave me strength and faith, but also the opportunity to do something with my life... I have been a believer all my life, so I raise my children that way too. Every Sunday I try to go to the Eucharist. I thank God for every day because he has given me strength and faith, but also the opportunity to do something with my life. For me and my family, faith is extremely important. God is present every day in my family and life... With me faith is a constant and for all I have done in life and in my career I can thank my faith in God. I constantly repeat how I can be overjoyed with everything that has happened to me. Without a high degree of faith and a good motive that is difficult to accomplish. The rosary is always with me, and when I feel a certain moment, I put my hand in my pocket, I cling to it and then all everything gets easier."9

Mario Ančić is a celebrated tennis player who won the Davis Cup with the Croatian national team. He was among the top 10 tennis players in his career, and victories against many tennis legends such as Roger Federer at Wimbledon will be remembered. Apart from being a top tennis player, Ančić also has an enviable scientific career after sports, in which he obtained his doctorate. Mario won the most prestigious national

<sup>7</sup> http://balkans.aljazeera.net/vijesti/modric-osvojio-zlatnu-loptu-rad-i-vjera-su-kljuc-uspjeha

<sup>8</sup> http://hu-benedikt.hr/?p=24362

<sup>9</sup> https://www.bitno.net/vjera/aktualnosti/zlatko-dalic-hrvatska-argentina/

tennis competition with the Croatian national team, the Davis Cup in 2005, as well as a bronze medal in Athens in 2004. Mario's career was unfortunately interrupted at the young age of 27 by injuries, but after a sports career he managed to achieve an even greater scientific goal. He received his doctorate in law from Columbia, one of the 5 most prestigious law schools in the world<sup>10</sup>, and got a job as a lawyer in the NBA League<sup>11</sup>. Mario Ančic's faith greatly helped him to overcome difficult and traumatic moments when, due to injuries in his best sports years (27), he had to leave the sport he loved and trained for from an early age and switch to another career.

God helped him turn his occupation into a scientific career after 20 years of investing in tennis. In difficult times, he went to the Holy Mass led by Don Damir Sto-jic¹²² and found the answers to his questions and decided to say his "Yes" to Jesus. An encounter with God helped him pursue a further career even after a prematurely ended sports career. Mario always emphasizes for himself that he was raised traditionally and that he believes in family life¹³³. Mario is also remembered by us for beating Roger Federer, the best tennis player of all time, in the second round of Wimbledon in 2002, after which Federer achieved a record and never before achieved 7 finals at Wimbledon from 2003—2009¹⁴, as well as consecutively won 65 appearances on the grass from 2003-2008 years.

Niko Kovač, former captain of the Croatian national football team, and also its head coach after his career as a player often gives interviews for renown foreign newspapers:

"We were raised Christian, religion played a big role in our home. If you try to live according to the Bible, you will have everything you need in life: honesty, openness, friendship, respect, tolerance and much more that is lacking today. Values have changed a bit today", Kovac told the Frankfurter Allgemeine Zeitung recently.

Kovač shows how important faith is in his life by going to Mass regularly.

"From 52 weeks a year I manage to go to Mass for forty weeks. I think everyone goes there because they need peace, they want to communicate with the Lord and because there they have the opportunity to think about everything that happens around them. We can only hear good things from the Bible. There are those who will interpret some things from the Qur'an and the Bible differently. But if everyone stuck to what it really says, we would be much happier", continues the futu-

<sup>10</sup> http://sport.hrt.hr/285693/nakon-sportske-i-znanstvena-karijera-mario-ancic

<sup>11</sup> https://www.tportal.hr/sport/clanak/mario-ancic-postao-pravnik-u-nba-ligi-20130515

<sup>12</sup> https://www.bitno.net/vijesti/hrvatska/mario-ancic-posvjedocio-o-svom-da-isusu/

<sup>13</sup> https://www.24sata.hr/show/mario-ancic-tradicionalan-sam-tip-i-vjerujem-u-brak-116414

<sup>14</sup> https://en.wikipedia.org/wiki/List of career achievements by Roger Federer

re Bayern coach, who admits that he brings a lot of Christian values to the field, among the players. "I try to approach everyone openly, honestly and friendly. We are a team. As a coach, I have to make decisions some of which will disappoint the players. But one thing is clear: I never judge someone based on their personality but solely sports performance. There is one difficulty: as coach you work with players from different countries and cultures, each of them is brought up in their own way, not all have the same education and, of course, have a different character. So I enrolled in a seminar at the German Football Association which, among other things, talks about and how to deal with intercultural differences. I want to know how as a coach I can approach each individual in the best possible way" Niko explained. 15

Ivan Rakitić, former FC Barcelona player and UEFA Champions League winner said the following about the importance of religion to him:

"The values I acquired as a child in my family still guide me on my football journey and through life. I pray to God every morning and evening".

#### CONCLUSION

Based on interviews and public data about renown Croatian athletes who work or live in the Diaspora, what immediately stands out is the fact that when they leave for another country they bring most important parts of their culture with them, which also includes religion. Since the majority of Croatia's population is Catholic, so is the majority of renown Croatian athletes in the Diaspora. This is the case for athletes who lived in Croatia and went abroad, as well as athletes who were born abroad and their parents were Croatian migrants.

Faith as a fundamental part of every society and is at the same time a part of much human activity <sup>16</sup>, and Croatian athletes in the Diaspora are no exception. Commitment to a higher good and a higher goal enables a person to take on the business burden more easily, especially for athletes who are far from home and friends. Talent, diligence, work habits and perseverance are not the only qualities that build athletes. The struggle for success and fame often leads to many difficulties and trials and brings with it many ups and downs. On this path to success, faith and prayer are very powerful "weapons" that give athletes the strength to persevere on the path to their goal and keep moving forward. Religious practices from renown Croatian athletes are much in line with other Croatian people in the Diaspora, which means they go to church and pray regularly. Religion also plays a big part in their private lives and stability, as ma-

<sup>15</sup> https://direktno.hr/zivot/vjera/niko-kovac-ako-pokusate-zivjeti-skladu-s-biblijom-zivotu-cete-imati-sve-sto-vam-potrebno-121084/

<sup>16</sup> https://en.wikipedia.org/wiki/Human behavior

ny of them often name family and religion amongst the more important factors in their daily lives.

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## STUDENTS' TENDENCIES TOWARDS USING HEURISTICS IN DECISION MAKING

#### Abstract

Behavioural economy is a discipline which primarily uses evidence from psychology and economy in order to examine human rationality in nearly every part of decision making. Facing complex situations, incomplete information and/or limited amount of time, people tend to use mental shortcuts also known as heuristics. Heuristics are used in numerous situations, but sometimes they lead to systematic errors and cognitive bias. The objective of this work was to examine frequency in using heuristics in decision making among student sample from different fields of study in Croatia. The questionnaire included several situations with availability heuristic, representativeness heuristic and loss aversion possibilities. The questionnaire was available online and it was shared on social media. The sample included 560 students. The research results showed partial tendency in using heuristics.

the different study fields on the quality of decision making.

Keywords: behavioural economy, availability heuristic, representativeness heuristic, loss

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Behavioural economics deals with motivation behind economic decisions that people make in everyday life. As such, it employs both the findings from psychology as well as economy and other social sciences (Cartwright, 2011). The field developed in contrast to rational economic theory, as a reaction to the idea that psychological notions that underlie economic decision-making, which cannot be directly observed and measured, should not be in the scope of the research of rational economics.

Since its emergence, it has significantly changed both the fields of psychology and economics, and influenced many more: law, medicine, political science (Gilovich & Griffin, 2002; Cartwright, 2011; Fiedler & von Sydow, 2015). Cartwright (2011) writes that the findings in this discipline "have fundamentally changed the way we look at economic behaviour" and "is crucial to understanding the world around us" (p. i). Its significance stems precisely from the fact that behavioural economics acknowledges the human aspect of economics.

It is hard to pinpoint the exact moment when this discipline emerged. Some authors go back as far as Adam Smith's work "An Inquiry into the Causes of the Wealth of Nations" from 1776 (Cartwright, 2011). However, psychology found a more significant place in the field of economics in the 1950s and 1960s, with Herbert Simon's notion of bounded rationality, for which he received a Nobel Prize in Economics in 1978 (Gilovich & Griffin, 2002; Cartwright, 2011). This theory was developed as a reaction to attempts to approximate people with the notion of homo economicus (Cartwright, 2011). The notion of bounded rationality acknowledges that human computational abilities are not perfect and that they will not follow the rules and laws of statistics and probability. This does not mean people are irrational, but that their input and computational abilities are limited and inherently bounded (Gilovich & Griffin, 2002, p. 2). Kahneman and Tversky built on and further developed Simon's theory. However, they defined the decision-making processes as categorically different than the simplified processes of the rational model. According to their model, heuristics are used for intuitive judgement; the most prominent are representativeness, availability, and anchoring and adjustment. They are simple and come naturally to the thinker, as they utilize the already existing mechanisms of human computation already known in psychology (memory retrieval, pattern-matching...). Furthermore, they included biases in their model, which underlie and influence judgment processes (Gilovich & Griffin, 2002). In other words, they were the first ones to explain human errors in decision-making in a systematic way, and the first ones to explain the decision-making process in terms of human cognitive processes (Gilovich & Griffin, 2002; Kahneman, 2003). Their theory marked a turn in the fields of both economics and psychology (Fiedler & von Sydow, 2015).

Before Kahneman and Tversky's theory is explained in detail, decision-making as a cognitive process will be discussed. Kahneman (2011) explains that there are two systems we employ when making a decision. The first system, sometimes referred to as intuition or experential system, is automatic (involuntary), fast and requires little effort. It is believed that humans developed it evolutionary as a response system in situations where a decision must be made on the spot. This system enabled humans to survive in dangerous and risky situations and is thus still a commonly used automatic cognitive process (Slovic, Finucane, Peters, & MacGregor, 2002). The second system — reasoning or analytic system — employs much more complicated mental processes. As a result, it takes more effort, focus and time, and as such it is voluntary.

The system of heuristics and biases that Kahneman and Tversky (1983) explained is employed when making intuitive judgements. Heuristics are mental shortcuts for processing information quickly, effortlessly and automatically in circumstances when information is limited. They are applied because human mental capacity is inherently limited as are our thought processes. All this makes them a useful tool in simplifying complex tasks such as evaluating probabilities and predicting values. Although they are usually efficient in helping people adapt to uncertain situations and sometimes lead to

correct decisions, they also "lead to systematic and predictable errors" (Kahneman & Tversky, 1974, p. 1131). Representativeness heuristic is thus employed when one has to make a jugdment about "the probabilty that an object or event A belong to class or process B", availabilty heuristic is used to "assess the frequency of a class or the plausibility of a particular development" and anchoring and adjustment is used "in numerical prediction when a relevant value is available" (Kahneman & Tversky, 1974)(Kahneman & Tversky, 2011).

Although the theory has been heavily criticiesed, the critique that still most strongly persists today is twofold. Firstly, researchers still have not agreed on a precise specification of heuristics, which leads to results that are inconsistent and can be subject to interpretation. This problem leads to another debate: to which extent these heuristics have a positive or negative impact on the decision-maker (Bhatia, 2015; Fiedler & von Sydow, 2015). Despite the criticism, Kahneman and Tversky's work has been very influential not only on psychology, but other fields as well. This area of research remains prolific to this day (Fiedler & von Sydow, 2015).

Representativeness is one of the three most prominent heuristics, along with availability and anchoring (Fiedler & von Sydow, 2015). It is used when "categorizing targets into a group" based on similarity to the prototypical member of the group (Spina, Ji, Guo, Zhang, 2010, p. 583). A less researched use of this heuristic is "when searching for causes that are similar to an effect." (Spina et al., 2010, p. 584). However, the decision-maker easily falls into a trap here, as the most plausible solution is not necessarily the most probable (Kahneman, 2011). Kahneman and Tversky give the following illustrative example: "Linda is thirty-one years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social justice, and also participated in antinuclear demonstrations." (Kahneman, 2011, p. 101). The participants were given eight possible answers to describe Linda (bank teller, elementary school teacher, feminist, insurance salesperson etc.). Their research has shown that only 15% of their sample gave a statistically correct answer, which shows "the uncritical substitution of plausibility for probability" (Kahneman, 2011, p. 102).

Availability heuristics are used when one needs to assess the frequency of occurrence or probability. It is based on memory retrieval — the more salient an event is, the more easily one remembers it and the more probable one judges it to be (Fiedler & von Sydow, 2015). In a famous example, participants have judged the words starting with the letter "k" to be more frequent than the words that have the letter "k" in the third place simply because it is easier to recall the former than the latter (Kahneman & Tversky, 1973).

One of the most prominent decision theories in economics is Kahneman's prospect theory, for which he received a Nobel Prize in Economics in 2002. It encompasses both risk aversion as well as loss aversion theory (Ferenčak, 2018). Kahneman's

(2011) understanding of loss aversion is put in the clearest way in his following explanation: "The attractiveness of the possible gain is not nearly sufficient to compensate for the aversiveness of the possible loss" (p. 276). In other words, results from his research have shown that his participants valued more the \$10 that they already had than \$30 that they might win. They did not want to risk losing their \$10 if the win was not larger than \$30. When faced with losses, decision makers tend to be more prone to taking risks in order to mitigate their losses. Similarly, they tend to averse risk when faced with probability of gains (Kahneman, 2011).

#### METHODOLOGY

#### Research Goal and Problems

The main goal of the research was to examine the frequency of using heuristics in decision-making among a student sample in Croatia.

In the frame of the main goal four research problems were set:

- 1. to examine the frequency of using availability heuristics in decision making.
- 2. to examine the frequency of using representativeness heuristics.
- 3. to examine the frequency of using loss aversion bias.
- 4. to examine to what extent students show overconfidence bias.

#### Instruments and Procedure

Questionnaire construction was based on previous research and information obtained from literature (Lichtenstein et al., 1978; Tversky & Kahneman, 1983; Kahneman & Tversky, 2011; Bjelajac, 2013). The anonymous questionnaire was available online during July and August 2018 and it was shared via social media (Facebook, Instagram). The questionnaire consists of 12 questions divided into two sections: one for demographic variable (gender, age, study programme) and the other related to availability, representativeness and loss aversion heuristic.

#### **Participants**

The sample included 560 participants (80% female / 20% male). Only participants older than 18 were included. 45% belong to the age group 22 - 25 years of age; 41% were between 18 - 21 years, and only 14% were older than 25 years. The majority of participants were students of Business Economics or Law (36%).

#### RESULTS AND DISCUSSION

#### Availability Heuristic

In order to determine whether availability heuristics is present in students' decision-making, a question with four different combinations of possible answers was asked:

Do you think that there is a greater possibility that the person will die due to the consequences of:

- I. a) car accident (24.1% participants); b) heart attack (39.4% participants); c) the probability is equal (36.5% participants)
- II. a) botulism (53.4% participants) b) lightning strike (15.6% participants); c) the probability is equal (31%participants)
- III. a) diabetes (29.1% participants); b) car accident (50% participants); c) the probability is equal (21.5% participants)
- IV. a) car accident (75% participants); b) airplane accident (17.7% participants); c) the probability is equal (7.3% participants).

In the first combination of answers, less than half of participants have chosen dying of heart attack as more probable than dying in a car accident. According to statistics in Croatia (Državni zavod za statistiku, 2018), heart attack is more probable and is one of the most frequent causes of death and diabetes was the fourth leading cause of death in 2018 (Hrvatski zavod za javno zdravstvo, 2020). Both of these diseases are a more probable cause of death than a car accident (Ministarstvo unutarnjih poslova Republike Hrvatske, 2019). Similar statistics are mentioned in previous research too (Lichtenstein et al., 1978; Combs & Slovic, 1979; Slovic, Fischhoff, & Lichtenstein, 1979; Pachur, Hertwig & Steinman, 2012; Kahneman, 2013). In addition, death caused by lightning strike is more probable than death from botulism. However, only 16% of participants think so. Newer data shows that mortality rate related to botulism takes ballpark figure of 5% (https://www.ncbi.nlm.nih.gov) and about 10% of people who are struck by lightning are killed (https://www.weather.gov/safety/lightning-odds). According to Tversky and Kahneman (1973, p. 208), individuals estimate the frequency of an event "by the ease with which instances or associations come to mind". Slovic (1986, p. 5) emphasizes that "risk judgments are influenced by the memorability of past events and the imaginability of future events. As a result, any factor that makes a hazard unusually memorable or imaginable, such as a recent disaster, heavy media coverage, or a vivid film, could seriously distort perceptions of risk". Car accidents are more visible through media, and seem more dramatic, which could influence estimation and decision-making. Only in the fourth combination of answers, where the choice between probability of dying by car or airplane accident is given, most participants chose the statistically correct answer.

In order to see if there was a significant difference between male and female participants in the given answers, the chi-square test of independence for each question was performed. The statistically significant difference was found for the first ( $\lambda^2$  (2, n = 567) = 9.22, p = .01, Cramer's V = .13) and third combination of answers ( $\lambda^2$  (2, n = 567) = 13.4, p = .01, Cramer's V = .15). In other words, male participants have more statistically correct answers, estimating diabetes and heart attack as more probable causes of death then car accidents. In other two questions, in estimation between botulism and lightning strike, ( $\lambda^2$  (2, n = 567) = 1.26, p = .53), and car or airplane accidents,

 $(\lambda^2 (2, n = 567) = .53, p = .77)$ , the gender difference was small and not significant. In their original description of the availability heuristic, Tversky and Kahneman (1973) did not distinguish between direct or indirect experience in forming of heuristics. However, Pachur, Hertwig and Steinman (2012) show that it is important to distinguish between these two sources of availability. When direct experience is present, they found no evidence that availability from the media has a significant impact. This could be a possible explanation to why male participants have chosen medical reasons as more probable than a car accident as a cause of death. Male drivers are generally more skilful, more likely to drive at higher speeds, more likely to be able to perform difficult manoeuvres, and are more likely to risk driving under the influence of alcohol (Al-Balbissi, 2003). What is more, women have generally more external locus of control than men, and driver stress is increased with more external locus of control, which is especially applicable for younger drivers (Holland, Geraghty, & Shah, 2010).

#### Representativeness Heuristic

To determine representativeness heuristic, two questions were asked:

- I. Imagine that you have tossed a coin six times in a row. In what order is the coin more likely to fall? (G heads, P tails)
  - a) GPPGPG (30% participants)
  - b) GGGPPP (0)
  - c) Both options are equally probable (70% participants)
- II. If a married couple has four sons, is it more likely that the fifth child will be a girl or a boy?
  - a) Girl (10.5% participants); b) Boy (16.5% participants); c) Both options are equally probable (73% participants).

Kahneman and Tversky (1973, p. 237) claim that people "predict by representativeness, that is, they select or order outcomes by the degree to which the outcomes represent the essential features of the evidence". In this sample, the majority of participants chose the right answer, that both options are equally probable. In other words, the majority did not show the representativeness heuristics. What is important to mention is that the majority of participants study economics or business studies, with some statistical knowledge. These particular examples are mentioned in many books so maybe this heuristic is not so characteristic for a student population with basic knowledge of mathematics and statistics. However, gender a difference was found for the second question ( $\lambda^2$  (2, n = 567) = 8.25, p = .02, Cramer's V = .12). A higher percentage of female students chose the statistically correct answer — that both options are equally probable, and a higher percentage of male students chose the answer *boy* as a correct answer. As Kahneman and Tversky (1973, p. 251) mentioned, "statistical training alone does not change fundamental intuitions about uncertainty". The different circumstan-

ces that could influence decision-making stay open for future research. In estimation of a coin flip, there was no gender difference ( $\lambda^2$  (2, n = 567) = 1.37, p = .6).

#### loss Aversion

Loss aversion, as mentioned earlier, is related to an individual's stronger desire to avoid losses than to experience comparable gains (Tversky & Kahneman, 1979). In order to determine loss aversion in the student sample, three questions were asked:

- I. What would you rather choose?
  - a) To get 3,000 HRK immediately (34.8% participants)
  - b) To get 3,500 HRK next month (65.2% participants)
- II. You won 100,000,000 HRK on the lottery and you have 2 pay-out options:
  - a) To take 50,000,000 HRK immediately (25.9% participants)
  - b) To take 100,000,000 over 20 years (74.1% participants)
- III. Would you start a project that would financially ensure you for a lifetime if the probability that you could lose everything that you earned in life was 10%?
  - a) YES (60% participants); b) NO (40% participants)

The results show that more than half of the respondents would prefer rather to wait to receive the larger sum of money. Respondents in this study gave more rational answers than those in previous research, for example, of Bjelajac (2013). Although the sample of Bjelajac research consisted of experienced financiers, as many as 55% of them decided to take the sum immediately. Bjelajac (2013) explained that financiers may consider it rational to accept a larger amount immediately as money tends to lose value over time.

There was no gender difference for loss aversion in two questions dealing with receiving money ( $\lambda_1^2$  (1, n = 567) = 3.69, p = .06;  $\lambda_2^2$  (1, n = 567) = .39, p = .53). However, a gender difference was found in readiness to start a new project with a 10% risk.  $\lambda^2$  (1, n = 567) = 8.12, p = .00, Cramer's V = .12. In other words, male participants are more prone to start a new project despite the 10% risk of losing all they have. Bjelajac (2013) had the opposite result with a sample of people in finance, where 60% of participants would not take that risk. These results could be explained by the fact that financiers have more experience in investing, dealing with real money, and taking risks in real life.

# CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH

The sample of university students from different fields in Croatia showed a partial tendency in using heuristics in decision-making but in a lower percentage than expected in comparison with previous research. The participants may have recognized the true purpose of the study in the questionnaire. Therefore, their answers may not always be spontaneous or authentic. In addition, there is a possibility that students had the opportunity to come across similar examples of heuristics through their study programs. There are some other limitations that should be mentioned. The sample, although fairly large, was not representative. Furthermore, using e-surveys does not enable to calculate response rate, and female participants are usually more motivated to participate.

Future research may concern the analysis of the potential influence of students' various study fields on the quality of decision-making. Along with educational background, some personality traits could be taken into account, such as locus of control or propensity to take risks. It is also suggested to use disparate methodology in future research with different questions and situations. The science of behavioral economy should be incorporated in educational programs to improve the quality of discernment and problem solving.

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### FROM INCINERATION TO NEW DESIGN SOLUTIONS BASED ON A CIRCULAR ECONOMY

#### Abstract

This paper describes a non-typical design process of developing new concepts designed by students. The goal was to develop new solutions from a secondary raw material, in our case from discarded jute coffee bags, which currently end up in an incineration plant. The aim was to find a new use based on the cradle-to-cradle principle. Since the jute bags were torn, no design solution for any product in terms of a direct material reuse was possible. The typical methodological approach did not work. Therefore, a different methodological approach was chosen, requiring a lot of experimental work, transforming 60-kg jute bags into more basic components, mostly fibres and dust. Students experimented with different processes like cutting, shredding and mixing fibres with other organic materials. This kind of experimental work led us to inventing two new biodegradable materials. The first one was a result of mixing jute with over-ripe discarded bananas. By cooking and mixing the bananas with jute fibres, we obtained a biopolymer of a varying quality, depending on the type of application. If the biopolymer is applied flat on a surface, the final material is similar to paper carton and can be rolled. If applied to a 3D form, the material is stiffer and more compact. The material was further developed into packaging solutions for fresh staple food. The second material was developed on the principle of pulp technology with the help of the Pulp and Paper Institute from Ljubljana. This material is surprisingly water resistant. It allows three possibilities of waste management — reuse, or recycling or biodegradation. The applications developed included a coffee cup and a plate for a 24-h salad, which requires no controlled atmosphere. Both newly developed materials are without any harmful substances and are seen as a great opportunity for replacing some single-use plastic products.

Keywords: biopolymer, jute, biodegradable, single use, packaging, sustainability

The essence of sustainable production and consumption practices is circularity in terms of material flow. The cradle-to-cradle philosophy, introduced by William McDonough and Michael Braungart, known as the eco-effectiveness approach, is slowly supplanting eco-efficiency introduced in 1992 at the Rio De Janeiro Earth Summit (McDonough & Braungart, 2002). The path towards a sustainable society has been clearly charted, especially since the EU Green Deal was presented as the new growth strategy last December. There is no fear that sustainability will become just another buzzword, although the final material/waste destination is still too often an incineration plant, as in the case of jute, a natural material with strong fibres and unique features that we do not know and use well enough, at least not in the design profession.

Last year, at the Academy of Fine Arts and Design, University of Ljubljana, we ran the "Jute Project" within the Sustainable Design Course at the master level. The aim was to find some new design solutions/proposals, using discarded torn jute bags, in which Droga Kolinska d.d., our partner in this project, imports coffee beans. When the coffee bags come to the production line, the process is completely automatic. A mechanical metal arm grabs each bag and tears it open so that it cannot be reused. The bags are baled and sent to the incineration plant, amounting to 90 tons per year and creating an expense for the company.

It is an unfortunate waste as jute is a natural 100 % biodegradable material. The plant grows annually for about 4-6 months in warm and humid climates and needs very little fertilizers for its cultivation. Jute bast fibres are long, shiny and can be spun into coarse, strong threads and are mainly used as low-cost packaging materials. Jute is the second most common natural fibre cultivated in the world (Datta, Rahman, & Hossain, 2016). It can grow in the same field each year because it does not exhaust the soil. In addition, it even improves its structure. The important feature is the fact that the jute plant purifies the air because it absorbs great quantities of CO2. (Jute & the Environment, 2019). It is generally expected that the jute coffee bags undergo biodegradation, which is unfortunately not the case at the Droga Kolinska company. The main standard coffee bag holds 60 kg. This is a global standard unit. On the market, there are other sizes of jute bags used as secondary raw materials. These are usually 30 kg bags, in which coffee is distributed to smaller coffee-roasting companies. According to the reports from and conversations with several small roasting companies' owners, these bags are cut in a straight line across the top. They can then be reused or remanufactured to obtain other products.

In parallel with the jute project, we have been running another project titled the  $\S IPK^1$  project with another group of students, focusing on the search for new, innovative solutions for decreasing the quantities of single-use plastic packaging. The trend that we are facing everywhere is the use of plastic materials for wrapping and packing fruits and vegetables. According to the traders, the main reason for it is protection against damage during distribution. Distribution causes approximately 10 % of waste. Thus, for the sake of preventing damage, resulting in biological waste with no harm to our planet and people, we produce plastic waste.

Research among customers in the four biggest markets in Slovenia showed that about 90% of people prefer to buy food in bulk or from a crate, where they can choose fruits and vegetables themselves. When considering the data about global plastics production, we find that its highest fraction is represented by packaging. Thus, in order not to lose money with 10% of biological waste, merchandisers all over the world

<sup>1</sup> ŠIPK is the acronym for Students Innovative Projects for Social Benefit — a project sponsored by the Republic of Slovenia and European Social Found

pack staple food and are therefore responsible for the enormous growth of packaging waste and its consequences worldwide. All these facts are important because later we linked the two projects, transferring the knowledge obtained during our regular seminar work where the biopolymer was invented to the ŠIPK packaging projects where the experimental packaging solutions were developed.

Within the circular economy, industrial waste is not seen as waste but rather as material. This has always been the starting point for the Sustainable Design Course at our Academy. If we talk about a material we think of its value, if we talk about waste we think of no value. At a declarative level, companies often agree with us about that. However, at an operational level, legislative documents and terms usually still consider discarded material as waste and not as useful material. In many cases, this fact inhibits the circularity; worse still, it prevents people from thinking and searching for creative solutions, therefore inhibiting a faster spread of circular businesses. We, the designers, see discarded material as the starting point for a design challenge. We focus on the project work, but the project has always had a wider meaning, conveying a message to the client and to the wider public that we have good ideas in terms of the cradle-to-cradle and circular-design approaches and that it is always possible to do something, even if the task looks hopeless at first sight.

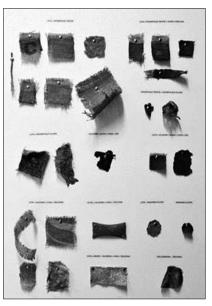
#### METHODOLOGICAL APPROACH — EXPERIMENTING WITH JUTE

At the beginning, our work indeed seemed hopeless. When watching, with students, a pile of discarded jute, we did not have the faintest idea as to what we could possibly do with those torn bags (Picture 1). Students did some web research about jute, but that did not help either.

At that stage, the right teaching and methodological approach was very important. We did not have to think of the final useful applications but rather considering the material-treatment processes like cutting, fraying, shredding, grinding, ironing, sewing and maybe combining it with other materials in different ways. In other words, we tried to experiment not knowing exactly what would happen or what results might be expected. All the students focused on practical experiments with the jute bags and jute fibres, while also searching for actual environmental issues where we could intervene with applications made of jute. Within this frame, our areas of research included current problems such as single-use plastic waste, soil erosion in some steep areas, dying of coral reefs and thermal-building insulation. Two students were experimenting, step by step, by combining jute fibres and dust with several organic waste materials like potato-peel starch, coffee grounds, clay, plaster, bananas and additives like vinegar and gelatine (Picture 2). The result with potato starch was impressive, as we obtained a material stiff like carton, unfortunately a bit wavy so it would be difficult to use it, especially for packaging that turned out to be the focus for the students. They wished the







**Picture 2** — Different Organic Waste Materials Mixed with Jute

new biopolymer material to be so flexible that it could be rolled. With the help of the Bioplastic Cook Book by Margaret Dunne (2018), further experiments were made, and the students also studied the behaviour of the already introduced biopolymers and fruit leathers made from pineapple leaves, banana and apple peels. Based on all those experiments, the decision to further explore the combination of jute with bananas was made

#### Experimenting with Jute and Bananas

Why bananas or, more precisely, discarded bananas? It is known that banana peels contain a high degree of pectin, so it was expected that this substance could contribute to the material compactness (Khamsucharit, Laohaphatanalert, Gavinlertvatana, Sriroth, & Sangseethong, 2018). The use of any material discarded during a company's production, or any other process, as a waste is the main requirement of the project organised within the Sustainable

Design Course. The Rastorder company, the leading trader with bananas in the region, annually discards 36 tons of bananas before their distribution to the market. These bananas are over-ripe and not suitable for the market. The designers' challenge is to create useful solutions for people's daily needs by designing products from secondary raw materials based on the principle of the cradle-to-cradle biological or technical cycle. Our mission is realised through a combination of different businesses where the waste of one system can become the food for another system (McDonough & Bra-

ungart, 2002). Over-ripe bananas are thrown away. They are composted at the regional centre for waste management, which is the right thing to do. However, there has always been a challenging thought that there must be another way of using bananas instead of delivering them to the composting area. Can they be discarded at a later stage and have an additional function before that time? With this idea in mind, the experiment with bananas and jute took place. Over-ripe bananas were cooked for about half an hour, mixed with dry jute fibres with a length of approximately 2-3 cm and then applied onto different surfaces to dry. Among the surfaces of different materials, plastic foil and backing paper were the most appropriate. For example, it was difficult to remove the dry biopolymer from a metal net. Several experiments with different degrees of banana over-ripeness and different ratios of both substances were made. It is important to stress that not only banana peels, but the entire fruits were cooked. This is important for possible future business models, because it would be easy to collect the whole bananas but very difficult to collect only their peels as they are discarded in the municipality waste containers where they are mixed with other biodegradable wastes.

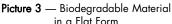
#### Experimenting with Jute Based on Pulp Technology

Within the SIPK project, the experiments with jute fibres took place as part of our search for a biodegradable material based on pulp technology. The idea was to try to make a cup from a discarded jute bag. What initiated this idea? When starting the singlepackaging ŠIPK project, we were informed that Petrol, the Slovenian petrol company, would like to do something toward sustainability regarding single-use coffee cups, in which the coffee is sold at their petrol stations. Slovenians are a population of two million and only at Petrol stations, we discard between 5.5-8 million<sup>2</sup> coffee cups per year, not to mention the cups from other vending machines around the country (educational institutions, hospitals, supermarkets, companies etc.). Within the frame of the packaging project, we were also exploring the take-away packaging used for salads or fresh fruit — this is 24-hour packaging that does not need a controlled atmosphere. Some types of biodegradable packaging for this purpose have been on the market for some time, but the problem is that they are still too expensive. The aim was to develop two different applications — a plate and a cup — from discarded jute, a secondary raw material that we can, for now, obtain free of charge. We expect that using this material might lower the final price of the products and allow biodegradable products to enter the market on a larger scale (Žepič Bogataj, 2017).

Our department is a design school with no labs or technical equipment for developing new materials. Usually, such activities are not in the domain of designers. But

 $<sup>^{2}</sup>$  5.5 million of take-away coffees are sold but 8 million coffee cups are used. The difference tells us that some people take two cups to hold their coffee.







**Picture 4** — Biodegradable Material in a 3D Form

with a growing number of sustainable-approach designers, more and more experiments are also done in this field. With the help of the Pulp and Paper Institute from Ljubljana, we managed to develop a plate that enabled us to test the new material. Surprisingly, it turned out to be waterproof. Experts from the Institute thought that this is not because we added 3% of synthetic biodegradable clay, but probably due to a special resin that is part of the natural structure of jute fibres. At that point, it became even clearer that a cup should also be developed. But the process of developing a cup was much more complicated since the technology that we used was not intended for three-dimensional applications. We were improvising and it turned out that to develop a cup with a paper-shaping machine was almost "mission impossible". A lot of experiments with different moulding materials were carried out, but it turned out that the only proper material for this technology was wire. As there was no budget for 3D metal printing, we finally decided to use a tea strainer made of a metal net. As a result, we had a shape that looked more like a bowl then a cup.

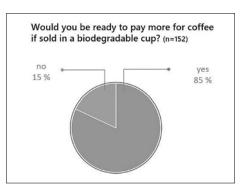
# RESULTS — TWO DIFFERENT BIODEGRADABLE MATERIALS USED AS A SUBSTITUTE FOR SINGLE-USE PACKAGING SOLUTIONS

In the first case, the innovative result of extensive experimentation with jute and bananas was a biopolymer of varying quality: stiffer or more flexible; a more homogenous look if the jute fibres were short or a more heterogeneous look if the jute fibres were longer. It quickly became clear that a very important aspect was the air humidity: the higher it was, the more flexible was the material; the lower it was, the drier and stiffer was the material. When investigating the biopolymer material, its most likely application seemed to be packaging, which had anyway been one of the interests and priorities of the students right from the beginning.

If we cannot avoid packaging, it at least should not be plastic, where this is not necessary. Therefore, the further development of packaging applications for fresh food



Picture 5 — Cups from Discarded Jute Bag (Foto: Tajda Hladnik)



**Picture 6** — A Graph Showing Fondness for Biodegradable Cups

seemed logical. That is why knowledge transfer from regular seminar work, where the biopolymer was developed, to the parallel packaging project was carried out. Through further experimental work, students developed different packaging solutions that could replace the current plastic packaging for carrots, parsley, leeks, soup vegetables and other similar items that are unfortunately found on the market shelves. The material was developed in two different forms: as a flat surface like paper (Picture 3) that can be later shaped into packaging in line with a designer's creative solution, or it was shaped and produced as a compact 3D form (Picture 4). At this first stage of development, when no industry was included, the first option seemed more viable from the viewpoint of production and entering the market. Since our new biodegradable material has been intended for packaging, testing for harmful substances should be done in the future. On the other hand, we already experienced an attack by worms, as the material was kept in a place where moths developed. After having won the battle against the worms, the material has been kept in a clean and dry space. The only factor that can still influence its properties over a period of more than a year is the air humidity, which significantly affects all biodegradable materials.

In the second case, the final results of all the experiments that took place at the Pulp and Paper Institute lab were plates and small bowls made of a waterproof material obtained from torn, discarded 60-kg jute coffee bags, which can be either reused because they can be washed, or recycled as paper or biodegraded. According to the interviews carried out among coffee-to-go buyers, the latter suits them better; in the questionnaire, over 80 % of customers would prefer a biodegradable coffee cup and are ready to pay more for it (Picture 5), which is somehow understandable since this is the most comfortable way that requires no change in our behaviour. We just throw the cup in the right litter bin, depending on the kind of waste management that is practiced in a specific region. Using biodegradable solutions, we are unfortunately not reducing the amount of single-use products; however, we are definitely reducing the negative environmental impact. To lower the amount of single-use products, we need ad-

ditional incentives for promoting their reuse. A plate from our newly developed biodegradable material could easy replace the current packaging of a 24-hour salad, which is the only product among all the take-away products provided by one of our biggest food-merchant chains that does not require a plastic casing. Sad but true. At the Pulp and Paper Institute, the newly developed material was internally tested for harmful substances since it would be in contact with food. No harmful substances were found.

Why is this material an option? Not only is it safe to be used when in contact with food, not only does it allow all the three above possibilities of waste management, but it is also available in almost every country that imports coffee. Applications made from discarded jute could be produced regionally and the resource might be for free if obtained from the big coffee importers who now pay for the removal of production waste. Besides, the material is a good example of the desirable model of a circular economy — taking discarded material from one process and using it in another process. It is exactly how it should be. Until now, it has been a work in progress.

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# ECUADORIAN ADAPTATION AND VALIDATION OF THE SCALE OF RISK FACTORS ASSOCIATED WITH EATING DISORDERS (EFRATA)

#### Abstract

The objective of this study was to adapt and know the factorial structure and reliability in the Ecuadorian population of the EFRATA Scale of Risk Factors Associated with Eating Disorders. A non-probabilistic sample of 1172 participants was used (age: M = 21.99; SD = 2.49; 58.6% women and 41.4% men). The first parallel analysis study identified seven interpretable factors that explain 50% of the variance. The second confirmatory factor analysis study indicates an acceptable fit (GFI = 0.96; AGFI = 0.95; NFI = 0.94; RMR = 0.08). The reliability coefficients for Cronbach's alpha and McDonald's omega were 0.89 and 0.90 respectively. The Ecuadorian version of the EFRATA shows good psychometric properties and adapts to the cultural context of this country.

Keywords: eating disorders risk, EFRATA, psychometric analysis.

Eating Disorders (ED) are multi-causal realities characterized by alterations related to food intake, a marked dissatisfaction of body image and a fear of weight gain (Martínez & Berengüí, 2020; Gómez-Peresmitré, 2001). The prevalence of eating disorders has been growing throughout society, in recent times (Culebras, 2020; Chisowa & O'Dea, 2010), this is associated with cultural concepts such as the value of thinness in most of developed societies (Pipher, 1999), in addition to this, increasingly affects younger populations (Gómez-Peresmitré, 1999; Gómez-Peresmitré, Alvarado, Pineda & Saloma, 2001; McVey, Tweed & Blackmore, 2004; Saucedo, 2003; Correa, Zubarew, Silva & Romero, 2006). At present, a high percentage of alterations in eating behavior can be seen, considered to such an extent as a risk factor, which could worsen and turn into eating disorders (Thomas, Ricciardelli & Williams, 2000; Harrison, 2000; Cotrufo, Cella, Cremato & Labella, 2007; Konstanski & Gullone, 2007), or in alterations in the act of eating, according to the DSM-V (American Psychiatric Association, 2013) which stipulates them as unspecified as is the case of overeating by impulse or atypical eating disorder, that are commonly related to obesity (Dikshit et al, 2020; Gómez-Peresmitré, 2001).

The early detection of behaviors or risk factors that affect eating is essential to avoid the origin of an eating disorder, this would reduce the costs derived from the disease and health problems. In the Ecuadorian context, there is no instrument that explores the risk of suffering from an eating disorder, which is why the need for an instrument that helps to detect these eating disorders adapted to the Ecuadorian population has become evident,.

The Scale of Risk Factors Associated with Eating Disorders (EFRATA) (Gómez-Peresmitré & Ávila, 1998), has been widely used in Mexico to assess the risk of suffering from an abnormal eating disorder in the Mexican population, showing good internal consistency and a solid structure (Gómez-Peresmitré, Alvarado, Pineda & Saloma, 2001). Given the above, the objective of this study was to adapt the EFRATA linguistically to the Ecuadorian culture and analyze the psychometric properties of factorial structure and reliability.

#### METHOD

#### Design

A cultural adaptation of the scale was carried out, as well as an instrumental, descriptive and cross-sectional study to determine its validity and reliability.

#### **Participants**

The study population consisted of an accidental non-probabilistic sample (Hernández-Sampieri, Fernández & Baptista, 2015) of 1172 undergraduate psychology students (age: M = 21.99; SD = 2.49; 58.6% women and 41.4% men) at a public university in Cuenca. The selection criteria taken in this study were, for the inclusion criterion, university students who had signed the informed consent were considered, and participants who were under the influence of narcotics and / or drugs, except tobacco, was considered as the exclusion criterion.

#### Instruments

Scale of Risk Factors Associated with Eating Disorders (EFRATA) The EFRATA (Gómez-Peresmitré & Ávila, 1998) is a questionnaire that explores the type of eating behavior and the risk of suffering from an eating abnormality. The scale is grouped into seven factors, composed of 54 items of which some of them are referred to women and others to men, however 39 items correspond to the unification of the scale for both sexes. Each item has five response options ranging from 1 "never" to 5 "always". The risk factor for bulimia nervosa has a Cronbach's alpha of .91 (student population); the risk factor for anorexia nervosa an alpha of .82; the normal eating behavior factor an alpha of .69; the external food control attribution factor an alpha of .80; the eating behavior factor of psychological compensation an alpha of .74; the chronic and restrictive diet factor an alpha of .81; and the attribution factor of internal food control an alpha of .75 respectively. The full scale explains 61.2% of the total variance and has a reliability of .89 Cronbach's alpha. The sum of values obtained in each subscale interprets the type of eating behavior and the risk of suffering from an eating abnormality.

Sociodemographic Questionnaire. A short survey was made that collects personal data such as age, gender and level of education.

#### **Procedure**

The study consisted of two stages. In the first, the cultural linguistic adaptation of the original scale was carried out according to the recommendations established in this regard (Streiner & Norman, 2008; Muñiz, Elosua & Hambleton, 2013). According to the fact that the semantic structure of some items of the instrument contained popular local Aztec phrases, two health professionals of Mexican nationality settled in Ecuador for more than seven years were used, who independently modified the dialectical expressions to the Ecuadorian culture which generated two versions. Subsequently, two other Mexican professionals from the health area residing in Ecuador carried out the back translation of both versions (Harkness & Schoua-Glusberg, 1998; Streiner & Norman, 2008). The successive versions were collated by a panel of experts in psychometrics and nutrition (two psychometrists and a nutritionist), who verified their conceptual equivalence, reviewed the divergences and chose the terms that were most similar to those used in the Ecuadorian locality. The suggestions made were agreed with the researcher and with the authors of the original questionnaire. Thus, a first Ecuadorian version was obtained with which, from a sample of 29 university students (target population), a pilot study was carried out to evaluate its feasibility and respondents' semantic understanding of the items (García, Rodríguez & Carmona, 2009; Argimon & Jiménez, 2013), after which the final version of the scale was considered.

The Research Ethics Committee of the Catholic University of Cuenca approved the study and informed consent was obtained, which under the regulations of the APA code of ethics for research and confidentiality of data (*APA's Ethical Principles of Psychologists and Code of Conduct*, APA, 2002), the students who wanted to participate in the study voluntarily signed the document. The data collection process was carried out during class hours during teaching hours, highlighting the anonymous nature of the information collected (Behnke, 2006). In this second stage, a descriptive and cross-sectional study was carried out to analyze the psychometric properties of the instrument and support its use in the context for which it is adapted (Ramada-Rodilla, Serra-Pujadas & Delclós-Clanchet, 2013; Streiner & Norman, 2008), all this in order to guarantee the quality of future measurements (Carvajal, Centeno, Watson, Martínez & Sanz, 2011). For this study, the Ecuadorian version of the EFRATA was used, as well as a short questionnaire with sociodemographic data.

#### Data Analysis

A descriptive analysis of the sample was carried out, summarizing the sociodemographic variables, as well as the univariate and multivariate normality study (Mardia Coefficient) in the data matrix of the observed variables.

Regarding the internal structure, and in order to determine the underlying dimensions of the EFRATA, a cross-validation procedure was used. For this, the sample was randomly divided into two halves. The first subsample (n1 = 586) was used to perform an exploratory factor analysis (EFA). Previously, its relevance was evaluated using the

Kaiser-Meyer-Olkin (KMO) test and the Bartlett sphericity test. In the study by Gómez-Peresmitré and Ávila (1998), there is no information on the estimation method for factor extraction, as well as the rotation method used, however in the present study according to the non-compliance of the multivariate normality assumption in the data matrix, the estimation method was Unweighted least squares (ULS). This method allows obtaining adequate estimates of the models without the requirement of the normal distribution of the variables used (Ruiz, 2000). The procedure to determine the number of dimensions was by optimal implementation of parallel analysis (Parallel Analysis, PA) (Timmerman & Lorenzo-Seva, 2011) and the oblique rotation method was Promin (Lorenzo-Seva, 1999), which allows all the factors correlate with each other.

With the second subsample (n2 = 586), a confirmatory factor analysis (CFA) was carried out to verify if the structure obtained by the PA was replicated. For this, in the absence of multivariate normality, the same ULS estimation method was used. The fit of the model was evaluated using various indicators: Goodness-of-fit Index (GFI, Goodness-of-fit), Normed Fit Index (NFI, Normed Fit Index) and Adjusted Goodness-of-fit Index (AGFI, Adjusted Goodness-of-fit) of which values equal to or greater than .90 are interpreted as indicators of an acceptable fit (Hu & Bentler, 1999). The Residual Mean Square Root (RMR) was also obtained, so a small value is interpreted as a good model (Tabachnick & Fidell, 2007).

Once the factorial structure was established, the Cronbach's alpha  $(\alpha)$  coefficient (Nunnally, 1975) and McDonald's (1999) Omega coefficient  $(\omega)$  were used to determine the reliability of the scale. The Omega coefficient is a relatively new reliability estimator used in factorial models (Ventura-León & Caycho, 2017), driven by its higher sensitivity compared to other estimators (Zinbarg, Revelle, Yovel & Li, 2005), as well as its robustness when sampling heterogeneous populations and the reduced risk of overestimating reliability (Waller, 2008). This coefficient does not require the absence of correlated errors, which are limitations of Cronbach's alpha (Dunn et al., 2014; Ventura-León, 2018). In the present study, acceptable reliability values were considered above 0.70 (Nunnally & Bernstein, 1994).

The analyzes were carried out with the computer programs: Factor software vers. 10.8.02 (Ferrando & Lorenzo-Seva, 2017), AMOS statistical package version 24.0.0, SPSS (IBM Corp., 2016) and JASP 0.9.2 (Love et al., 2015).

#### **RESULTS**

#### Cultural Linguistic Adaptation

Of the total scale, 46 items did not present any difficulty and were accepted literally; in the remaining eight, minor modifications had to be made to popular expressions that did not alter the meaning of the item. Thus, the statement "he who is born pot-bellied, even if they girdle it", which describes a very specific colloquial situation, was replaced by "he who is born pot-bellied even if he wears a girdle, stays pot-bellied", which refers to a more local context. Regarding the statement "I find myself thinking about food", the sentence was reformulated to "I spend all the time thinking about food". The pilot study carried out with a sample of the target population (n = 29) confirmed the

adequate feasibility of the scale. Regarding the semantic understanding of the items, more than 95% of the university students confirmed that the instrument was simple and easy to understand; the mean completion time was less than ten minutes.

#### Descriptive Data

The two subsamples of the cross-validation procedure did not show significant differences depending on gender, but they did on age. The Mardia multivariate normality tests indicate the absence of normality in the variables observed for both subsamples (Table 1).

		•			•		
	n <sub>1</sub> = 586		$n_2 = 586$				
	n	%	n	%	x <sup>2</sup>	df	Р
Gender					.088	1	.767
Female	341	58.20	346	59			
Male	245	41.80	240	41			
	M	SD	Μ	SD	t	df	P
Age	21.07	2.49	21.52	2.47	-3.073	1170	.002
Mardia's coefficient					x <sup>2</sup>	df	Р
$A_m$	-	712.246	-		69931.793	27720	.0000
K <sub>m</sub>	4	021.960			24124.158	1	.0000
$A_m$	-	1	590.777		58009.469	10660	.0000
K <sub>m</sub>		2	118.755		12375.306	1	.0000

**Table 1** — Descriptive Statistics and Multivariate Normality Test

Bold — significant difference (.001 level)

Note: df — Degrees of freedom; SD — standard deviation; M — Mean;

 $A_m$  — Multivariate asymmetry;  $K_m$  — multivariate kurtosis.

#### INTERNAL STRUCTURE VALIDITY

#### Exploratory Factor Analysis

With the first subsample (n1 = 586), an analysis of optimal implementation of the parallel analysis (PA) was carried out (Timmerman & Lorenzo-Seva, 2011) with the Promin rotation method (Lorenzo-Seva, 1999). For factor extraction, the following criteria were considered: 1) factor load greater than 0.30; 2) theoretical congruence between the items of a factor; and 3) minimum of three items grouped in a factor. The data from the correlation matrix were adequate for this type of analysis [Bartlett's sphericity test (1431) = 16173.4; p <.001; Kaiser-Meyer-Olkin index = .938]. Seven theoretically interpretable factors were extracted according to the unification of the scale (Gómez-Peresmitré & Ávila, 1998). The seven-factor solution explained 55% of the variance. Table two shows the saturations of the rotated configuration matrix: the first factor would be made up of nine items related to the risk of bulimia nervosa (2 to 9 and 12); the second would group seven items related to the risk of anorexia nervosa (15 to 21); the third would incorporate six items related to normal eating behavior (24 to 27 and 29 to 30); the fourth would be made up of four items on the attribution of external food

control; the fifth would group three items on eating behavior of psychological compensation (39 to 41); the sixth would be made up of five items on the attribution of internal food control (43 to 47); and finally, factor seven would be made up of five items related to the chronic and restrictive diet (50 to 54). The correlations between factors (Table 2) are denoted relatively low, however their theoretical value is relevant, because the factors that measure positive aspects of eating behavior (factors: 3, 4 and 6) present a negative correlation with the factors related to eating disorders (factors: 1, 2, 5 and 7) respectively. This suggests the discriminatory capacity of the items to distinguish the protective and risk factors against the diet within the instrument.

**Table 2** — AFE with Parallel Analysis and Oblimin Rotation: Factor Loadings (configuration matrix) and Factor Correlations

Items	F1	F2	F3	F4	F5	F6	F7
Item 1	0.543	0.037	0.041	-0.139	0.099	0.226	-0.056
Item 2	0.712	0.026	0.028	-0.085	0.034	0.125	-0.107
Item 3	0.621	0.023	-0.002	0.119	0.026	0.121	-0.081
Item 5	0.677	-0.003	0.078	0.085	0.020	0.012	0.020
Item 4	0.801	-0.033	0.075	0.063	-0.005	-0.048	0.006
Item 6	0.451	0.100	-0.036	0.073	0.005	-0.013	0.101
Item 7	0.761	0.014	0.078	0.052	-0.077	0.029	0.030
Item 8	0.774	0.028	-0.132	-0.009	0.028	-0.034	0.114
Item 9	0.520	-0.079	0.249	0.043	-0.006	-0.054	0.192
Item 10	0.31 <i>7</i>	0.048	-0.000	0.070	0.301	0.077	0.064
Item 11	0.432	0.146	0.005	0.041	0.059	0.182	0.036
Item 12	0.346	0.362	0.113	-0.130	0.478	0.151	0.104
Item 13	0.214	-0.055	0.571	-0.008	0.038	0.019	-0.014
Item 14	0.214	-0.397	0.400	-0.120	0.035	0.31 <i>7</i>	0.037
Item 15	0.171	0.704	-0.190	0.053	0.107	0.026	-0.064
Item 16	-0.091	0.598	0.003	0.051	0.036	0.052	0.107
Item 17	0.105	0.609	0.187	0.135	0.106	0.003	-0.037
Item 18	0.029	0.466	0.097	0.239	0.017	-0.060	0.099
Item 19	0.025	0.301	0.201	0.196	0.107	0.014	0.009
Item 20	0.050	0.377	-0.765	0.164	-0.078	-0.032	0.138
Item 21	-0.033	0.300	-0.076	0.289	-0.105	-0.015	0.186
Item 23	0.067	0.005	0.499	0.118	0.044	0.014	0.028
Item 22	0.036	0.283	0.300	0.248	-0.021	0.105	0.048
Item 24	-0.094	0.059	-0.300	0.000	0.002	0.095	0.041
Item 25	0.031	0.070	-0.302	0.020	-0.026	-0.045	0.115
Item 26	0.027	0.089	-0.350	0.007	-0.041	0.028	-0.008
Item 27	-0.002	0.045	-0.3 <i>7</i> 5	-0.042	0.077	0.099	-0.083
Item 28	-0.090	0.025	-0.577	-0.050	0.104	-0.139	-0.009
Item 29	0.064	0.057	-0.347	-0.138	0.096	-0.117	0.001
Item 30	0.031	0.032	-0.348	0.035	0.050	-0.012	-0.088
Item 43	0.026	-0.045	-0.031	-0.744	0.061	0.037	-0.007
Item 44	0.017	-0.069	0.024	-0.707	0.084	-0.000	0.011

Item 45	0.011	0.044	0.318	-0.350	0.001	0.103	0.144
Item 46	0.040	0.085	0.145	-0.622	-0.075	0.088	0.147
Item 47	-0.031	0.017	0.116	-0.600	0.045	0.105	-0.040
Item 50	-0.015	0.001	0.101	0.153	0.610	-0.052	-0.031
Item 51	-0.014	0.093	-0.033	-0.001	0.726	-0.033	-0.003
Item 52	0.025	-0.025	-0.008	-0.050	0.658	0.036	0.043
Item 53	-0.017	0.056	0.142	-0.021	0.566	-0.082	0.113
Item 54	-0.010	0.026	0.031	0.167	0.371	0.136	0.171
Item 37	0.157	-0.044	0.114	0.322	0.069	0.494	0.007
Item 38	0.382	-0.035	0.134	-0.027	-0.069	0.391	0.024
Item 39	0.062	0.032	0.026	-0.051	-0.044	-0. <i>7</i> 13	0.051
Item 40	-0.047	-0.007	-0.040	-0.047	0.044	-0.804	0.028
Item 41	0.181	-0.009	-0.176	-0.115	0.060	-0.503	-0.019
Item 31	0.117	0.023	-0.198	0.082	0.103	-0.012	0.467
Item 32	0.169	-0.020	0.123	-0.087	0.181	0.153	0.370
Item 33	0.061	-0.058	0.091	-0.036	0.211	-0.034	0.436
Item 34	0.046	-0.077	-0.135	0.026	0.103	0.150	0.484
Item 35	-0.051	0.111	0.055	-0.120	-0.408	0.044	0.238
Item 36	-0.019	0.305	0.073	0.095	0.285	-0.162	0.300
Item 42	0.077	0.416	0.028	0.098	0.183	0.173	-0.050
Item 48	0.174	-0.638	-0.139	0.224	0.556	0.116	-0.008
Item 49	0.132	-0.023	0.052	0.257	0.649	-0.082	-0.062
Variance of the ro	otated factor:						
Factor	F1	F2	F3	F4	F5	F6	F7
	2.88	2.57	2.47	4.17	2.88	3.56	2.65
Factorial correlati	on matrix:						
Factor	F1	F2	F3	F4	F5	F6	F7
Fl	1						
F2	0.14	1					
F3	-0.51	-0.31	]				
F4	-0.33	-0.18	0.59	0.40	1		
F5	0.30	0.24	-0.28	-0.42	0.07	1	
F6	-0.45	-0.10	0.33	0.37	-0.37	0.20	1
F7	0.29	0.27	-0.30	-0.37	0.42	-0.32	1

Note: In **bold** the factorial loads> 0.30 in absolute value; in shading, the theoretically grouped factor.

#### Confirmatory Factor Analysis

With the second subsample (n2 = 586), this seven-factor model was subjected to a confirmatory factor analysis using the Unweighted Least Squares (ULS) estimation method. The covariances between the unicities of various items were allowed to be freely estimated, taking into account the similar semantic formulation of the items and the modification indices. Table 3 shows the standardized parameters of the final model, whose fit was excellent (Hu & Bentler, 1999; Gaskin & Lim, 2016) [x2 (632) = 3032.47; GFI = .96; AGFI = .95; NFI = .94; RMR = .08] and the covariance matrix in annexes. All factor loadings and factor correlations were statistically significant (p <0.001).

 $\textbf{Table 3} - \mathsf{AFC:} \ \mathsf{Standardized} \ \mathsf{Regression} \ \mathsf{Weights} \ \mathsf{of} \ \mathsf{the} \ \mathsf{Evaluated} \ \mathsf{Model}$ 

F1: Risk of bulimia nervosa.	
Item 2	0.633
Item 3	0.665
Item 4	0.781
Item 5	0.765
Item 6	0.621
Item 7	0.822
Item 8	0.792
Item 9	0.595
Item 12	0.695
F2: Risk of anorexia nervosa.	
Item 15	0.562
Item 16	0.641
Item 17	0.759
Item 18	0.661
Item 19	0.467
Item 20	0.618
Item 21	0.617
F3: Normal eating behavior.	
Item 24	0.759
Item 25	0.302
Item 26	0.764
Item 27	0.869
Item 29	0.680
Item 30	0.744
F4: Attribution of external food control.	
Item 31	0.296
Item 32	0.573
Item 33	0.657
ltem 34	0.326
F5: Eating behavior of psychological compet	
Item 39	0.839
Item 40	0.735
Item 41	0.754
F6: Attribution of internal food control.	
Item 43	0.595
Item 44	0.545
Item 45	0.730
Item 46	0.667
Item 47	0.572
F7: Chronic and restrictive diet.	
Item 50	0.594
Item 51	0.500
Item 52	0.623
Item 53	0.688
Item 54	0.589

#### Reliability

The internal consistency of the scores was relatively good, since Cronbach's alpha coefficient and McDonald's Omega coefficient showed higher values of .70 in most factors: for Factor 1 (nine items)  $\alpha$  = .90,  $\omega$  = .90; Factor 2 (seven items)  $\alpha$  = .84,  $\omega$  = .82; Factor 3 (six items)  $\alpha$  = .81,  $\omega$  = .85; Factor 5 (three items)  $\alpha$  = .81,  $\omega$  = .82; Factor 6 (five items)  $\alpha$  = .75,  $\omega$  = .78; Factor 7 (five items)  $\alpha$  = .76,  $\omega$  = .77; However, in Factor 4 (four items)  $\alpha$  = .60,  $\omega$  = .61 presented comparatively low reliability. The total scale has a Cronbach's alpha of .89 and a McDonald's omega coefficient of .90, respectively.

#### DISCUSSION

After a process of cultural adaptation and validation, an Ecuadorian version of the EFRATA has been obtained, a scale that can be used to assess the type of eating behavior and the risk of suffering from an eating anomaly. It is essential to have tools that allow us to analyze this issue, since most of the interventions aimed at reducing this problem are based on the use of measurement instruments where it is possible to know the risk of disease, to have a solid knowledge of the pathology and better plan prevention programs (Casado-Morales & Helguera-Fuentes, 2008).

The new instrument is similar to the one conceived by its authors (Casado-Morales & Helguera-Fuentes, 2008), so that the Ecuadorian version hardly presents any conceptual or semantic differences with the document. During the cultural adaptation, slight comprehension difficulties derived from words not common with the Ecuadorian locality were detected. Carrying out an adequate cultural adaptation is essential: one of the biases that is usually found in the adapted psychometric scales is that a conceptual equivalence is not carried out between the different cultures (Carvajal et al., 2011) and, in this sense, the greater there is a discrepancy with the original scale, the greater possibility of evaluating different concepts (Sánchez & Echeverry, 2004; Harkness & Schoua-Glusberg, 1998; Carvajal et al., 2011). On the other hand, it is an easy and fast application tool. The pilot study carried out confirmed the adequate feasibility of the scale, considering that all the items were understandable and suitable for use by Ecuadorian professionals. Due to this, it is important to point out the importance of the scale using a simple and neutral language in order to avoid bias (Carvajal et al., 2011; Arrimón & Jiménez, 2013).

Regarding the factorial structure, the results presented are similar to the seven-factor model proposed by Gómez-Peresmitré and Ávila (1998). The seven factors show low and negatively charged correlations, but theoretically representative; since the instrument is able to discern between healthy and pathological aspects of diet, because the model is about differentiated factors (Brown, 2006).

Regarding the limitations, it is worth mentioning the possible existence of a selection bias, since participation was voluntary by university students and the sampling was not probabilistic; however, the large number of participants strengthens the value of the findings. Another limitation is that convergent and discriminant validity could not

be evaluated, as there were no other instruments adapted to the Ecuadorian culture to perform an alternative measurement.

In conclusion, after a process of cultural adaptation and validation of the EFRATA, an Ecuadorian scale has been obtained whose scores can be considered valid and reliable. It can also be said that the present version is equivalent to the original instrument from the semantic point of view. This refers to the fact that it is a relevant tool for evaluating risky eating behavior. Knowing this information, the contents of health promotion and healthy diet and disease prevention can be designed more accurately.

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# E-TANDEM CRITICAL THINKING PROJECT: USING E-TANDEM ACTIVITIES TO DEVELOP CRITICAL THINKING SKILLS IN COMMUNITIES OF DISPERSED LEARNERS OF ENGLISH AS A FIRST AND SECOND LANGUAGE

#### Abstract

E-tandem critical thinking is an online collaborative learning technique which uses a Moodle chat room (http://moodle.org) and Skype (http://www.skype.com) to facilitate the development of students' questioning and critical thinking skills and their understanding of character traits in relation to plot development in narratives, to provide professional development for teachers in using ICTs in their classrooms, to facilitate students' and teachers' skills development related to building and operating within collaborative learning teams as well as learning about and making virtual connections with students from different locations, and to assist in the development of English language skills. Developing a classroom environment which promotes student questioning will lead to greater motivation in students to ask questions which seek deeper levels of understanding, requiring the use of critical thinking skills (Albergaria-Almeida, 2010). Schools from various regions (country and city) and socio-economic backgrounds are invited to participate. The project attempts to also target low socio-economic areas and isolated school communities (by location and/or access to speakers of the target language). E-tandem enables staff and students to collaborate on focused activities, build relationships, widen their perspectives, and share ideas. It enables classroom teachers to work together to enhance their professional development and the learning outcomes of their students using computer mediated technology. This paper will provide an overview of the theoretical background of the project, the pedagogical perspectives and task--tool alignment based on the affordances of the Web tools selected for the activities, the relevant results of the first cycle of the technique 'E-hotseat' used with students who speak English as their first language, the project's methodologies and the potential benefit for students and staff especially those located in country towns, on the Mediterranean coast/islands and outside of the Republic of Croatia.

Keywords: critical thinking, e-tandem, English as a second language, virtual teams.

In a typical classroom, the weekly number of questions asked by teachers is significantly greater than the number of questions asked by students. The main type of questions being asked focus on students' ability to recall facts (Albergaria-Almeida, 2010). The development of a classroom learning environment that facilitates and celebrates questioning will provide greater student motivation to seek out information and deeper levels of understanding through questioning, which entails the use of critical thinking skills (Albergaria-Almeida, 2010). For students who are not familiar with this type of environment or the process of questioning, teachers will need to design activities that develop students' questioning skills. When students have an authentic audience for their work, their motivation to perform well increases (Helgesen, 2003). The use of computer-mediated-communication Web tools provide teachers and students with a platform to create a collaborative learning space to communicate with other teachers or students synchronously or asynchronously. The E-tandem technique is based on the E-hotseat technique used with learners of English as a first language (Kavanagh & Levak, 2011). Etandem activities follow a pattern of each class learning about questioning and practising analysing a selected text. Each class then takes on the role of a character from the selected text and the other class prepares questions to ask them. Preparation for the role play requires that both groups know the texts well and have analysed the characters and plot development. A chat room is used as the learning space where the classes meet to participate in the activity. The E-tandem study examines the effectiveness of using the E-tandem technique for developing students' questioning and critical thinking skills and understanding of character traits in relation to plot development in narratives. An analysis will also be made as to whether the technique impacts on the English vocabulary used by students throughout the activities. The pilot of the E-tandem technique using two schools began in October 2020. This paper provides an overview of the theoretical and pedagogical perspectives that the E-tandem technique is based on. The Web tools used as part of the technique will be discussed and their selection justified in relation to the pedagogical aims of the task. The method and the technique will be outlined. Potential benefits and difficulties will be considered. At this stage, preliminary results are not available to be included in this paper.

#### THEORETICAL AND PEDAGOGICAL PERSPECTIVES

Importance of Critical Thinking Skills Development in Students

Regardless of whether students are learning a first or second language or content and processes across various subjects, the development of critical thinking skills has been highlighted as important by various countries' school curriculums from the early years to university level study. At this stage, the schools currently involved in the E-tandem project or those joining during the second cycle, are located in Croatia and Australia. The Croatian Government has placed focus on critical thinking skills, problem solving

and informed decision making as key skills to be developed in Croatian students, which are discussed in their new School for Life curriculum. There is also a focus on the development of students' critical thinking skills when learning in a virtual environment (see https://skolazazivot.hr/ guidelines-for-assessment-and-grading-in-a-virtualenvironment/). The Australian Curriculum, Assessment and Reporting Authority (see http://www.acara.edu.au/) highlight critical and creative thinking as a key area of skills development with a focus on the critical analysis of events and identified problems. For example, Year 2 students are being encouraged to develop their language skills (English usually being a first language for these students) to be able to analyse characters' motivations and actions in a narrative. The need for educators to facilitate critical thinking skills development continues from the younger years all the way through to university education, where critical thinking skills development was traditionally the role of universities (Halpern, 2014). With the prevalence of technological advancements, it has become a focused skill area in many universities' curriculums around the world. These skills are viewed as being important for young people to become proactive and reflective members of society (Jarvis, 2010). The Foundation for Young Australians (2016) point out that critical thinking is becoming more and more a focus skill searched for by employers.

#### Questioning and Critical Thinking Skills

Ku (2009) states that it is important to define critical thinking as its definition shapes how it is assessed. For the E-tandem activities, critical thinking skills include: conceptualising issues (Paul & Elder, 2005); asking questions; problem solving; and carefully inspecting the facts (Piaw, 2010; Silverman & Smiths, 2002). In Bloom's Taxonomy of Higher Thinking (1956), being able to evaluate evidence and circumstances is on the highest level for thinking. These skills can be stimulated by appropriate questioning by the teacher and the development of questioning skills in students. As Albergaria-Almeida (2010) pointed out, many teachers use closed questioning techniques in classrooms which require the recalling of facts. Incorporating closed and open questions into the classroom will help students deepen their understanding. Nevertheless, the type of closed and open questions used requires focus and development for questioning to be used effectively.

Socratic questioning techniques consider three general ways of posing questions: exploring a general part of the focus content; encouraging brainstorming and creativity; and, concentrating on a particular problem. These techniques were asserted by Etemadzadeh, Seifi and Far (2013) as playing an important role in facilitating independent learners. Based on Socratic questioning techniques, Paul and Elder (2016) categorised questions into 6 different types: asking for clarification; challenging assumptions; asking for evidence to support an argument; exploring other perspectives and opinions; considering the consequences and implications of actions; and, posing questions about

a question. Based on their study of Malaysian' English second language students and the use of questioning, Etemadzadeh, Seifi and Far (2013) found that using this style of questioning technique to encourage students' active engagement resulted in more meaningful communication, demonstrated improvement in critical thinking skills in the target language and improved motivation and confidence in the students who participated in their study. Baleghizedeh (2011), in a study on the impact that training students in the *Question the Author Technique* had on English reading comprehension skills, found that students who received training in how to question performed better on reading comprehension tasks than those who did not. These students were more engaged with the texts as they created their own questions. By developing their questioning skills, they were able to analyse texts in more depth and gain deeper understandings. The E-tandem technique encourages teachers and students to create a classroom environment that encourages and celebrates questioning, facilitating the students' development of their skills in asking questions that stimulate critical thinking.

#### Authentic Audiences and Collaborative Teamwork

While developing skills and understanding helps improve student motivation to engage in activities and achieve, so does providing students with an authentic audience for their work (Helgesen, 2003). An authentic audience of one's peers through collaborative work facilitates active learning in a social circumstance and is supported by socioconstructivism and collaborative learning theories (Vygotsky, 1978; Johnson & Johnson, 1999). Incorporating peer review and interaction into activities increases students' motivation as students gain a sense of there being a real purpose for their work. This encourages them to deepen their understanding of the activities they participate in (Anderson et al., 2001). Active learning in teams with peers on activities that incorporate analysis and problem solving as well as the shared creation of knowledge not only motivates learners but also promotes the development of critical thinking skills in a real situation as they learn to adapt to the context in the moment (Ocker & Fjermestad, 2008; Ehlers, 2007). Through the E-tandem technique, students initially learn about questioning and practise and develop these skills with an authentic audience of peers in an E-tandem 2 classes team. In this way, students are learning to function within collaborative learning teams (an important life-long skill) as well as developing friendships with other students from other regions or countries.

#### Computer Supported Collaborative Learning (CSCL) for Second Language Learners and Task-Web Tool Alignment

Computer Supported Collaborative Learning (CSCL) promotes utilising computer-mediated communication (CMC) to create the social environment to enable social collaboration. When students work together to socially construct knowledge they are required to analyse their own perspective while comparing and critically analysing another's

perspective. As previously discussed, using authentic audiences and designing tasks that are meaningful to students increases their motivation and input into activity work (Helgesen, 2003) and CMC provides the means to access authentic audiences from anywhere around the world while students are sitting in their own classrooms (Wang & Wang, 2009) or, as a result of epidemiological measures due to the COVID-19 global pandemic, students at times are required to participate in standard classroom activities from home using online methods and Web tools.

Ehlers (2007) states that CSCL, where learners work together on shared tasks, is based on constructivist theories of learning and is a more beneficial method of utilising e-learning as opposed to the distributive method in which information is simply given via e-learning networks. Tandem learning or telecollaboration uses CMC to facilitate lessons that incorporate an intercultural network (Darhower, 2007, Cziko, 2004. Davis, Cho, & Hagenson, 2005). Through the process of collaborating together, learners develop positive relationships with one another. Cavallaro and Tan (2006) asserted that using the mentoring process is beneficial for the mentor as well as the learner. Mentoring will be especially beneficial during the E-tandem technique Cycle 2 for students in Croatia when they are linked with students in Australia who speak English as their first language. Having intercultural competencies is becoming more important with the influence of globalisation (Liaw & Master, 2010; Mufwene, 2010). When learners begin communicating and creating positive relationships with members of the target culture through various situations, they start to identify aspects of who they are in relation to the target culture (Brown, 2000).

In the first cycle of this project, E-tandem groups are formed using whole class collaboration. In this manner, students are able to meet other students situated in different geographic locations: city, country towns, island towns and in other countries which enables them to widen their world view and understanding and knowledge of people from different locations with varying cultural influences. They gain exposure to the cultural norms and lifestyles of different students (e.g. a comparison of city and country town or island town lifestyles). The whole class formation was selected to allow the teacher to facilitate interactions as this is the first time these classes are participating. As the project is based on action research methods (see Methodology) if the teachers evaluate that positive gains were made during Cycle 1 and that the students are at a stage to begin working in smaller virtual groups, the group formation may be altered. This will be decided during the evaluation phase of the project.

Task-tool alignment refers to the connections between learning objectives, learning activities, assessment and the affordances of the learning/Web tools selected to facilitate students' learning. Conole and Dyke (2004) assert the importance of exploring and considering the positives and negatives of affordances when selecting technological tools, in this case, Web tools. Teachers are also introduced to the concept of affordances and selecting Web tools for communication based on the negative and positi-

ves of the affordances of the Web tool. The E-tandem technique uses the video conferencing tool Skype and chatrooms and forums provided by Moodle (http://moodle.org), a learning management platform. Using video conferencing in the initial meeting allows students and teachers to see one another and make a visual and verbal connection with the other class. Students can gain a sense of who they are collaborating with and learn about each other prior to interacting in the session activities. Chatrooms provide teachers and students a learning space to communicate with another class in real-time with only the teacher's written text being displayed to the other class. Students do not have to wait long periods for a response. This affords teachers the opportunity to discuss questions and answers with their own class without the other class watching. If any behaviour issues arise, teachers can deal with these without an audience. The collaboration and discussion thread can be saved and referred to later in class.

### **METHODOLOGY**

The E-tandem technique is an adaptation of Kavanagh and Levak's (2011) study of tandem learning teams for developing questioning and critical thinking skills in students with English as their first language. E-tandem is an online collaborative learning technique which uses Skype (http://www.skype.com) and a Moodle (http://moodle.org) chatroom to facilitate the development of students' questioning, critical thinking and English language skills and their understanding of character traits in relation to plot development in narratives. The participants are part of in-tact groups in that they are students learning English in already formed mix-gendered classes. The students are located in Zagreb and Vukovar, Croatia. They are approximately 13-14 years of age and are learning English as a second language. Parents were provided with information pertaining to the project and asked to provide written consent with the opportunity with withdraw their child's participation and data at any stage of the project.

The first cycle of the technique is being piloted during Semester 1, 2020. In the pilot cycle — Cycle 1, two Croatian schools will participate forming one virtual team. The project will expand during Cycle 2 to include schools located along the Croatian coast and in Australia. The project provides staff and students with an opportunity to collaborate on focused learning activities, develop positive relationships with another school while widening their perspectives of daily life in another region or country, and to share ideas and build knowledge and understandings together. The Web tools used in the technique were specifically chosen as they afford the development of virtual teams and cater specifically to the needs of the age group and activity. As discussed previously, Skype was chosen for the initial face-to-face meeting as classes were able to project the video stream onto an interactive whiteboard. A Moodle chatroom was selected for communicating questions and answers as the chatroom conceals the image of the class. All that is seen is typed text into the chat box. The chatroom allows the

teacher to control the communication and the privacy to discuss questions and answers without the other class listening. Students also have the opportunity to make predictions about the potential answers that the other class may provide.

The study has taken a mixed methods approach and is grounded in educational action research methods with a focus on continuous improvement through cycles. The technique is evaluated at the completion of each cycle by the involved researchers, teachers and students to ascertain how it may be improved. If there is a major problem during a cycle, the project team will call a meeting and re-evaluate aspects where needed. To assist evaluation of the effectiveness of the technique, qualitative data is collected in the form of student reflections, teacher observations, reflections and a recording of the chatroom discussions and quantitative data is collected in the form of comprehension pre-test and post-test results. The results of the pre-test and post-test are compared to ascertain whether the technique had an impact on the students' ability to think critically about narrative texts, answer closed and open questions with results marked according to a rubric. Researchers take notes on discussions with teachers regarding their perception of the techniques and arising issues. Researchers conduct a focus group discussion with teachers involved. Triangulation is used to analyse the results and gain a deeper understanding of the influence the technique has on students' development of critical thinking and English language skills. Selected members of the school teaching and project team will participate in the role of second-rater to strengthen the validity of the results.

The E-tandem technique follows the pattern: 1) Skype get to know each other meeting; 2) Pre-test; 3) In-between task 1; 4) E-tandem session 1; 5) In-between task 2 — joint construction; 6) E-tandem session 2; 7) Post-test; and 8) Story book shared collaborative creation. Each treatment period lasts around 10-12 weeks to allow activities to take place alongside other curriculum tasks. To begin, a pre-test is given to the students to ascertain the students' ability levels. This focuses on their questioning skills and comprehension abilities. Students are asked to answer a set of comprehension questions by giving written answers which are evaluated according to the level of critical thinking skills required to answer them which is outlined in an assessment rubric (Paul & Elder, 2005). Quantitative scores are given. The E-tandem activity work begins with the class teams meeting via Skype, with the aim of establishing a relationship between the groups. In-between task 1 involves reading a fairytale. For Cycle 1, the selected text is Little Red Riding Hood. Teachers facilitate the development of students' questioning skills relating to closed-ended and open-ended questions using inferences. They teach the students about the 6 types of questions based on Socratic questioning as described by Paul and Elder (2016) (see Section 2.2). The students analyse the text and prepare a set of questions to ask a selected character from the book with their Etandem class role playing that character when responding. The students participate in E-tandem session 1 taking turns to ask and answer questions role playing a character

from the fairytale. For In-between task 2, the teacher facilitates a joint construction of an adaptation of the fairytale for modern times. They send their partner class their story and the classes prepare questions to ask the other class as author of their stories. Etandem session 2 occurs with students questioning the authors. Following this, revisions are made to the stories if needed. The students then illustrate their stories and publish a book containing both stories using an online self-publishing website. The posttest is also administered using a similarly structured text. The results from the pre-test and post-test are compared to identify improvement in students' comprehension of characters and plot development, the depth of analysis, justification and evidence used to answer questions as well as the type of language used. The results are triangulated. Evaluation sessions will be conducted and reflections and suggestions will be made for Cycle 2. This project has been funded by the American Embassy in Croatia Small Grants Program 2020. Funding will be used to purchase each participating school (from Cycle 1) an interactive whiteboard, finance collaborative face-to-face meetings with the school/research team and finance the printing of copies of the collaborative book.

### CONCLUSION: POTENTIAL BENEFITS AND ISSUES

The project aims to facilitate the development of primary and high school students' critical thinking skills by increasing their questioning skills and ability to critically analyse and understand specifically character traits in relation to plot development in narratives. The main objective for Cycle 1 of the project is to pilot the E-tandem technique with classes of students who are learning English as a second or foreign language to determine whether there are positive gains in using this technique as demonstrated by the students' results on their pre- and post- comprehension tests; students' perceptions of the technique and teachers' perceptions of the technique. The potential benefits of the project are predicted based on the positive gains demonstrated by the results of using the E-hotseat technique with English as a first language learners and the predicted gains as demonstrated in the related literature. One potential gain may be that students begin to ask more questions in English class and display meta-cognitive skills and higher order critical thinking as they analyse and create texts. The analyses of the paired pre-test and post-test E-hotseat results demonstrated improvement in the depths of students' answers. Many students had originally provided one or a few word simple answers on the pre-test. On the post-tests, their answers were written as complete sentences and reflected deeper analyses with answers demonstrating their reasoning for their answer or supported by evidence from the text. The students had written their perception of the technique in a forum created on their class Moodle course page that were extracted and analysed for consistent themes. Most comments related to the social aspect of meeting another class or were reflections of actual questions posed and creative answers given. These themes are a positive reflection of participating in questioning activities. Teachers from the E-hotseat technique noted that students were highly motivated during the joint construction activity and accounted this to the students' feelings of ownership of the characters. Teachers also commented that they noticed a positive flow on effect from having E-hotseat in-between tasks in the morning as students then asked more questions or commented on questions during the day (Kavanagh & Levak, 2011). This positive effect may be harder to notice in the E-tandem activities in Croatia as the English teachers are specialist teachers who have their classes at different times with the students.

Students may develop social cultural skills as they communicate with other students and learn about their E-tandem partner class' community. Students who participate in the E-hotseat technique found the experience to be enjoyable and were interested in learning about their partner class and their town/city. Student reflections demonstrated the establishment of a positive collaborative relationship between classes. For students who are located in low-socio economic areas or isolated communities, CMC provides them with the opportunity to interact with other students, to gain access to resources they may otherwise not be able to access. This is an important measure when considering the social justice aspect of educational experiences and opportunities.

Teachers may further develop their own questioning skills and develop a classroom environment that encourages questioning. They may find positive gains in connecting with other teachers and sharing and creating knowledge and understandings. The teachers involved in the E-hotseat technique were particularly interested in trialling new ways of using technology in the classroom. They appreciated working with likeminded colleagues from other schools and found that the technique facilitated focused and reflective practices (Kavanagh & Levak, 2011).

If the potential benefit of transferring questioning and critical thinking skills into other classes realises, students' questions may not be as welcomed in those classes if other teachers are not aware of the projects' conceptual pedagogical framework. It is then important to provide information about the project to all staff members and potentially provide training relating to critical thinking and questioning skills to the whole staff. Another potential difficulty may be that students are at greatly varying English ability levels which could influence their willingness to communicate and their ability to engage with the content. The school team has attempted to control this variable by selecting classes with similar abilities. According to Sweller (2010) in his discussion on Cognitive load theory, it is not recommended that educators use tasks that require the learner to use a large amount of working memory as this will interrupt and hinder the learning process. This issue has been addressed by the selection of fairytales as the focus texts which are already known to the students in their first language and contain English vocabulary suitable to the learners' ability levels (as determined by their teachers). The use of technology can facilitate real-time interaction, but it also relies on

adequate Internet speed. Interruptions to Internet connections can cause participants frustration and hinder interaction. Both schools involved appear to have sufficiently good quality Internet connections for this issue to be minimal. Teachers may not have skills in using the selected Web tools. To address this potential issue, teachers have been offered training in the use of the Web tools and assessing the affordances of Web tools in general.

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# THE (IN)ABILITY OF SENIOR EMPLOYEES TO LEARN

#### Abstract

Nowadays, there are no doubts that, as far as the current population growth is concerned, by the next decades the needs of further vocational training of older employees will have increased. When talking about their abilities to learn and the possibilities of their support, there has not been a common conviction yet. The aim of this paper based on the newest studies on andragogy and psychology is to pursue problems in the very traditional deficient thesis, that is, the thesis concerning age-related decline of the ability to learn, and to focus on the general principles of the didactical effect — or the training methodology related to older employees.

Keywords: intelligence, learning ability (docility), constructivism, learning chreod, drifting zone, Androdidactics.

Demographic change is a hot topic these days. Rising life expectancy and an overall decline in natality are causing an aging society in which the age pyramid increasingly resembles a "mushroom". It is quite understandable that against this background there is a growing social, but especially economic, interest in the education of older employees (hereinafter referred to as "older employees"). However, according to Rossnagel (2009), employees 40+ are rarely motivated to participate in further education and training programs tailored to this group are a scarce commodity. According to him, this is also related to the fact that inaccurate and incorrect ideas are still circulating about the ability of older employees to learn. Compared to younger ones, they allegedly learn too slowly and achieve worse results. However, these age stereotypes are more than a small mistake of beauty, as they can significantly influence personnel decisions and ultimately reduce productivity.

### FLUID AND CRYSTALLINE INTELLIGENCE

These facts are a good reason to shed more light on age stereotypes. Although the agerelated decline in cognitive performance is indisputable, the ability to learn is still limited to a much lesser extent than has been generally assumed so far. The reason is that

 $<sup>^{1}</sup>$  By "older employees" we mean women and men in the period of older adulthood or overtime (approximately 45 to 60-65 years).

while fluid intelligence gradually decreases during aging, crystalline intelligence remains relatively well preserved, and even, as Pavel Říčan (2010) notes, it increases even after the age of fifty in people who are intensely intellectually active.

Fluid intelligence is, according to Cattell, the ability to perceive relationships independently of previous experience. In a word, it is a potential ability to learn and solve problems, which peaks in the 20th-23rd year of life and later gradually decreases. On the contrary, crystalline intelligence is directly derived from previous experience. It is conditioned by success in verbal analogies, general awareness and vocabulary level (Ruisel, 2004).

It follows that crystallized intelligence can be used to compensate for the age-related decline in fluid intelligence. A good example is given by Říčan (2010): two people with the same IQ, but of different ages, have equally good overall intelligence, but of different composition. Each of them solves the same task in their own way.

### TESTING THE LIMITS METHOD

However, there are other reasons why the findings of age-related cognitive decline barely explain the assumption of significantly impaired learning ability. Almost all findings of this kind come from the laboratory and are obtained by a method called "Testing the Limits". In it, cognitive performance is whipped to the extreme. Compensation options, for example, through knowledge and education, largely fall away here. The test subjects find themselves in a situation that puts considerable strain on them cognitively. For example, in the situation when one is provided various instructions on how to handle given tasks or time constraints (Rossnagel, 2009). These and other adverse stimuli are perceived by the brain as threats and it respond to them as follows:

- "loses its ability to correctly interpret minor environmental instructions,
- returns to well-known, verified and true [viable2] behaviour,
- loses some of its ability to include, store and access information,
- becomes more automatic and limited in its responses,
- loses some of its ability to perceive relationships and patterns,
- is less able to use higher order thinking skills,
- loses the ability to store in long-term memory,
- I tend to dramatize stimuli in a phobic way" (Zajacová, 2009, p. 52-53 added by M. Sch.).

<sup>2</sup> Viability is a measure of the subjective degree of certification. Activities, terms and conceptual operations are viable if they correspond to the purposes or descriptions for which we use them. The concept of viability replaces the traditional philosophical concept of truth in the field of experience, which determines the "correct" representation of reality. However, this substitution does not change the everyday notion of truth, which means faithful repetition or faithful description of a certain experience (von Glasersfeld, 1997).

As a rule, these threats do not play a role in learning in the work process and in further vocational education at all. Learners can determine the order in which they process the curriculum. In addition, they can use various tools that are not available to them in the "Testing the Limits" method (e.g., they can take notes). Thus, we can conclude that laboratory findings on age-related cognitive decline relate to only a small section of adult learning.

### MENTAL REGRESS OR GROWTH?

Another important point is often overlooked in the debate on mental decline. Visible differences compared to younger people do not appear until people over the age of 60. And although the cognitive differences found in the laboratory would be significant for everyday life, they would concern, even with increasing retirement age, only a very late phase of productive life and not in their fifties (Rossnagel, 2009).

Although after the age of fifty, as stated by Říčan (2004), the most striking is the decline of memory, it is not a general decline. Memory is not a single function, but a series of sub-functions. Some of them weaken after the age of fifty, others remain the same. It is difficult to recall especially names, numbers and professional names, which we rarely use. It therefore suffers from remembering. Involuntary memorization is further impaired. Memorization takes longer after fifty because memory is impaired. But what we learned once, we still remember quite decently, in this respect memory is slowly declining. However, people in their fifties will cope with these depressing losses. For example, when a person needs to learn something, more time will be made for it. The person chooses more carefully what really needs to be remembered. Older people will improve their "external memory", that is, write everything down in a diary and gets used to opening the diary every morning. They will become a bit of a pedant and will create less confusion than many younger individuals. People in their fifties must also be able to better organize mental work, for example, the study of demanding materials will be placed in a daily schedule included in the first morning hours, when the brain is still fresh, in the following hours they will deal with routine matters.

### SELECTED RESULTS OF THE STUDY "FURTHER EDUCATION OF OLDER EMPLOYEES"

"What can be said about the further education of older workers in Austria?" "What agerelated effects can be observed at all?" These were the main questions of a study commissioned by the Research Institute at the Austrian Labor Market Service (AMS Österreich) at the end of 2008. education in the economy (ibw). From the main results of the study, which is summarized in the report "Challenges and Trends in Further Education of Older Employees / Women" (2009) by one of its authors, Kurt Schmid, we select the following:

Employees from the age of about fifty are perceived as older. In the coming years, companies expect a general increase in the need for further education, which equally applies to employees 50+. Knowledge about electronic data processing, computers, that is, the field of new technologies (Internet), is proving to be particularly relevant content for further education for this age group. Equally important is specific further education (knowledge of the relevant sector and products) and knowledge of foreign languages. At the level of Soft Skills, communication / rhetoric, motivation and leadership of employees are presented. The vast majority of the surveyed companies are of the opinion that further education is important and meaningful even shortly or even immediately before retirement. Many companies are also convinced that training older employees pays off. True, sectoral assessments often show different assessments of these aspects. Based on their experience, almost two thirds of companies are convinced that:

- the willingness of older employees to continue their education is generally lower than that of their younger colleagues,
- it is generally more difficult to motivate older workers to take part in further training,
- the content needs of further education differ for both age groups,
- special incentives are needed for further training of older workers.

From the point of view of the surveyed companies, it is possible to talk about four reasons for the lower willingness and motivation of older employees to continue their education:

- ... older employees often see no importance in training activities; either they perceive them as unnecessary or they are convinced that they will no longer pay for them (especially employees just before retirement),
- ... older workers often refer to their experience and think that their qualifications and knowledge are sufficient,
- ... frequent fears of failure in further education (especially with regard to new technologies),
- ... motivation slows down (also the presence of a certain "exhaustion" or "comfort").

And finally, the most important, respectively. the saddest. About half of the companies surveyed believe that older employees' ability to learn is lower than their younger counterparts.

Such reservations can lead to doubts among older workers about their own ability to learn and subsequently lead to a vicious circle: older workers rarely participate in training programs. Therefore, they experience almost no success, which further undermines their confidence in their own abilities and increases barriers to further education. In addition, the fact that companies often lack the financial and time to further train older employees is not motivating (Rossnagel, 2009).

### LEARNING CHREODS, DRIFT ZONES

In general, we can say that companies' doubts about the ability of older employees to learn can be occasional reasons for them to either create new or confirm previously created negative learning constructs.

Edmund Kösel, the creator of constructivist didactics, described these learning constructs as learning chreods. Chreods are biographically shaped learning paths and approaches, as well as reactions of approach and avoidance, experiences determined by experience about one's own possibilities and boundaries, interests and disinterest. Learning creeds consist of motivational, emotional and cognitive factors of learning. Each educational offer, each teaching is checked, evaluated, assimilated or rejected by the learning chreods of the participant, that is, our learning creeds act as "gateways" who either open or close to the new (cf. Siebert, 1998; Arnold-Siebert, 2006). In general, we distinguish between adaptive — compatible and aversive — hardly compatible chreods (Kösel, 1993). Although the educational offer must be interesting to include the new knowledge, based on our structural determination, we process only what we feel compatible, tolerable, viable.

The framework in which one learns in which new knowledge is compatible and can be integrated into the cognitive system is called the drift zone. For didactic work, it is necessary to correctly estimate and expand these zones. Educational offers and goals must be subjectively bearable and acceptable. Educational appeals beyond drift zones are perceived as a burden and a threat and are rejected by chreods. In short, chrodes also function as self-protection against permanent educational pressure. The boundary of the drift zone is reflected in the wording as "I don't have to do this anymore.", "I'm not into this.", "This topic doesn't suit me." (Arnold-Siebert, 2006).

According to Edmund Kösel (1993), myself-chreods are currently skewered units of action in a situation in which goal orientation, organizational function, form, structure, relationship, information and concrete interaction represent a dynamic unity. Based on the wording of the (aversive) myself-chreod so far, we can easily guess:

- "I'm too old for that."
- "I do not have time for this."
- "I never did."
- "I'll do without the course."
- "At my age, it pays to learn another foreign language."
- "It's useless to me."
- "I'll forget everything anyway."3

<sup>3</sup> Older employees doubt their ability to teach often because they rate their memory as very weak and fear that they will quickly forget what they have learned. At the same time, the memory of these employees, objectively speaking, is often much more powerful than they consider it to be. Simple cognitive training based on the fact that memory and the ability to concen-

Our ability to learn depends on our learning constructs. Biographical self-reflection helps to understand them (Kösel, 1993). How did my interests, avoidance or resistance to learning arise? What learning culture, what learning places and settings do I prefer?

Not only is it important to clarify thematic "cognitive maps" in the study group, but it is also necessary to explain the drift zones between teachers and learners. The drift zone is thus the framework in which the learning group moves with respect to themes, learning habits, emotions and expectations. The ability to teach and learn therefore means sensitization to drift zones and an explanation of learning patterns.

### **ANDRODIDACTICS**

In an innovative view of older employees, their cognitive performance, that is, all processes related to memory, learning and thinking, a number of open didactic-methodological and practical questions arise. How to design educational projects for older employees so that they respect not only the specifics given by their social status, but also the specifics given by age and differences in motivation? How did it work to expand drift zones and remove aversive chreods?

From the above, it is clear that older employees do not learn poorly, but only differently. Educational methods focused on practical situations and applications are proving to be particularly useful means of dynamizing the educational process of this target group. The application of these educational methods is supported mainly by constructivism, which explains that learning is possible only through the active activity of the learner. The learner takes responsibility for the management and control process and learning without self-equipment is not possible. The basic prerequisites for learning are motivation and interest. In addition, older employees need to see meaning in their learning, because learning something new means leaving "walkways". Learners are usually more motivated to learn something if they understand why it is worth knowing (e.g. better coping with workload). This, of course, is easier said than done. There are no ready-made recipes or guaranteed standard procedures for creating such situations.

The psychology of learning based on research over the last two decades shows quite clearly that the calendar age is no obstacle to successful learning. On the contrary, individual performance differences increase with age. For example, two seventies from different social backgrounds differ in their ability to learn more than one in their fifties and one in their seventies from the same social background. The result is the individualization of age, which combines the traditional deficit thesis with specific social

trate can be visibly improved at any age is useful to remove these doubts (for more details, see Rossnagel, 2009, p. 73).

factors, such as education and occupation (cf. Siebert, 2011). We can generally say about the learning of (older) adults:

- there is no causal link between age and learning, age-related diseases affect learning only in exceptional cases,
- compensatory thesis: the decline of certain functions is compensated by the optimization of other functions, the decreasing memory capacity is compensated by conscientiousness and motivation,
- motivation greatly influences adult learning, continuous learning processes stem from interest,
- resistance to learning manifests itself when the need and purpose of the curriculum is questioned,
- self-confidence and level of difficulty affect the ability to learn, self-image is influenced by social expectations and attributes of roles, for example, if we do not trust someone, he will act in the sense of a self-fulfilling prediction, which will subsequently confirm social prejudices,
- learning techniques are often insufficient for adults, qualifications such as content breakdown, interpretation of texts and so forth. They should therefore be mediated in all seminars (comp. Siebert, 2003).

Didactics is basically a mediation between the material logic of content and the psychology of the learner. This means that material logic includes knowledge of the structures and contexts of the topic, and psychology takes into account the motivational and learning structures of learners (Siebert, 2003). It is psychology that must not go unnoticed, because individual differences increase with age. Knowledge about the learning of older employees reveals various didactic implications, which Franz Decker (1984) summarizes as follows:

- focus on the experience, profession and daily life of the participants,
- enabling one's own activity, active learning,
- interviews and discussions<sup>4</sup>.
- development of semantic and structural contexts,
- problem orientation through the integration of learning and activity,
- illustration instead of abstraction, examples and multimedia,
- taking into account the need for self-development,

<sup>&</sup>lt;sup>4</sup> It is the responsibility of the educator to create an atmosphere that not only allows but also promotes a reflective conversation between the participants as well as between them and the educator. It is the language interaction that is a good source of perturbations and subsequent accommodations. In words, there is an act of learning, a change of conceptual constructs. We start from the constructivist notion that the concepts of learners are determined by what they abstract as individual subjects (as empirical abstractions from their sensory perceptions and as reflexive abstractions from the operations they themselves perform in this process) (comp. v. Glasersfeld, 1997).

- memory training and practice,
- preparation of documents for repetition of missed and new,
- learning through change.

Herbert Schwab and Sabine Seemann (2005) also point out the need for didactics respecting the specifics of older adults and present eight didactic principles:

- active involvement of participants in course preparation,
- breaking down prejudices against the learning ability and performance of older people,
- use of activating educational methods,
- mediation of learning strategies,
- provision of individual educational counseling and care,
- incorporating participants' previous experience,
- contextualisation, structuring of the curriculum and reduction of complexity,
- use of learning tasks close to the working reality<sup>5</sup>.

### DISCUSSION

If the presented contribution no longer replaces, then at least it expands the traditional deficit thesis by a compensatory thesis, according to which the age-related decline of certain functions is balanced by the optimization of other functions. Neuroscience research shows that brain plasticity is greater in older adults than previously thought. Simply put, even the elderly can learn relatively well. However, learning cannot be compared to simply filling the reservoir, because learning is not possible without the active activity of the learner. Knowledge, as Ernst von Glasersfeld (1997) points out, is not passively received, either through the sense organs or through communication. Knowledge is actively constructed by the thinking subject.

An age-related decline in cognitive performance does not automatically mean a loss of the ability to learn. The reason is that the gradual loss of fluid intelligence is compensated by experience, that is, crystalline intelligence, which increases in mentally active people even after the age of fifty. The traditional deficit model is becoming obsolete. Experience in recent years has come to the forefront of the interest of androdidactics as a theory of adult education respecting the specifics of adult education at different stages of age, which examines educational processes in various settings, including work.

<sup>&</sup>lt;sup>5</sup> The educator should encourage participants to explain why they are solving the task just as they are. This will show not only whether they understand and correctly interpret concepts, etc., but also how valuable the experience is if they find out for themselves that what they do and describe makes no sense. Such "self-inflicted crises" cause perturbations that lead to accommodation that results in learning. It is in these situations that the educator becomes a particularly useful helper. However, not by showing "the only right way" but by drawing attention to a wrong or neglected factor in the process. Education must be a kind of communication (von Glasersfeld, 1997).

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# MARKETING MIX IN THE EXAMPLE OF HEALTHY FOOD CONSUMERS

### Abstract.

Contemporary trends show that a "healthy lifestyle" is being promoted more and more and that more and more people care about quality of life. Such a lifestyle, among other things, includes quality eating habits, in terms of healthy food. Healthy food has many benefits that positively affect the quality of one's life, which is why people are increasingly paying attention to what they eat. The detected problem investigated in this paper is the diversity and specificity of healthy food consumers. Every consumer has their own lifestyle that can be manifested by buying specific food products, and effective marketing allows consumers to find products that will meet their needs. Lifestyle influences the needs, desires and habits in buying products and services, as well as consumer behaviour. Food must meet certain criteria in order to be considered healthy. The specific goal of the paper is to present the elements of the marketing mix on the example of healthy food consumers. The paper defines and analyzes healthy food through four elements of the marketing mix, which includes product, price, promotion and distribution, compared to conventional food. There are many ways manufacturers can sell their products, and it can be said that elements of the marketing mix provide effective benefits for successful sales.

Key words: healthy food, marketing mix, healthy lifestyle

Healthy food is a general term, and this paper more closely defines what exactly healthy food means and what conditions food products must meet in order to be considered healthy. Supplying the body with quality food is essential for health. This involves eating a varied diet rich in nutrients. Although fast food is popular because people do not have enough time and want to find a quick way to meet their needs, after some time of consuming such unhealthy food they usually begin to feel the consequences involving various pathophysiological conditions. Therefore, the result is often a subsequent attempt to improve health by improving diet and lifestyle. The specific aim of this paper is to present the elements of the marketing mix on the example of healthy food consumers as the basis of a healthy lifestyle. There are many products on the health food market that are advertised as healthy foods, but the consumer must be careful when buying such products and read the declarations. Products created from organic production are marked with a special logo by which consumers recognize the cor-

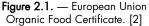
rectness of the product and compliance with the standards that healthy food must meet. The market for healthy food is growing significantly because a healthy lifestyle that includes caring about one's diet is constantly being promoted, and consumers are increasingly realizing the benefits of eating healthy food. In order for such food to reach the customer, quality marketing is needed, which includes informing consumers about the benefits of the product. The paper analyzes healthy food through the four elements of the marketing mix, which includes product, price, promotion, and distribution.

### HEALTHY FOOD AS THE BASIS OF A HEALTHY LIFESTYLE Lifestyle

Lifestyle is built from an early age and upgraded by biological development, and this is influenced by various psychological and social factors. Lifestyle consciously or unconsciously influences the needs, desires and habits in the purchase of products and services, as well as consumer behavior. Style can be further defined as a way of selfexpression, and gives us information about a person's personality, his preferences and way of life. [13] Healthy food includes all types of food of nutritional value, which unites all food groups in certain quantities. Food must meet certain criteria in order to be considered healthy, and some of the criteria are: the foods we consume must have a positive impact on health and must be eaten in the recommended amounts according to the healthy eating pyramid; foods must be adequately prepared, because the method of preparation greatly affects the preservation of their nutritional value; meals must be of recommended quantities; meals must be arranged throughout the day and eaten at about the same time; food must be eaten in the right way — it must be well chewed, not eaten too quickly; food must be correct (undamaged, stored according to recommendations). [13] Products that are considered healthy foods are labeled "bio", "eco" or "organic food". Such products must meet the conditions of organic production, namely: production without the use of mineral fertilizers and synthetic pesticides, prescribed conditions for the care of animals needed for the cultivation of healthy food, the use of crop rotation for the cultivation of plants. Food produced in accordance with international standards of organic production in the European Union has a special logo consisting of a list of stars. This label may only be used by certified producers who adhere to the principle of organic production, which is controlled by the competent control authority of the Member State.

The Ministry of Agriculture authorizes control bodies to conduct certification and control in organic production in the Republic of Croatia. The certificate is valid for one year, after which the production should be controlled again. Due to consumer awareness of food quality in Croatia, organic production is significantly increasing. In addition, consumers recognize the benefits of such production in terms of environmental protection due to the use of renewable energy sources, recycling and reducing the use of GMO compounds.







**Figure 2.2.** — Organic Food Certificate of the Republic of Croatia. [2]

The Process of Making Purchasing Decisions on the Example of Healthy Food

Today's fast-paced lifestyle, characterized by the rush for a career and money, often leads to a lack of time to think about diet, due to an inability to choose a healthy diet, people often reach for quick and unhealthy solutions. Such a pace is hard to maintain, especially if you do not eat foods that are nutritionally valuable and that do not improve health. The public is increasingly promoting a healthy lifestyle, which includes a healthy diet, and thus an increasing number of people decide to lead such a lifestyle, recognizing that food significantly affects quality of life. Consumers who decide to buy, in this case, a healthy diet, go through five stages of decision making: 1) understanding the problem; 2) seeking information; 3) evaluating alternatives; 4) making a purchase decision; and 5) after buying processes. [5]

### HEALTHY FOOD MARKETS AND CONSUMERS

Due to today's accelerated pace of life, rarely does a person pay attention to their diet. Healthy food, which is extremely important in these circumstances, seeks to break into the market, meet the needs and desires of consumers, and above all persuade them to buy and consume regularly. There are different opinions and views on healthy eating, so in 2017 the marketing agency Hendal conducted a survey on healthy food carried out in European countries, including the Republic of Croatia. The research was conducted through an online forum as the method of collecting data from respondents, and involved people who consume healthy food between the ages of 25 and 45. [11] In Tables 3.1. — 3.3. some research results are presented. Table 3.1. Research results — Reasons for buying healthy food and Table 3.2. Research results — Barriers to consuming and buying healthy food.

**Table 3.1.** — The Reasons for Buying Healthy Food?

48%	Healthy lifestyle
34%	Avoid consumption of additives and preservatives
18%	Family care
6%	Diet
4%	Taste
1%	Environmental protection

**Table 3.2.** — Barriers to Consuming and Buying Healthy Food?

71%	Price
40%	Lack of time to prepare food
40%	Food unavailability
33%	Temptations of unhealthy food
33%	Lack of time to shop
24%	Contradictory information about healthy food
19%	Lack of information about healthy food
16%	Lack of support from family members
13%	Compromise between healthy and unhealthy foods

**Table 3.3.** — Research Results — Product Declarations

What do you see on product declarations?			
77%	Expiration date		
66%	Additives and preservatives		
54%	Freshness of ingredients		
47%	Caloric value		
47%	Price		
42%	Low sugar content		
36%	Low fat content		
35%	Place of origin of the ingredient		
31%	Country of origin		
19%	Low Sodium content		
15%	Ethically produced		
15%	No glucose-fructose syrup		
13%	Gluten free		
12%	Soy free		
8%	Lactose free		

As one of the reasons for consuming a healthy diet, consumers cite concern for their own health and the health of their family. However, regardless of perseverance, it is sometimes possible to encounter obstacles, and some of them include price, lack of food in the store, lack of time to prepare food, questionable quality and similar. Many stores offer a wide range of healthy food at a low price but questionable quality. For healthy food, some consumers are willing to pay a 10 to 20% higher price because they believe that it is healthier, or better. When it comes to information about healthy food, the best information will be obtained from doctors, kinesiologists and nutritionists. People can also be informed about healthy food through various channels such as the Internet, social networks, magazines and television. [11] The health food market is growing faster than the food market itself: "The report of the International Trade Center predicts an average growth rate of the organic food market of 20 to 25% per year." [9] The increase in demand and the large quantities on the market were recorded during the early nineties, and only 15 years later, in 2008, sales of organic food reached \$50 billion. [7] According to Organic Monitor, sales of organic products are increasing every year:

"Total sales in the market of organic food products increased from 23 billion in 2002 to 40 billion USD in 2006 and to 46.1 billion USD in 2007. Sales of organic food products increase by approximately USD 5 billion each year. The organic food market has been growing at an average rate of 20% per year since the early 1990s, and estimates for future growth range from 10 to 50% per year, which certainly varies from country to country". [9]

During 2018, the consumption of organic products reached \$100 billion in revenue. [7] The decision to buy is influenced by various factors such as advertising, eating habits, educational institutions, health status and similar. According to a Eurobarometer survey (2018) on product labeling, only 49% of Croats (Greeks 71%, Danes 68%) always check declarations and expiration dates on food products. Only 36% understand the difference between "use by" and "best before". [11]

"Certification of organic products is a tool for consumer protection because it gives the consumer the right to information when making a purchase decision, and related, to the choice of organic product, and further informs him that the organic product is continuously controlled and produced by ecological methods."

Certification is carried out by manufacturers and they emphasize with it the specific properties of the product, that is, what distinguishes their product from other products on the market. Certification therefore helps the manufacturer to be well positioned in the market and to gain a certain reputation, which meets the needs of the market and customers and at the same time ensures quality and safety. [11] The year 2020 will be remembered for the pandemic Covid-19 that has caused many changes impacting every area, including the area of organic production and the sales of organic products. Thus, online sales of naturally grown food recorded the highest sales growth, it increased by 25 to 30% in some countries. In addition to Internet sales, the sales rate in physical stores has also increased, so France has recorded an increase of as much

as 40% by attracting new customers and increasing the consumption of existing ones. A healthy diet during the pandemic gained great importance. Consumers buy organic food to increase their immunity and protect themselves in the best possible way from the virus. A large increase in demand has caused a shortage of food supply as some producer countries have stopped food production and exports due to the virus. It is expected that demand after the virus will continue to be high, as can be inferred from examples with SARS when in 2004 there was a growth in demand for organic food in China and throughout Asia which continued later. As Covid-19 raises awareness of healthy eating, it is estimated that organic food consumption will increase and reach revenues of \$150 billion over the next 5 years. [7]

## ANALYSIS OF MARKETING MIX ELEMENTS ON THE EXAMPLE OF HEALTHY FOOD CONSUMERS AS THE BASIS OF A HEALTHY LIFESTYLE

Product — Healthy Food

None of the marketing mix can function without a product. Each of the elements must be aligned in order for the product to be successfully placed on the market. Today, healthy food is consumed in increasing quantities and awareness of caring for one's own health is developing.

"Organically grown food products are those products that are produced using methods that do not include additives such as pesticides and mineral fertilizers and do not contain genetically modified organisms. Such products are considered to taste incomparably better and more natural because they come to the market fresher". [12]

Organic production is according to the definition of the Ministry of Agriculture and Rural Development

"a comprehensive farm and food management system that combines best environmental and climate practice, a high level of biodiversity, conservation of natural resources, the application of high animal welfare standards and production standards that are in accordance with the demand of the increasing number of consumers for products produced with the application of natural substances and processes". [3]

According to the research from 2016, the most frequently purchased brands of organic food products are bio & bio, followed by Alnatura and other brands shown in Figure 4.1.

Figure 4.2. contains data from 2016 regarding the best-selling categories of organic food products.

Well-known American chain store Whole Foods Market has predicted what aspects of a healthy diet will be 'in' in 2020. They predict that West African cuisine and

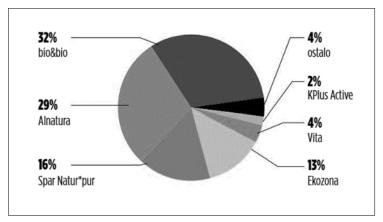


Figure 4.1 - The Most Commonly Purchased Brands of Organic Food Products [19]

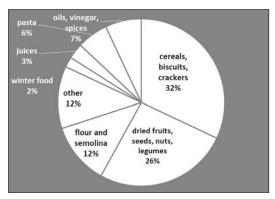


Figure 4.2. — The Best-Selling Categories of Organic Food Products. [19]

old cereals such as fonio, tef and millet will become popular. These are the foods that contain the most nutritional value. Then, non-alcoholic cocktails based on naturally flavored waters with properties similar to alcoholic beverages, but with 0% alcohol, will also become popular. Other food products that will be a trend in 2020 are spreads made of nuts, soy, coconut, sweet potato, avocado, coconut flour, banana flour and so forth [17]. Comparing organic and conventional food, we come to the conclusion that organic food is much healthier because it is richer in micronutrients. In addition, regarding the example of the comparison of organically grown milk and conventional milk, it was concluded that organically grown is richer in proteins and omega-3 fatty acids, also regarding the example of organically grown eggplant, it is determined that it contains more vitamins, minerals and phenols. [3]

From Table 4.1, t is clear that organically grown vegetables are richer in minerals than conventional ones, which means that they are much healthier for the human body, but also for the environment, because the soil is not treated with chemicals.

Table 4.1. — Comparison of Mineral Amounts of Organic and Conventional Foods. [15]

MINERALS (in	milliequivalents)	/ Vegetables /	<sup>7</sup> Type of soil	managemen	t		
	Calcium	Magnesium	Potassium	Sodium	Manganese	Iron	Copper
Beans							
0	40,5	60	99,7	8,6	60	227	69
K	15,5	14,8	29,1	0	2	10	3
Cabbage							
0	60	43,6	148,3	20,4	13	94	48
K	17,5	15,6	53,7	0,8	2	20	0,4
Salad							
0	71	49,3	176,5	12,2	169	516	60
K	16	13,1	53,7	0	1	1	3
Tomato							
0	23	59,2	148,3	6,5	68	1938	53
K	4,5	4,5	58,6	0	1	1	0
Spinach							
0	96	293,9	257	69,5	117	1584	0
K	47,5	46,9	84	0,8	1	19	0,5

O — Organic, K — Conventional

### The Price of Healthy Food

When comparing industrial and healthy food, it is often noticed that healthy food is more expensive, but this does not guarantee quality, although the customer expects that a high-quality product has a higher price than food that is not organically grown. However, prices are one of the problems when buying healthy food because they are sometimes too high: "The price of organic food in relation to inorganic food in Croatia is between 40 and 100% higher. In the world, organic food is 10 to 40% more expensive than ordinary food, and somewhere its production is subsidized". [8] An example of a store where healthy food is offered at reasonable prices is one that opened a few years ago in Zagreb, under the name Healthy Food Factory.

**Table 4.2.** — Comparison of Healthy Food Prices. [14]

Healthy Food Factory	Retail Chain		
Organic almonds 250g	44,00 kn	Almond kernel 500g	42,99 kn
Cashew nuts 200g	33,00 kn	Cashew nuts 180g	23,99 kn
Wheat semolina 500g	13,00 kn	Wheat semolina 1kg	6,29 kn
Organic Polenta 500g	11,00 kn	Frank Polenta 540g	7,99 kn
Peanut butter 350g	27,00 kn	Peanut butter 350g	17,99 kn
Flower honey 250g	85,00 kn	Flower honey 450g	23,99 kn
Oregano 18g	19,00 kn	Oregano 15g	4,99 kn
Sweet pepper powder 50g	13,00 kn	Sweet pepper 100g	8,49 kn
Gluten-free pasta 340g	23,00 kn	Barilla Fusilli pasta 500g	8,99 kn

According to the researched data and prices from the Healthy Food Factory and the retail chain, it can be concluded that the prices of some organic foods are even twice as expensive as ordinary or inorganic food which is for sale in Konzum. Despite this, the demand for healthy food continues to grow. It is believed that people of lower economic status will reach for food whose price is lower than organically grown food, without thinking about their own health. The goal is to raise awareness among consumers about the consumption of healthy food, even though it is more expensive, in order to be well fed, preserve the environment and prevent possible diseases. One of the reasons why the price of organic food is higher is precisely because it is treated in a special way.

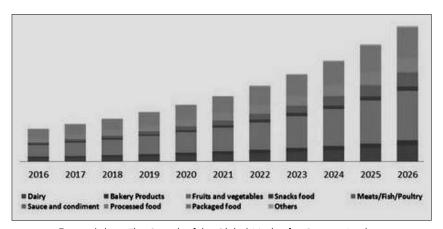
### Promotion of Healthy Food

Promotion plays an important role in healthy food and its placing on the market. In order to successfully sell healthy food, it is necessary to emphasize all its advantages, primarily quality and cost-effectiveness despite the slightly higher price. The promotion of healthy food is not strong enough compared to conventional food. For example, products that contain significant amounts of carbohydrates and artificial sweeteners can be found on the market and are promoted as healthy foods called dietary products. Organic producers often do not have enough financial resources to launch an advertising promotion for the products they grow [18]. There are three ways to promote healthy food: 1) advertisements that communicate the relationship of a product or service with the biophysical environment; 2) advertisements that promote a green lifestyle emphasizing a particular product or service; and 3) advertisements that present a corporate image of environmental care [18].

One of the main segments of healthy food promotion is design. The design must be striking with an indication of the bio product because in this way it will significantly influence the customer's decisions: "That is why it is imperative to make product packaging as green as possible, and to try to adapt plastic packaging and replace it with more environmentally friendly options" [18]. The promotion of healthy food can be achieved on the Internet, in magazines, advertisements, television and similar. The most common medium today is the Internet and it provides a wealth of information and data on healthy food. On the example of the new Tržnica.hr platform, customers are enabled to purchase domestic eco products with proven quality. The platform allows small family businesses and farms to advertise and sell their own products from their own cultivation.

### Distribution of Healthy Food

The distribution of organic products is one of the main preconditions for the growth of the market of organic food products. Markets differ in the offer of organic products, therefore each of the sellers or distributors give their products a different value and dif-



**Figure 4.4.** — The Growth of the Global Market for Organic Products by Type of Product and Distribution Channels (2016.—2026.). [10]

ferent distribution channels are adapted to consumers. The storage and distribution of healthy food requires special treatment. The products are packed in different packaging to make it easier to manipulate the goods. Eco products must be packaged with information and signs to protect consumers. "Labeling includes the following markings: product declaration, conformity marking of a product, process or service, marking with an attestation mark, EAN code, marking of Croatian products of above-average quality, marks on the product, environmental protection mark and ecological label" [1]. Eco products are stored in special rooms with adjusted temperature and other factors that affect the preservation of healthy food quality. The packaging of eco products must be degradable, and containers in which storage must not contain preservatives, synthetic fungicides and similar properties: "Organic products must be produced in means of transport that are completely cleaned of any conventional products, while warehouses must be specially adapted to organic products. In addition, they are not treated with pesticides and chemicals, both in the production process and during transport and storage" [16]. As the demand for eco-products increases, so does the distribution or marketing of products. According to a global survey from 2016, it was determined that the demand and distribution of organic food will increase by 15% in the period from 2016 to 2026. The research is based on the demand for organic food by type (dairy products, bakery products, fruits and vegetables, etc.) and distribution channels (Internet, supermarkets, shops, family farms...) [4].

### CONCIUSION

A healthy lifestyle is increasingly being promoted and more people are concerned about quality of life. Such a lifestyle includes physical activity and care regarding one's diet, that is, general health. Healthy food has many benefits that positively affect one's

quality of life, which is why people are increasingly worried about what they eat. Appropriate marketing is important for such products. The specific goal of this paper was to present the elements of the marketing mix on the example of consumers of healthy food as the basis of a healthy lifestyle. There are many products on the health food market that are advertised as healthy foods, but the consumer must be careful when buying such products and read the declarations. Products created from organic production are marked with a special logo by which consumers recognize the correctness of the product and compliance with the standards that healthy food must meet. The presented research in the paper shows that the most important factor for consumers to buy products grown with organic production is to support a healthy lifestyle and avoid the use of preservatives that are harmful to the body. Healthy food requires special storage conditions because it does not contain preservatives, so in order to keep it fresh requires special treatment. The price of food with such a special logo is often twice as expensive as products grown in a conventional way. It is the price that consumers state in the research as the main disadvantage of healthy food. Although its biggest disadvantage is the price, food grown in a natural way without the use of mineral fertilizers and synthetic pesticides has many advantages, and some of them are improving health and quality of life and caring for the environment, because food grown in this way does not pollute the environment. Promotion is very important because good promotion has a strong impact on consumers and a big role in motivating to buy a particular product. There are many ways in which manufacturers can promote their products, especially on the Internet, which offers the opportunity to buy from home, and because of these advantages, more and more manufacturers decide to open their own pages for selling their products.

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# SATISFACTION OF UNIVERSITY PROFESSORS WITH INTERNAL COMMUNICATION BASED ON THE EXAMPLE OF THE UNIVERSITY OF PÉCS

#### Abstract

Our starting point is that organizational culture and organizational communication are interdependent and interacting entities, especially in higher education. The study aims to present university lecturers' satisfaction with internal communication based on an example of employee satisfaction — research (2018) in higher education at the University of Pécs (UP). Our Research Question is whether there is a difference in the perception of internal communication between employees who are in lecturer/researcher status (in casual working hours, in unequal working hours) and those in typical working relationships (working under fixed working hours). The survey was conducted using an online technique in 2017—2018 using EvaSys software. We presented six internal communication tools and compared the related importance-satisfaction categories and the teaching staff's results with the results of colleagues working in a non-sector-specific sector. Based on our survey, there is no significant difference in terms of internal communication tools. The nature of the work does not affect the importance and satisfaction values related to the internal means of communication. The newsletter works well as a means of communication. Internal communication between units needs to be improved. Because of the epidemic situation, digital communication tools used daily should continue to be integrated into daily communication work in the future. As UP is one of the largest and most diverse higher education institutions in Hungary, we believe that based on our research on internal communication, we can formulate the university's concerns and broader opportunities for internal communication development.

Keywords: internal communication, higher education, professors, informal work schedule

Internal communication of the organization is a tool for strengthening the relationship between the organization and the employees whose primary purpose is to create internal cohesion and integration. Communication is also the lifeblood of an organizational culture that holds together colleagues and units and is present in every aspect of its life. The quality of communication determines the efficiency of the organization's operation; its channels and mechanisms even affect the characteristics of the manage-

ment structure. Our starting point is that organizational culture and organizational communication are interdependent and interacting entities, especially in higher education.

Our Research Question is whether there is a difference in the perception of internal communication between employees who are in lecturer/researcher status (in casual working hours, in unequal working hours) and those in typical working relationships (working under fixed working hours). In our study, we present the primary theoretical sources related to the topic, which provided us with a starting point when examining the field of organizational communication. Following the literature review, we formulate proposals for further progress based on the results of the employee satisfaction survey of a higher education institution, the University of Pécs (UP), in the areas of internal communication.

### ORGANIZATIONAL COMMUNICATION AND ORGANIZATIONAL CUITURE

When discussing organizational communication, we start from an organizational culture. According to Martin and Mayerson (1988), there are three organizational culture approaches: integration, differentiation, and fragmentation. Our research views organizational culture as a source of consistency that acts as an integration mechanism. According to this interpretation, the "organizational culture" task is to create organizational coherence, consensus, that is, to create integration.

Several authors have addressed the relationship between trust and communication. In their research, Ruppel and Harrington (2000) found a significantly positive correlation between communication and trust among employees. Willemyns, Gallois and Cannan (2003), in their research, examined the relationship between managers and subordinates and identified factors that can destroy a sense of belonging within an organization, reduce trust. These include, but are not limited to, leaders' dominant behavior, lack of listening skills, lack of empathy, and supportive expressions. The frequency of communication and quality of information are fundamental to build trust (Borgulya, 2017). According to Kottila and Rönni (2008), the quality of information is more important, while Huang, Gattiker and Schwarz (2008) found that direct interpersonal communication is most effective in building trust. Thus, communication is the lifeblood of all kinds of organizational culture, which holds the members and units of the organization together and is present in every moment of the life of the organization (Klein, 2009). "Communication is the heart of corporate performance" argues Van Riel and Fombrun (2007, p. 2).

Research in corporate communication management has a decades-long history, with many authors approaching the field from multiple perspectives, proving its complexity. In their study, Borgulya and Konczosné (2019) summarizes the framework and history of organizational communication. Representatives of the merger of corporate communication management and strategic management, the reinterpretation of com-

munication frameworks, were represented by Varey and White. Mast in process management (planning and evaluation process), Cornelissen marketing PR, corporate PR, coordination mechanisms Varey, the importance of management-level operation Steyn, van Riel, Fombrun and Cornelissen highlight corporate communication management in their research (Borgulya & Konczosné, 2019).

Several authors highlight the importance of contact with employees between types and areas of corporate communication. According to Van Riel and Fombrun (2007), communication should be one of the most important skills a manager has to accept the organization's goals, and it contributes to the commitment of employees towards the company. Schmid and Lyczek (2006) highlight employee communication (communication with employees), Piwinger and Zerfass (2007) communication between employees and managers, the value-creating role of communication, and Goodman and Hirsch (2010) highlight communication with employees (employee relations).

Examining the practical significance of communication, Borgulya and Konczosné (2019) found that corporate communication was seen as a tool in the 20th century, namely as a tool for information transfer and as a tool for internal community building that contributes to internal cohesion. According to the 21st century, however, communication is more than a tool, but a carrier of intangible values and has a value-creating effect.

In our research, we view internal organizational communication as a tool to strengthen the relationship between the organization and employees (Argentini, 2003), with the primary goal of internal cohesion, integration, building trust, motivating employees (Van Riel, 1992), and the condition of all this is the interactive flow of information, the provision of a feedback system (Buday-Sántha, 2005). The flow of information (as an organizational cultural factor) strongly characterizes organizational culture. Organizations that ensure the free flow of information, in general, encourage innovation, be seen as jobs with a calmer climate, plan for a longer period, have managers that are predominantly relationship-oriented and empathetic, and prioritize managers' social sensitivity and negotiate consensus-building solution tools (Jarjabka, 2008).

According to Semeginé (2015), internal communication develops and changes the working relationship between the organization's members and her research. She believes that one of the basic elements of successful organizational operation is providing information to employees today. Employee satisfaction is also critical; it is also an indicator of organizational efficiency. Appropriate employee relationships and good relationships with managers are important motivating factors for employees (Farkas, Jarjabka, Lóránd & Bálint, 2013).

Most research focuses on actors in the private sector, although communication within a higher education institution is also important. In her study, Antal (2018) examined the main differences that influence communication practices in the public and private sectors. Antal highlights the flexibility, employee motivation, and organizational performance management among the factors within the organization. In his view, the

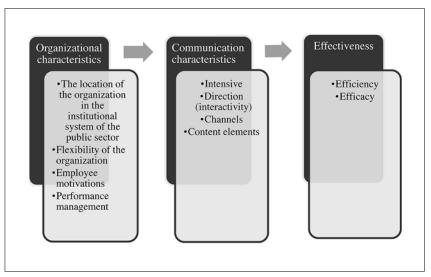


Figure 1 — Factors Influencing the Effectiveness of Public Service Communication (Source: Own editing based on Antal, 2018)

public sector consists of bureaucratic, hierarchical organizations, and processes, while in the private sector, organizations can operate flexibly. Figure 1 illustrates the factors influencing the effectiveness of public service communication. Effectiveness depends on the organizational characteristics (in our case, I would highlight the motivation of employees) and the characteristics of communication, such as the intensity of communication, the direction of communication (interactivity), and communication channels the content elements of communication. In our research, we focus on communication channels.

According to Krajcsák (2018), considering labor market trends, employees' attitude towards employers will change in the future; this is especially true due to the spread of atypical forms of employment. Motivational methods that promote employee engagement, he said, will fundamentally change. This is worth keeping in mind when analyzing jobs where employees can work flexible or casual hours, such as a teaching job. <sup>1</sup>

We believe that employee satisfaction testing, as for all organizations, including higher education institutions, is essential. Satisfaction testing and the exploration of areas for improvement will help organizations develop a well-functioning human resource management plan, even in an unpredictably changing environment, that can contri-

<sup>1</sup> Any form of employment that differs from full-time employment in an indefinite, traditionally employed employment relationship is atypical. Based on these, the Labor Code in Hungary lists flexible working hours and the use of casual working hours here (Ásványi & Nemeskéri, 2017).

bute to the successful operation of the organization, especially if there is an opportunity to review processes for follow-up (Karoliny & Balogh, 2017).

The University of Pécs examines employee satisfaction and conducts regular surveys of student competencies among students to increase its performance. The Graduate Career Tracking System (DPR) has been developed. The institution considers it essential that graduates have the competencies that the labor market expects. On the one hand, PTE is a significant employer in the region, and on the other hand, graduates will also appear in the labor market (Sipos, 2015).

### EMPLOYEE SATISFACTION RESEARCH

Now the University of Pécs is one of Hungary's most prominent universities with more than 20 000 students. It is the centre of knowledge in South Transdanubia, and with its broad educational program, it has grown beyond the borders of Pécs. It has an independent faculty in Szekszárd and has launched critical educational programs in Kaposvár, Szombathely, Zalaegerszeg, and Zombor. UP represents classical university values, although it has to adjust to present and future challenges successfully. It is supported by the strategic objectives set in the UP Institutional Development Plan (2017) and the 19 central strategic directions of the next period — also defined in the Institutional Development Plan (2017).

### The Purpose of the UP Employee Survey

Our starting point was that no efficient internal and external communication and HR planning are sustainable without information about the employees' opinions which is an important consideration when planning the survey.

The main objectives and themes of the research were:

- surveying the employees' opinions and their satisfaction referring to internal services, internal communication, and the vision of UP,
- exploring the employees' needs, motivations, and their suggestions of what should be developed,
- surveying the efficiency of internal Jubilee communication.

Based on the objectives and themes, the research covered the following main are-

as:

- university strategy, vision
- organizational operations
- university services
- internal communication
- motivation
- projects of high priority internal communication of the UP Jubilee 650

In this study, we will deal with the field of internal communication.

### RESEARCH METHODOLOGY

The questionnaire research was done using an online technique with EvaSys software in the winter of 2017. The questionnaire was finalized after investigating a focus group of employees and using an earlier questionnaire. We also included questions on the communication methods of the Project. 6,902 employees worked at the University, and a total of 1,723 completed questionnaires were returned, a 25% response rate. The sample was representative of the organizational units of the University. Because of this high rate, we did not weight the responses. The statistical population participating in the inquiry mainly consists of highly educated, qualified persons (although at different levels). So, the total of opinions is not likely to become distorted either in a positive or in a negative direction. A statistician elaborated the statistical methods, and the form of sample collection was full assessment.

### RESEARCH RESUITS

In the following, we present the composition of the sample and the respondents' satisfaction with internal communication.

### Description of Basic Data

The survey covered all departments of PTE. 58% of the respondents were women, and 36% were men. Our study examines and compares the data of those working in the higher education sector (lecturers, researchers, teachers) and non-sector-specific positions (administration — administrative expert, clerk, physical, professional, technical service provider, engineer). Due to the unique nature of the sectors, those working in the health care, public collection, and public education sectors are not examined in this study. 25.54% of respondents work in higher education, while 31.46% of respondents work in non-sector-specific jobs.

### Satisfaction with Internal Communication

To explore the field of internal communication, we formulated six questions in the questionnaire as follows, focusing on answers relating to the following:

- monthly chancellor newsletter;
- understanding university programs;
- internal communication between units;
- internal communication between employees at the level of a smaller group (e.g., department, division);
- informing the immediate supervisor (about things that concern me);
- opportunity for free expression.

Figure 2 shows the six factors examined based on how satisfied the respondents are and how important it is to them. Based on "importance", it can be seen that infor-

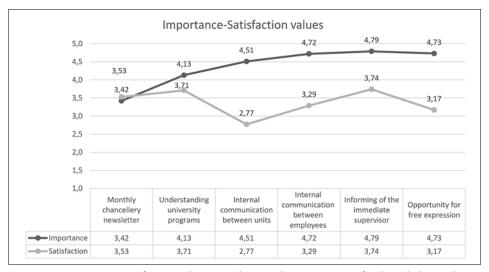


Figure 2 — Importance-Satisfaction Indicators with Internal Communication for the Whole Population (Source: Based on Kuráth, Héráné, & Sipos, 2018)

ming the immediate superior is the most important (value 4.79), followed by the possibility of free expression (4.73), internal communication between employees (4.72), internal communication between units (4.51), information on university programs (4.13), and a monthly chancellor newsletter (3.42) are the least important for respondents.

Let's consider the factors related to the already mentioned internal communication according to how satisfied the employees are. It can be seen that they are the most satisfied with informing their immediate superior (3.74), while they are the most dissatisfied with the internal communication between units (2.77). The most considerable difference as a function of importance-satisfaction is in the factor of internal communication between units (-1.73), that is, this element is the one that needs the most improvement.

Results From Those Working in Higher Education — Educators, Researchers, Teachers

It can be seen that for the category of "importance" for those working in higher education, internal communication between staff (4.79), information from the immediate superior (4.79), and the possibility of free expression (4.79) is the most important, while the monthly chancellor newsletter the least important (3.23).

We examined colleagues' results in higher education regarding their 'satisfaction'; the following can be stated: According to the results regarding 'satisfaction' from the six surveyed areas, the following develops in descending order: information from an immediate superior (3.69), information about university programs (3.65), internal communication between staff, at the level of a smaller group (e.g., department) (3.38), the

monthly Chancellery Newsletter (3.36), free expression of opinion (3.25), internal communication between units (2.61).

The most significant difference is in the internal communication between the units (-1.82), this area would be essential for them too (4.43), yet they are the most dissatisfied with its realization.

Results of Non-Sector-Specific Positions

— Results of Administrative and Technical Colleagues

Examining the order of "importance", we can state that in the case of those working in non-sector-specific jobs, the most important is informing the immediate superior (4.81), internal communication between employees, at the level of a smaller group (e.g., department) (4.75), free opportunity to express an opinion (4.7), internal communication between units (4.63), information on university programs (4.16), and the monthly chancellor newsletter (3.6).

Examining the satisfaction, we can state that they are most satisfied with the information about the university programs (3.83), then with the information of their immediate superior (3.8), and then in descending order with the monthly chancellor newsletter (3.75), internal communication between the staff. (3.35), the possibility of free expression (3.27), and they are most dissatisfied with internal communication between units (2.81). In the case of non-sector-specific positions, we can state that the most significant difference is also in the internal communication between the units (-1.82) with a minimal difference, as they are considered necessary, but at the same time, they are the most dissatisfied.

#### Comparison of The Examined Sectors

Comparing the results of those working in the higher education sector and those in non-sector-specific jobs, we can conclude that the possibility of internal communication and free expression of opinion is more important among those working in higher education than among those working in non-sector-specific fields (Figure 3). Interestingly, the monthly newsletter had the largest, though not significant, difference between the two sectors.

Examining the satisfaction values (Figure 4), we can conclude that those working in higher education are more dissatisfied with internal communication than those working in non-sector-specific jobs, except for one factor, internal communication between employees.

Overall, in both sectors, regarding internal communication, there is the most considerable difference relating to importance-satisfaction indicators in terms of internal communication between units (-1.82).

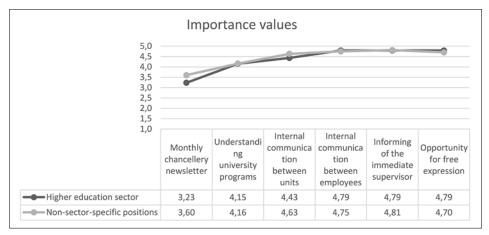


Figure 3 — Comparison of the Importance Indicators of Internal Communication in the Examined Sectors (Source: Based on Kuráth et al., 2018)

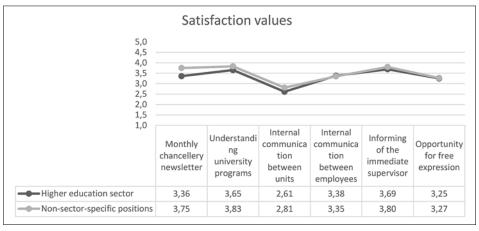


Figure 4 — Comparison of Internal Communication Satisfaction Indicators in the Examined Sectors (Source: Based on Kuráth et al., 2018)

#### CONCLUSIONS, SUGGESTIONS

As a whole, regarding internal communication, satisfaction values fall short of importance values, except for the newsletter. The most significant difference is in internal communication between units, and it is necessary to focus on its development. This factor showed a significant difference in the satisfaction importance indicators for the total population, as was the case for those working in the higher education sector and non-sector-specific jobs.

There is no significant difference between the values of those working in the higher education sector and colleagues working in a non-sector-specific sector in internal communication tools.

The nature of the work does not affect the importance and satisfaction values related to the internal means of communication.

As the results provide useful information to leaders, we consider it necessary to conduct regular surveys and, accordingly, to prepare, implement, and communicate unit-level action plans to employees. It can also facilitate communication between managers and units and between units; employees feel it is important to have their say, and the improvement measures that are implemented also encourage a willingness to respond at a later stage and build trust in the organization.

The epidemic of COVID-19 reached European countries at the beginning of 2020, as a result of which in the middle of March 2020, Hungarian higher education also switched to the method of "non-attendance teaching". This binding instruction essentially meant introducing a digital-based and online tool for home office work (administration, education, examinations, preliminary, etc.) with a 10-day transition period of preparation for the University of Pécs (UP) faculty/researchers and administrative staff and its students. It seemed as if, due to the compulsion caused by the virus, the higher education sphere had leaped forward 10 years in 10 days in the field of digital education. During the transition to digital education, several new communication tools were applied to the home office, which can also be used to make internal communication between units more efficient, so we recommend that they be used and expanded in the future.

We also recommend that in the next satisfaction survey, digital communication tools in connection with the topic of internal communication and the issues of suggestions for their development should be included in the analysis. The various disciplines are likely to address much of the coronavirus epidemic's consequences in the coming period. (Eurofound, 2020; Caligiuri, De Cieri, Minbaeva, Verbeke, & Zimmermann, 2020). However, the impact of social distance measures on higher education has also left its mark (Marinoni, van't Land, & Jensen, 2020). In the future, it is worth examining the impact of COVID-19 on the use of communication tools.

There are a few limitations of this study that are relevant for future research. The first relates to the fact that the surveys focus on Hungary, and the results are limited only to the employees of the University of Pécs, even if this HEI is one of the largest domestic institutes. The methodology and results of this study did not investigate the depth of the issue but offered an overview instead. Its objective was to indicate which internal communication features and areas can be involved in research in an HE institution.

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# CHALLENGES OF INTERNAL ORGANIZATIONAL COMMUNICATION IN ATYPICAL EMPLOYMENT: EXEMPLIFIED ON A SURVEY IN HUNGARY

#### Abstract

Atypical employment is gaining more significance beside the typical forms of work. Particularly in the service industry (sales), Information Technology (IT) and in the administrative sector, there is a tendency for employees to be employed in atypical (e.g., teleworking) employment. This effect poses a challenge to both employees and employers/leaders, especially to develop and effectively manage internal organizational communication. The study aims to present the internal communication of a group of companies operating atypical employment, such as organizations using telework, based on the results of semi-structured interviews with employers and employees, and a questionnaire among employees. Our research questions were based on the following: whether teleworkers are satisfied with internal organizational communication, information provision, which communication channel they consider being the most effective, and how these channels are integrated into the corporate culture, and whether there is a preference for them at all. Our sub-hypothesis is that those workers who are employed in atypical forms of work are more loyal than employers who work in a conventional way. The more freedom they get the more reasons they find to stay at the company, so this technique can be contributed to the power of retention. Our research was exploratory research and our survey consists of two stages: the first was administering a qualitative survey and following this, we carried out semi-structured interviews. We prepared two versions of questions: one for employees and one for employers. We conducted 24 interviews. Overall, the technical tools for telecommuting/home office applications are now readily available and can be provided to employees when resources are available. In this way, the application of these forms of atypical work depends rather on the managerial and employee attitudes, competencies, knowledge, organizational culture (control effort), and the nature of the work.

Keywords: atypical employment, organizational communication, internal communication, telework

The scientific and technological revolution has had a tremendous impact on the past decades. We have acquired tools and knowledge that make employment more and mo-

re IT-dependent, change the nature of the activity, and this can also have an affect on the operation of the company (Karoliny & Poór, 2017; Geskó, Gyulavári, Kártyás, Kovács & Németh, 2011).

Thanks to technological development, we can now manage coordination tasks from other countries (Forgács, 2007), and also the spread and development of infocommunication, we are now able to perform work processes regardless of location (Krajcsák, 2018). As a result of these factors, the methods of communication within a company and the schedule of working hours change (e.g. time lag). The typical form of employment is being replaced by an (atypical) form of employment that is more independent, information-centered, less fixed, flexible, and the employee can also shape their work environment and work culture (Geskó et al., 2011). This statement is especially valid in the case of cross-border work (Sipos & László, 2018). Our study examines the impact of these changed circumstances and opportunities in terms of organizational communication, attitudes toward new forms of employment and suitability.

## EVALUATION OF ORGANISATIONAL COMMUNICATION OF TELEWORKERS/WORKERS IN A HOME OFFICE AND THIS FORM OF COMMUNICATION

The Emergence of Telework in Research Literature

Bailey & Krland's (2002) review paper illustrates well how the popularity of this research topic increased in the late 20th century. As they find, after the 1970s American researches of the first quarter of the century focus on the individual, the teleworker, they deal with the issues on an individual level:

- they study social and professional isolation,
- the lack of a manager's continuous monitoring,
- the absence of continuous feedback and performance evaluation,
- the issue of loyalty to the company,
- motivation for teleworking.

Few researchers deal with teleworking's impact on the company. However, the results of research can be misleading, as Bailey and Kurland point out that this could be because of how frequently the employee works from home (home office) or in a virtual office (not at home but in an "anytime-anywhere" system) is often disregarded. However, the widespread 3-4 days/months teleworking does not cause much change regarding either the employee or the company. In the near-millennium years the focus of American research is changing: productivity (Pitt-Catsouphes & Marchetta, 1991), work ethic, the role of space and time, the worktime spent on a daily basis, work-life balance (Golden, Veiga & Simsek, 2006), and employee communication are examined.

Digitally supported services cover a wide range of activities from low or semi-skilled personal services (such as passenger transport) to highly skilled online services

such as software development. Systematically analyzing the literature on digital work, there are nearly 30 terms that describe the relationship between work and digital technology. These can be grouped by their focus, but among others, the concept of online work, digital work and online outsourcing are included here as well. By observing the various digital platforms (e.g. Upwork digital platform) it is easy to see which jobs professionals work in this form: software developers, web designers, IT and networking specialists, analytics experts, engineers, designers and creative workers, administrative workers, translators and legal experts (Makó, Illéssy & Nostratabadi, 2020).

#### Research on the Communication of Teleworkers Within the Company

A company's communication must function as a consistent system that serves a common goal, while employees form a complex interactive network directly and by using a multitude of communication tools (Borgulya, 2014). Each employee has an impact on the company's communication, depending on its integrity, research management skills and communication competence. "Internal communication holds together the members and units of the organization: it mediates the goals, the operating rules, it enables the organization and control of the processes, the feedback, the organizational learning; without communication it would be impossible to coordinate, integrate and motivate the members" (Borgulya, 2004, p. 15). Internal organizational communication is a tool for strengthening the relationship between the organization and employees (Argentini, 2003), whose primary goal is internal cohesion, integration, trust building (Borgulya & Barakonyi, 2004), motivating employees (Van Riel, 1992; Borgulya & Barakonyi, 2004), and the conditions for all this are: interactive information flow, providing a feedback system (Buday-Sántha, 2005), the evaluation of performance and the increase of loyalty (Borgulya & Barakonyi, 2004). The research area of our study, organizational internal communication, already appeared in the perspective of teleworking research in the 1990s.

According to Castro and Martins (2010), internal communication also plays an important role in employee engagement. Bray and Williams (2017) came to the same conclusion. Based on the excellent work of Grensing and Pophal (2000), when designing internal communication, it is important to be aware of how individual employees can be addressed, how and what we want to transmit to them, all at a micro level. A good relationship with managers and colleagues is an important motivating factor for employees (Farkas, Jarjabka, Lóránd & Bálint, 2013).

During teleworking, human relationships remain important, working elsewhere physically should not lead to social isolation (Albert, Dávid & Huszti, 2020). Several companies take special care to ensure that a variety of prejudices, isolation and the feeling of hopelessness do not hit their heads among online workers (Gibson, 2020).

Regarding the frequency of home workers' communication with their co-workers, Duxbury and Neufeld (1999) conducted a survey and concluded that home workers do

not communicate less frequently with their managers, employees, co-workers and clients than office workers. However, Olszewsky and Mokhtarian (1994) found the opposite, arguing that home-based workers communicate significantly less frequently with their office colleagues. We only have assumptions about the reason for the conflicting research results. It is possible that the work experience of home workers was different in the two samples (those with high routines require less guidance, turn to their colleagues less often), or the composition of the two samples may be different by sector, gender, maybe company position as well. These factors influence the amount of required/sufficient communication (Mason, 1994; Wood, 1996; Kovaite, Šūmakaris & Stankevičienë, 2020). The results of Meulen, Baalen, Heck and Mülder (2019) show that spatial separation directly reduces the frequency of knowledge sharing among colleagues, while temporal separation leads to lower work and proactive performance.

For those who work part-time from home, Bélanger (1999) found remarkable characteristics in terms of organizational integration. According to this, non-permanent home workers are not out of the office network and are not limited in the availability of communication partners, office staff do not form communication groups (cliques) from which teleworkers are excluded, but some communication groups consist of specifically teleworkers. Subsequent researches have shown that teleworkers prefer to communicate with their teleworking colleagues. Duxbury and Neufeld (1999) also found what Bailey and Kurland (2002) found in a broader context that partial teleworking work has little effect on communication within the company.

One of the topics of research on teleworking and related communication is the relationship between satisfaction with the means of communication and work available in teleworking and the personality types of workers. Researches by Smith, Patmos and Pitts (2015) demonstrates that extroversion, openness, pleasant individuality and conscientiousness are positively correlated with job satisfaction, that is, those with such personality traits feel better doing their job with available communication opportunities than their peers who do not show these characteristics.

According to the research of Bauer, Mitev and Gáti (2019), active and quality contact is the basis of trust building, regardless of whether it takes place online or offline. However, the authors note that digital communication is more suitable for performing target tasks, and offline communication is more suitable for building personal relationships. At the same, they attract attention to the difference between quality and frequent communication.

Based on research by Akkirman and Harris (2005), it was found that virtual office workers were more satisfied with organizational communication than traditional office workers.

Murphy and Sashi (2018) examined how offline and digital communication contribute to increasing satisfaction. Personal communication has a stronger effect on nurtu-

ring relationships, while digital communication is more effective. As the internal communication environment is constantly changing (e.g., the impact of new technologies), organizations need to adapt quickly to reach their employees. The choice of the internal communication channel is extremely important (Verčič & Špoljarić, 2020).

Digitalization and the ongoing digital transformation have affected many companies and industries (Kronblad, 2020; Makarius & Larson, 2018), as they change employee interaction in the workplace, communication, expectations and the place and time of work. In this sense, the development of digitalization affects organizations on many levels as it requires the adaptation and development of new knowledge and new working methods (Bondarouk & Ruül, 2009). The literature also emphasizes the importance of investing in the development of the necessary new skills, especially when the change involves new technology and new roles (Heracleous, 2003). The core mission of HR managers is to support and develop employees according to the overall organizational strategy (Watson, 2009). Nowadays, many tools, applications and task management software are available to help manage work processes, control, improve efficiency, motivate employees, and document working time during teleworking (jobctrl.com).

Partial or complete inconsistencies in the research results encourage us to collect primary data in a more differentiated way and by considering the sectors, work areas, the frequency of teleworking and so forth. However, the results found can only be generalized doubtingly, as the samples were taken from employees in different sectors (administration, computer science, software development, etc.). Following a review of the literature, the following research questions were formulated:

- RQ<sub>1</sub> Which channels, tools and ICT (Information and Communication Technology) solutions help teleworkers (and employees working in home offices) get involved in organizational communication? (Smith, Patmos & Pitts, 2015; Verčič & Špoljarić, 2020; Bondarouk & Ruël, 2009; Heracleous, 2003)
- RQ<sub>2</sub> How strongly can teleworkers connect and participate in communication processes in their organizations? (Borgulya, 2004; Argentini, 2003; Borgulya & Barakonyi, 2004; Castro & Martins, 2010; Bray & Williams, 2017; Albert, Dávid & Huszti, 2020; Duxbury & Neufeld, 1999; Olszewski & Mokhtarian, 1994; Bélanger, 1999; Bailey & Kurland, 2002)
- $RQ_3$  How do teleworkers and their employers evaluate communication in this situation? (Smith, Patmos & Pitts, 2015; Bauer, Mitev & Gáti, 2019; Akkirman & Harris, 2005; Murphy & Sashi, 2018)

Our research focused on domestic practice. We searched for the answers using a qualitative research method: based on the knowledge contained in the literature, we examined the above-mentioned issues with semi-structured interviews.

#### EMPERICAL RESEARCH

#### Methodology and Sample

Our research was an exploratory research and our survey consists of two stages: the first was administering a qualitative survey and then we carried out semi-structured interviews. We prepared two versions of questions: one for employees and one for employers. The advantage of using a semi-structured interview is that it is open, allowing new ideas to be brought up during the interview. The interviewees can express their opinions and ask the interviewers questions during the interview, which encourages them to give more useful information, such as their opinions toward sensitive issues. We used a coding system for certain questions to find the similarities and differences in answers. Our goal was to examine professions where home office/telework is widespread. We built the sample regarding firm size (SMEs and large companies, MNCs as well), position (subordinate, leader), region and gender to be more representative in connection with this special field.

The data collection began in April and finished in August 2019, just before the CO-VID-pandemic. We recorded audio material for every interview. We conducted 24 interviews. The sample consistented of 15 female and 9 male respondents with their average age being 39.3 years and the standard deviation being 7.8 years. There were 9 managers and 15 subordinates. From sectoral point of view, we had 8 financial employees, 7 IT experts and 4 pharmaceutical workers, and we had respondents from professions in the chemical industry, building industry, clinical research, commerce and trade and real estate market services.

#### Research Results

Channels and Tools in Communication. The most often used tools are telephone, email and sometimes personal meetings. A quotation from a web developer demonstrates the preference for these tools "There are so many online solutions for teamwork such as telephone, Skype, Google hangouts. In general, I prefer the written form, and voice call at prompt questions." The choice of communication tools depends on:

- the task.
- the stage of working process: at the beginning of work or for the definition of the project, the written form of communication is better. The more precisely the task is defined, the better the employee can perform during independent work. In the case of a well-defined project colleagues do not need to contact one another too frequently and in written form, they can just call each other.
- the personality, attitude and preferred tool of the partner: age has a significant effect on tool selection, the older generations prefer more personal contact or using the telephone.

*The Main Communication Channels for Telework.* Based on the interviews, it can be stated that the way the interviewees work mainly incorporates using telephone and e-mail, and in several cases face-to-face meetings are not necessary (Table 1).

**Table 1** — The Main Communication Channels for Telecommuting/Home Office (Source: own editing based on a sample of N=24 items)

Communication tools	Applied communication tools (number of mentions)	Characteristics of the tools
Telephone and	22	Characteristics of the tools
prompt voice calls	22	Simple, quick, it helps in immediate issues
E-mail and other written forms	17	It is necessary at project kick-off: clear data and directions, assignments, common agreement, traceability, developing and fixing mutual points.
Personal meetings, appointments	12	Common knowledge transfer, inspiring, motivating, strenghtens the social feeling (sense of community)
Online meetings	6	Common knowledge sharing, brainstorming, problem-solving

The choice between the above solutions (which communication channel is most effective) may also depend on the task and the stage of the process. According to the interviewees, it is worth using written forms in case a clear assignment of tasks, agreement, traceability and a common point is important. Although the literature often mentions as a limitation of telework that absence eliminates personal relationships, corporate attachment, removes employees from corporate culture, and severely limits personal (internal) career advancement (Olszewski & Mokhtarian, 1994), this was not the case at all.

The Reasons for Personal Attendance. Why do they have to go to the workplace, even if they are teleworkers? Which are the necessaties? In general, they must go personally one or two times a week or a month for the purposes of:

- distribution (collection and transfer) of information,
- motivation.
- training and development,
- office-meeting with colleagues,
- social activities,
- annual meetings with representatives from headquarters,
- meetings with partners and clients.

The Content of the Communication. The content mainly consisted of professional and personal issues, but the focus was on professional questions. It depends on the personality: the colleagues who are open easily share more information. 16 respondents replied that they have all the information that they need, some interviewees mentioned that this field needs to be developed. The tone and style of communication was

in most cases indirect, friendly, respectful, positive, free, with a dissolved atmosphere, intimate and polite, as was demonstrated by one respondent's comment: "The tone of communication depends on your collaboration partners' attitude to the work. Is (s)he problem- or solution focused? And going higher in hierarchy, the tone changes from indirect and colloquial to respectful and formal style."

**Involvement in Internal Communication.** In those jobs where higher involvement and teamwork is needed, regarding internal communication, the frequency and the intensity of communication is greater, but it can be done easily with the help of ICT tools, so it does not generate more personal meetings. It is usual for jobs like research and development, services, product development and project management. In the jobs where it is possible to work independently, internal communication is less frequently used, for example, for a salesman, webdesigner or programmer in the implementation phase. Here we found lower commitment.

Attitude towards Telework and the Home Office. Based on the interviews, we can state that there is an ICT dominance, meanwhile tdaily personal communication is disappearing. The respondents declared an absolutely positive opinion about these tools (very efficient): realtime online meetings, Slack, Google Hangouts, Facebook Messenger, Skype Business, chat, intranet, Teams, Viber, WhatsApp, White Board and Google Docs. The employees work with so many and diverse ICT tools and often it varies within one company as well. Several firms apply hybrid solutions. For example, a multinational company uses videoconference for working with foreign (expatriate) teams, while at the office in Budapest they use Slack, they upload documents to the Cloud and they write e-mails on official issues. For managers, on the leader's side, there is a stronger need to have more personal meetings, mainly at the beginning of the working process, as was pointed out concisely by a respondent:

"It would be great to get to know the team members at least once at the beginning of the project. Sometimes it comes true, and then we have definitely another quality of connection. After it, the videoconference and meeting is much better." and "There was a time, when the virtuality frustrated me. It changes during lifestages. Now I don't miss the workplace relationship anymore."

#### **FINDINGS**

Although the literature review frequently mentioned that the teleworking system and absence eliminates personal contact and relationships and the commitment to the company, and that it increases distance between employees and organizational culture and limits one's career opportunities and promotion within the firm, our survey did not verify or confirm these disadvantages. We identified some sectoral specialities: the banking and financial sector has limited ICT possibilites because of data protection and data security. Working in an international team has the problems caused by time-zone dif-

ferences and comprehension of language due to accent. Skype is used mainly between two people, although it is possible to work in teams too, it is less used by respondents. Cost effectiveness is a preferred goal as travelling is expensive, so some compenies avoid face-to-face meetings, but there are performance appraisal interview and these are in person every month or a quarter. Employees who are continously travelling require mobile tools:

"The tone of the communication depends on the used foreign language too: English is more colloquial: first name and hello. The Austrian language is another situation. Or the Austrians are very formal: Herr, Frau. The Germans are slowly approaching the English stlye."

#### CONCLUSION

From the manager's perspective, the most essential criteria of good collaboration in home office or telework are trust and the empowerment of empolyees. Managers are concerned that they cannot manage or control their staff and they feel as though they lose their power. From the teleworker's perspective, reliability and competency can ensure quality work and cooperation. But they can be faced with some disadvantages too, as displayed in this statement by a teleworker: "The background of the decisions cannot be explained because of the distance, and it is usually missing." We can state that nowadays the application of telework or home office does not depend on technical devices, equipments or tools. These are available for everybody (for employers and employees). So, the application of this athypical form of work rather depends on the attitude, competency and knowledge of managers and employees, the characteristics of the work and the organizational culture (e.g. if there is strong control or more empowerment).

The connection between the employees and the company and community defines their motivation level, their commitment, their integration and the fluctuation. We found that the jobs where individual performance is in focus, can be differentiated as a special category. Typical pay for performance systems and competition among workers can be found in those circumstances. In other types of jobs, employees need more collaboration and teamwork. If telework is not a necessary solution in a job, then the application of it can cause more motivation, satisfaction and even loyalty and that can contribute to the retention and decrease of staff turnover. Thus, the home office will not endanger the commitment of employees as there are more important factors influencing this field, for example, salaries can have an affect on it.

The communication of teleworkers is partly interpersonal (human-human) and mainly technical communication (human-machine). Regarding communication, there are significant differences between the continously online working employees (bank or marketing industry), the partly online workers (IT developers, project managers) and

the travellers (salesman, researcher). Online work means fixed working time, continuous computer availability is needed for interpersonal communication, and after working time the employee does not need to work. But in practice, there are alway urgent project deadlines and many tasks to do after working hours. The employers of course are totally aware of the extension of working hours. The semi-online work needs to be available in certain time for interpersonal communication, but it enables intense offline intellectual work.

The travelling telecommuting workers are driving cars for hours and they use telephone for keeping contact with their clients and colleagues. The main direct communication partners are not workmates or the boss but the clients (in personal, e-mail and telephone forms too). For a salesman, the elaboration and sharing of information happens when he/she finishes travelling work.

Meetings are the most important form of interpersonal communication for every-body. The employees can participate using notebook and it is often by videochat and videoconference. The security of communication and the inaccessibility of information for unauthorized people is essential for a company. So, there are many assumptions about the amount of freedom in telework, but at the same time there are so many limitations: special software, identification and so forth. We found significant differences between companies in providing communication tools for employees, such as mobile phones, notebook, cars, Internet subscriptions, service costs and those who did not. Based on our interviews, it seems that the IT, building and pharmaceutical sectors are more supportive, while in sales jobs the employer often passes on the costs.

The answers to our research questions can be summarized as follows. Research Question 1: the combination of a variety of technical tools (telephone, e-mail), ICT solutions and software ensures the involvement of teleworkers / home office workers in formal organizational communication, in which ICTs are a prerequisite. Examining Research Question 2, it was found that from both the management's and employee's perspective, it is appropriate for employees to participate in organizational communication processes. Colleagues are involved to the extent necessary to do their job effectively. On the management side, there is a need for more face-to-face meetings, but even without this, the work can be done productively. We received a completely positive opinion in the results from Research Question 3 from the point of view of employees and employers, the communication of teleworkers / home office employees was assessed as adequate both in terms of quantity and quality.

#### LIMITATIONS AND FURTHER RESEARCH DIRECTIONS

We consider the sample of 24 to be sufficient for the main population to identify the main trends and to identify further research directions. At the same time, further expansion of the sample would contribute to the collection of wider knowledge. Based on

the interviews, a very mixed, non-uniform picture emerged from the examined characteristics of atypical work. Generalisations should not be based on these results, but they provide an indication compilation of issues to be examined in a large sample.

The first (interview) phase of our research was conducted at the last moment before the outbreak of the COVID-19 epidemic, so we could observe the judgments and practices of telework and the home office without its effects. In the second phase of the research (online questionnaire survey), it is advisable to take into account the effects of the new situation and to ask questions about it.

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#### THE "RIGHT TO BE FORGOTTEN" IN EUROPEAN LAW

#### Abstract

The "right to be forgotten" has been regulated by law only recently, with entry into force of the General Regulation on the Protection of Personal Data (GDPR) as a mandatory regulation at the European Union level. It is rooted in the old principle of criminal and misdemeanour law on rehabilitation — so even crimes should not be something that will accompany the perpetrator for life but should be deleted from the records after a certain period. With the advent of the Internet and Internet search engines, there appeared an issue that certain behaviours or events related to a person remain permanently recorded and accessible to all. In relation to the development of "the right to be forgotten", the case of Costeja (C-131/12) before the European Court of Justice between the Spanish subsidiary of Google versus the Spanish supervisory authority of AEPD and Mario Costeja Gonzalez was extremely significant, because old, inconvenient information about financial problems he had had years earlier could be found searching Google. The "right to be forgotten" was then defined by the GDPR, but legal practise is only being built. Thus, according to the decision of the European Court of Justice in 2019, the law itself is exclusively related to the European Union and does not bind Google and others globally. The paper analyses the extent that the "right to be forgotten" is in accordance with today's European law and its relation to media regulations.

Keywords: GDPR, privacy, right to be forgotten, the EU, regulation

The "right to be forgotten" is a new right, which appeared only in this century, and was regulated only with the entry into force of the General Data Protection Regulation (hereinafter: GDPR) on 25th May 2018 (European Parliament & the Council, 2016). The provisions of the GDPR on the "right to be forgotten" were greatly influenced by the case (C-131/12) Google Spain SL and Google Inc. v. Agencia Española de Protección de Datos (AEPD) and Mario Costeja González. (Judgment of the Court, 2013)

Although debates over the "outer" and the "inner", public and the private, can already be found in the works of Greek philosophers (Moore, 1984), privacy as we know it today has developed in the United States. There was a big distance between homesteads, so physical privacy became usual, and the home became the primary place of privacy (Flaherty, 1972). It should be noted that privacy was also conditioned by wealth — most of the population lived in poverty in the 19th century, sharing only the few rooms they had (Holvast, 2009).

Some self-evident rights related to privacy, stated in the constitutions of many countries, such as the right to secrecy of correspondence, are legally relatively new. The United States introduced this right only by a court precedent from 1877:

"No law of Congress can place in the hands of officials connected with the Postal Service any authority to invade the secrecy of letters and such sealed packages in the mail; and all regulations adopted as to mail matter of this kind must be in subordination to the great principle embodied in the fourth amendment of the Constitution" (Ex parte Jackson, 1877).

The right to privacy developed greatly after World War II. As a key document we will mention 'The Universal Declaration of Human Rights' (UDHR) (United Nations, 1948). It is an international document adopted by the United Nations General Assembly in 1948. UDHR enshrines the rights and freedoms of all human beings. Chapter 12 is important to our topic: "No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks."

The general development of human rights in the following decades required further strengthening and elaboration of what became known as the right to privacy. Of the many documents, we will list those extremely important to this discussion: Charter of Fundamental Rights of the European Union (European Parliament, the Council and the Commission, 2007), Chapter 7, Respect for private and family life "Everyone has the right to respect for his or her private and family life, home and communications."

The danger to the protection of personal data and privacy of the individual through the automatic processing of personal data was recognized relatively long ago. Thus, the Council of Europe adopted in 1981 the Convention for the protection of individuals with regard to the automatic processing of personal data, also known as Convention 108. (Council of Europe, 1981). The Convention was upgraded later and is now known as Convention 108+.

The question of privacy is already mentioned in Article 1, Object and purpose: "The purpose of this Convention is to protect every individual, whatever his or her nationality or residence, with regard to the processing of their personal data, thereby contributing to respect for his or her human rights and fundamental freedoms, and in particular the right to privacy." Also, Convention 108+ in Article 5 quotes: that personal data undergoing automatic processing shall be "stored for specified and legitimate purposes and not used in a way incompatible with those purposes".

Given that all Members have ratified Convention 108, it is extremely important for the development of personal data protection and privacy law in the EU.<sup>1</sup> However, the fast development of computers and general informatization in the early 1990s, inclu-

 $<sup>^{</sup>f 1}$  It should also be mentioned how the European Council called on the members to ratify and refresh Convention 108+ (Council of Europe, 2019)

ding the advent of the Internet, required new, more extensive, and more precise regulation. Directive 95/46/EC, enacted in October 1995, of the European Parliament and of the Council of 24th October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (European Parliament and of the Council, 1995), better known as Data Protection Directive. shorter Directive 95/46. The recital states, among other reasons for the adoption: "Whereas increasingly frequent recourse is being had in the Community to the processing of personal data in the various spheres of economic and social activity; whereas the progress made in information technology is making the processing and exchange of such data considerably easier". The EU has rightly stated that we have entered an era of very easy collection and processing of previously unimaginable amounts of data.

Directive 95/46 does not directly mention the "right to be forgotten", although it states "legitimate purposes" when collecting personal data. Article 6 of Directive 95/45 among other things prescribes that Member States shall provide that personal data must be collected for specified, explicit and legitimate purposes and not further processed in a way incompatible with those purposes. Could this provision be interpreted in favour of the "right to be forgotten?" Perhaps from today's time lag, but it should not be forgotten that in 1995, today's models of Internet search engines were still in their infancy. The power and impact of the Internet and Internet search engines has not yet been recognized. Directive 95/46 provided a quality basis for regulation appropriate to the time in which it was enacted but it could not have foreseen universal "internetization" with the beginning of the 20th century<sup>2</sup>. It was only judgement (C-131/12) that introduced into European, and thus even more into a world law, the "right to be forgotten", as we know it and as it develops in its present form.

#### WHY DO WE NEED THE "RIGHT TO BE FORGOTTEN"?

Although the provision "stored for specified and legitimate purposes" can also be interpreted as the beginning of the regulation of the "right to be forgotten", which in the sense we know today dates back from more recent days. The "right to be forgotten" is related to two technological changes:

- a) online editions of various print media (from newspapers to official gazettes) and the development of completely new electronic publications;
- b) Internet search engines that search the entire available Internet and provide access to content based on typing key terms and words.

This can be explained with the following example. Let us say that some high school student in his final grade (when of legal aged that their name can be published), participated in a minor criminal offense, such as theft or drug abuse. In the former "analogue" world, his case would end up in a local newspaper's black chronicle,

<sup>&</sup>lt;sup>2</sup> Directive 95/46 is no longer in force, date of end of validity: 24/05/2018. Repealed by GDPR.

but the story would be forgotten in a few years. It still exists but only as a copy of the newspaper preserved in the archives or the national library. It takes hours of searching to get that information — knowing approximately when and where the news was published. Some databases exist only for celebrities — and only news about them is stored, and again only in specialized news agencies and large newsrooms, which regularly charge third parties for this information.

After the information started to be published on the Internet — data on minor legal problems considering any person are permanently available. By using Google, it can be reached by potential employers, neighbours, friends, anyone. For many years even after legal rehabilitation, a former minor offence or any other problem will remain easily available. What was once hidden in the old editions of newspapers, difficult to access and without indexing, is now available to everyone.

That is how the case of Costeja (C-131/12) came about. Mario Costeja González filed a lawsuit on 5th March 2010 with the AEPD (Spanish national regulator) against the publisher of the daily newspaper *La Vanguardia*, as well as against Google Spain and Google Inc. because typing his name into Google provided links to two pages of the *La Vanguardia* daily. There was an ad with his name on the real estate auction. M. Costeja González stated that the execution was completed several years ago and that the information on the site is irrelevant. The complaint requested, inter alia, that *La Vanguardia* be ordered to delete or modify the said pages, that is, that his personal data be protected by using certain search engine tools. By the decision of 30th July 2010, the AEPD rejected the complaint in respect of *La Vanguardia* but was adopted in the part directed against Google Spain and Google Inc., in respect of which M. Costeja González requested the AEPD to order them to delete or conceal his personal data (Mesarek, 2014, p. 152-153). Therefore, the information remained in the newspaper, but it could not be easily found — Google must not "link" it.

Google Spain and Google Inc. filed two separate appeals against that decision before the Audiencia Nacional, which were joined by the Audiencia Nacional. The Audiencia Nacional halted the proceedings and sent a request for a preliminary ruling before the Court of Justice of the European Union (hereinafter: CJEU), with the question of whether the person has the right to request that her/his data be removed from

<sup>3 &</sup>quot;References for preliminary rulings", cited from the Court of Justice Web page: "The Court of Justice cooperates with all the courts of the Member States, which are the ordinary courts in matters of European Union law. To ensure the effective and uniform application of European Union legislation and to prevent divergent interpretations, the national courts may, and sometimes must, refer to the Court of Justice and ask it to clarify a point concerning the interpretation of EU law. The Court of Justice's reply is not merely an opinion but takes the form of a judgment or reasoned order. The national court to which it is addressed is, in deciding the dispute before it, bound by the interpretation given. The Court's judgment likewise binds other national courts before which the same problem is raised." (Court of Justice of European Union, 2020)

the search results. In its decision to make the request, the court stated that the appeals raised the question of the obligations of search engine operators to protect the personal data of interested persons who did not want to be monitored, indexed, and have information about them made available by being published on third party websites. The answer to that question depends on the way in which Directive 95/46 is to be interpreted (Mesarek, 2014, p. 153).

The CJEU has considered the provisions of Directive 95/46, and Articles 7 and 8 of the Charter of Fundamental Rights. We transfer from the judgment: "Article 12(b) and subparagraph (a) of the first paragraph of Article 14 of Directive 95/46 are to be interpreted as meaning that, when appraising the conditions for the application of those provisions, it should inter alia be examined whether the data subject has the right that the information in question relating to him personally should, at this point in time, no longer be linked to his name by a list of results displayed following a search made on the basis of his name, without it being necessary in order to find such a right that the inclusion of the information in question in that list causes prejudice to the data subject. As the data subject may, in the light of his fundamental rights under Articles 7 and 8 of the Charter, request that the information in question no longer be made available to the public on account of its inclusion in such a list of results, those rights override, as a rule, not only the economic interest of the operator of the search engine but also the interest of the public in having access to that information upon a search relating to the data subject's name. However, that would not be the case if it appeared, for reasons, such as the role played by the data subject in public life, that the interference with his fundamental rights is justified by the preponderant interest of the public in having, on account of its inclusion in the list of results, access to the information in question.

The ability to delete "inconvenient" data for the user has thus become the rule. We note that the judgments of the CJEU are considered as an important source of law in the European Union and are considered a secondary source of law, therefore, according to their importance immediately after the fundamental treaties of the European Union (Majić, 2010, p. 166), they have the power of precedent in the sense of Anglo-Saxon law. The decision, therefore, has the relevance of the rules for future cases, that is, it has become part of the acquis communautaire.

Interestingly, CJEU did not define the "right to be forgotten" as an absolute right but bound it to the "public life" of a natural person, a provision very similar to the attitude towards privacy protection in regulations governing the work of the media. For example, the Croatian Media Act (Zakon o medijima, 2004) states in Art. 7 "A person performing public service or duty shall have the right to the protection of privacy, except in cases related to public service or duty that he or she performs. A person who draws public attention by his/her statements, behaviour and other acts relating to his/her personal or family life may not request the same level of the protection of privacy as other citizens."

In practice, the provision on "public life" is likely to be ambiguous — it is relatively easy for professional newsrooms to determine who, through their political or other public engagement (e.g., participation in a reality show), has led to not be subject to the privacy provisions that apply to other persons. It is much more difficult for the administration of a search engine, usually located in one country for a whole group of countries (e.g., for the European Union). How does someone from Ireland or Denmark know who really is a local politician, a candidate, but even more an Internet or reality-show star in Croatia, Montenegro, or Romania? Obviously, this will take time for this to create an administrative and judicial practice.

#### FURTHER DEVELOPMENT OF THE "RIGHT TO BE FORGOTTEN"

The reality of the digital age is that forgotten information has been replaced by automated memory. Issues such as border control over information in the media, who is the owner of the information, and how the digitally stored information affects the future and life of private individuals are closely linked to changes in human rights access, including the right to be forgotten (Razmetaeva, 2020).

There have been recent discussions on the meaning, application, and limitations of the "right to be forgotten", but there are still open questions (Villaronga, Kieseberg & Li, 2018).

In addition to the judgment of the Case of Costeja (Judgment of the Court, 2014), as a significant, it stands out the case Google LLC, successor in law to Google Inc. v. Commission nationale de l'informatique et des libertés (CNIL) (Judgment of the Court, 2019). Uncertainty about the breadth of the application of the "right to be forgotten" has prompted French Conseil d'État<sup>4</sup> to seek clarification from the CJEU regarding the territorial scope of the removal of links (Samonte, 2020). The request for a preliminary ruling in the dispute between Google LLC, the legal successor of Google Inc., on the one hand, and the French Commission nationale de l'informatique et des libertés ("CNIL"), was addressed to the CJEU for the purposes of interpreting Directive 95/46/EC (European Parliament and of the Council, 1995). The reason was a penalty of EUR 100 000 imposed by CNIL on Google because the company refused to apply that requirement to all extensions of its browser's domain name when accepting the link removal request. By a decision on 21st May 2015, the President of CNIL ordered Google to remove all the links from its browser's domain name to web pages from the list of results, following a search by a personal name. Google refused to comply with this order, removing only the relevant links for results displayed after searches of its search engine whose domain names accordingly exist within the Member States. Addi-

 $<sup>{</sup>f 4}$  Council of State (French: Conseil d'État), is a body of the French national government that acts both as legal advisor of the executive branch and as the supreme court for administrative justice.

tionally, CNIL considered the proposal of the 'geographical blocking' presented by Google to be insufficient after the deadline for execution of the order, disabling the IP address (Internet Protocol) which is considered to be located in a Member State, in which the respondent (resident) accessed the disputed results following a search performed by his personal name, regardless of the different version of the search engine used by the Internet user. After Google failed to comply with the order within the time limit, CNIL imposed a publicly announced sanction of 100,000 euro against the company by a decision o 10th March 2016.

In its request to the Conseil d'État, Google sought the annulment of that decision. The Conseil d'État pointed out that the processing of personal data carried out by a search engine used by Google, considering the activities of promoting and selling advertising space carried out in France through its subsidiary Google France, falls within the scope of Act No 78-17 of 6th January 1978 on Data Processing, Data Files and Individual Liberties (Act of 6th January 1978, which implemented Directive 95/46 into French law).

The Conseil d'État further finds that the search engine used by Google differs according to the geographical extensions of the domain name, to adjust the results presented according to the specifics, particularly linguistic ones, in the different countries in which the company operates. When a search is performed from 'google.com', in principle, Google will automatically redirect that search to a domain name that exists in the country from which the Internet user's IP address is considered performed. However, regardless of its location, an Internet user may perform its searches on other search domain names. Although the results may differ according to which domain name the search was performed on the search engine, it is undisputed that the links displayed in response to the search derive from common databases and the indexing process.

Conseil d'État considered that, on the one hand, taking into account, the fact that all Google domain names could be accessed from the French territory and, on the other hand, the existence of network gateways between those different domain names, that this search engine carries out a unique processing of personal data within the meaning of the Act from 6th January 1978. It follows, that the processing of personal data of search engines used by Google is carried out by Google France, based on the French territory, so the Act of 6th January 1978 is applied on that basis.

Google, on the other hand, claimed that the disputable sanction is based on a misinterpretation of the provisions of the Act of 6th January 1978 transposing Article 12, point (b) and Article 14, the first paragraph (1) of point (a) of Directive 95/46, on the basis of which the Court in its judgment of 13th May 2014; Google Spain and Google (C-131/12, EU: C: 2014: 317) recognized the "right to remove links". Google has pointed out that this right does not necessarily mean that the disputed links are removed without geographical restrictions, on all domain names of its search engine. In addi-

tion, Google considered that CNIL's acceptance of such an interpretation violated the principles of politeness and non-interference recognized in public international law, and disproportionately jeopardized the freedoms of expression, information, and press releases, guaranteed, *inter alia*, by Article 11 of the Charter.

"Having noted that this line of argument raises several serious difficulties regarding the interpretation of Directive 95/46, the Conseil d'État has decided to stay the proceedings and to refer the following questions to the Court of Justice for a preliminary ruling:

- (1) Must the "right to de-referencing", as established by the [Court] in its judgment of 13th May 2014, [Google Spain and Google (C-131/12, EU:C:2014:317),] on the basis of the provisions of [Article 12(b) and subparagraph (a) of the first paragraph of Article 14] of Directive [95/46], be interpreted as meaning that a search engine operator is required, when granting a request for de-referencing, to deploy the de-referencing to all of the domain names used by its search engine so that the links at issue no longer appear, irrespective of the place from where the search initiated on the basis of the requester's name is conducted, and even if it is conducted from a place outside the territorial scope of Directive [95/46]?
- (2) In the event that Question 1 is answered in the negative, must the "right to dereferencing", as established by the [Court] in the judgment cited above, be interpreted as meaning that a search engine operator is required, when granting a request for de-referencing, only to remove the links at issue from the results displayed following a search conducted on the basis of the requester's name on the domain name corresponding to the State in which the request is deemed to have been made or, more generally, on the domain names distinguished by the national extensions used by that search engine for all of the Member States…?
- (3) Moreover, in addition to the obligation mentioned in Question 2, must the "right to de-referencing" as established by the [Court] in its judgment cited above, be interpreted as meaning that a search engine operator is required, when granting a request for de-referencing, to remove the results at issue, by using the "geoblocking" technique, from searches conducted on the basis of the requester's name from an IP address deemed to be located in the State of residence of the person benefiting from the "right to de-referencing", or even, more generally, from an IP address deemed to be located in one of the Member States subject to Directive [95/46], regardless of the domain name used by the Internet user conducting the search?" (Judgment of the Court, 2019).

Although Directive 95/46 was applicable on the date of reference for the preliminary ruling, it was repealed, with effect from 25th May 2018, the date from which Regulation 2016/679 applies. The Court concluded that the recital 10 of Directive 95/46 and recitals 10, 11 and 13 of Regulation 2016/679, adopted on the basis of Article 16

TFEU, it follows that the aim of that Directive and that Regulation is to guarantee a high level of protection of personal data throughout the Union.

On those grounds, the Court (Grand Chamber) hereby rules: "On proper construction of Article 12(b) and subparagraph (a) of the first paragraph of Article 14 of Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, and of Article 17(1) of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46 (General Data Protection Regulation), where a search engine operator grants a request for de-referencing pursuant to those provisions, that operator is not required to carry out that de-referencing on all versions of its search engine, but on the versions of that the search engine corresponding to all the Member States, using, where necessary, measures which, while meeting the legal requirements, effectively prevent or, at the very least, seriously discourage an Internet user conducting a search from one of the Member States on the basis of a data subject's name from gaining access, via the list of results displayed following that search, to the links which are the subject of that request." (Judgment of the Court, 2019)

Paragraph 72 of the Court's judgment states that, at the time of the judgment, Union law did not impose an obligation that the accepted removal of links applies to all versions of the search engine, nor did it prohibit it. Given the above, the supervisory authority or judicial authority of the Member State remains competent to assess the respondent's right to respect his or her privacy and the protection of his or her personal data, on the one hand, and on the other hand, the right to freedom of information. Following the assessment, those authorities are, if necessary, empowered to order the operator of that search engine to remove links on all its versions.

Although this case focuses on the "right to be forgotten", the judgment could have a broader implication on the general territorial scope of the GDPR (Samonte, 2020). Regardless of the legal aspects of the judgment, the "right to be forgotten", and online information management opens the possibility of discussion in other areas as well. For example, from a journalistic point of view, the debate over data deletion also has an ethical component (Santin, 2017).

In some cases, when a person wants to censor information, it can lead to large exposure. This phenomenon is called the Streisand effect, after Hollywood star Barbra Streisand. When the image of her residency made public on the Internet, she decided to take legal action by asking the web portal to remove the image. In response to the publicity created by the legal action, the image of the house was taken more than 400,000 times within a month, while before the trial the image was taken only six times. The Streisand effect "raised awareness of analogous cases in which attempts to suppress information had the unintended consequence of stimulating greater demand

for information than would have happened if no action had been taken" (Jansen & Martin, 2015).

#### CONCLUSION

The "right to be forgotten" is a new legal institute, which should be developed and analysed from the point of view of legal practice, but also doctrine. There is a danger of its misuse and deletion of important data that are relevant to the protection of other rights and interests of all subjects, such as links to information "inconvenient" for certain politicians. There are also many open questions regarding the understanding and application of the "right to be forgotten", both in the European Union and beyond. Nevertheless, we consider the "right to be forgotten" necessary in the modern computerized world, where technology has almost stopped the current natural function of oblivion, where certain behaviors of individuals from the past; unless some very severe deviations from social norms; remained recorded only in hard-to-search collections of newspapers, in editorial archives and national libraries.

In such a world, teenage stupidity or a minor bad life episode can permanently mark a person. Even for criminal offenses, there is rehabilitation — but what is written on the Internet remains. This material can be found by the known and the unknown, potential employers and many others and get the wrong idea of the person, hinder the person's business advancement, weaken credit ratings and similar. Therefore, the "right to be forgotten" is necessary.

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## COLLABORATION BETWEEN CIVIL SOCIETY AND LOCAL GOVERNMENT — A BUSINESS MODEL FOR THE REVITALIZATION OF UNUSED PUBLIC SPACES

#### Abstract

The business model is one of the key factors why some organizations and companies have better results than others. Certain local government-owned public spaces are unused because of mismanaged resources and a lack of clear vision of how to use them successfully. In the context of civil-public partnership, it is necessary to develop a business model that structures management on the basis of: what the customer needs are, how they want their needs satisfied and how the organization can organize itself to meet customer needs while achieving profit and positive public opinion. In this paper, this type of successful business model is presented through a case study of the EU project "New practices — participatory management of the Scheier building" between the NGO Cakovec Community Centre Platform and Medimurje County.

Keywords: business plan, case study, public spaces, Scheier building, participatory governance

This paper will describe the model of participatory governance as a model for more the successful management of premises owned by public institutions or government. Participatory governance contributes to the improvement of democracy. Participatory models are established to implement changes in the context in which they emerge. They can be established top-down — initiated by international organizations, foundations, agencies, and institutions as well as public bodies, or bottom-up — through the engagement of citizens, civil society and other organizations. Participatory governance is based on the synergy of actors from public institutions and civil society initiatives and organizations. Thus, participatory governance enables citizens to enter decision making processes by building their capacities for the use of democracy (Wampler & McNulty, 2011, p. 3). The concept of participatory governance can be defined as sharing governance responsibilities among different stakeholders who have "a stake in what happens" (Wilcox, 1994, p.5). The stakeholders can be local administrations, public institutions, nongovernmental organizations, civil initiatives, local community re-

presentatives, artists, and others. One of the key documents for successful business and development of these spaces is the business model that supports participatory governance. The results of such a partnership on the business results of the Scheier building will be presented on the example of an EU project implemented by the NGO Cakovec Community Centre in partnership with Medimurje County.

### COLLABORATION AND THE BUSINESS MODEL — PARTICIPATORY GOVERNANCE

Every group of individuals who want to grow into an organized community must set clear common rules of operation. The process of forming a group begins before its formal establishment (eg. before the establishment of an association, cooperative or enterprise) and lasts, changing, during its operation. In the process of forming a group, it grows into a group that has its own norms of behavior and work. A group is often more than the sum of the individuals who are its members (Babič, 2019). "The group is the basic unit of work in the process of establishing companies, cooperatives or associations and other forms of group economic and social activities. Group work is quite different from individual work" (Babič, 2019, p. 8). The key elements of the community building process capable of participatory governance according to Babič (2019) are: good organization of work processes, responsible undertaking and execution of group coordinated work tasks and emphasis on belonging to a group. The goal of this process is effective democratic participatory governance based on collectivized personal responsibility and care for the community. These elements of the process characterize many organizations that often have one or two people who make all the decisions, but the challenge is their implementation within a group that can democratically adopt and change them. If the basic unit of work in this process is a group, its unit of measurement is the personal responsibility of the individual" (Babič, 2019). Management is a comprehensive and intertwined system of activities focused entirely on goals. Participatory governance, on the other hand, is a complete and interconnected planning of the whole group towards goals (Babič, 2019). In Table 1 functions and elements of management, and related activities are singled out.

**Table 1** — Functions or Elements of Management as a Complete and Intertwined System of Goal-Oriented Activities (Source: Table 1. Functions or elements of management as a complete and intertwined system of activities aimed at goals according to Babič, 2019.)

Planning (joint planning)	Defining Goals	Direction
	Defining Strategies	Path
Execution (self-responsibility and co-responsibility		Allocation of
of everyone in the implementation)	Organizing	resources
	Leadership	Impact on people
Supervision (leader's supervision over the work of group		
members and group supervision over the leader)	Monitoring	Methods
	Evaluation	Giving meaning

Participatory governance follows the functions in the table above. Bearing in mind the democratic joint decision of the group, equal responsibility in the implementation phase, circular control in the supervision phase (Babič, 2019). In Table 2, it can be seen that from planning to supervision, the group has a key role in setting the direction of movement, but also over the supervision of its members and leaders.

**Table 2** — Possible Connectivity Models for Participatory Governance (Source: Possible connection models for co-management of a joint product according to Babič, 2019)

Model	Characteristics	Advantages	Disadvantages
Informal network - without a formal structure	- partners are not formally connected (there is no multi-party civil contract between the partners) - joint activities are carried out through a secretariat organized by one partner or through a third party with whom they have concluded individual agreements	- simplicity - more relaxed inclusion of new members - higher speed of procedures - suitable for the early stages of grouping	- poorer management and control - partners do not have formal ties and obligations with each other - less opportunities for long-term existence of the group
A formal structure that is not an independent legal entity but is based, for example, on a consortium agreement or partnership agreement	- partners are formally connected - the secretariat is part of the partnership - the partnership agreement or consortium agreement specifies the specific rights and obligations of the members or partners regarding co-management and the formal rules for connecting the group externo and for including new members in the network	- simplicity - clear conditions for membership - formal guidelines for product quality - formalized development guidelines - structured management board	- the mere formalization of the partnership does not yet guarantee the effective management and development of the network - this form is the "middle way" which is not always appropriate - sales remain in the domain of individual members
Formal structure of a legal entity (member organization such as: cooperative, association, economic interest association (GUI) or mutual society	- a new legal entity is created that independently performs legal affairs - the new legal entity becomes a key development and marketing channel for the joint product - management in a new legal entity that must be a member organization is formed as co-management (democratic principle according to the principle of one member — one vote)	- formality, seriousness, and sustainability - connection and organization of membership is performed in a permanent legal entity - stable marketing strategy and implementation of sales through a new legal entity	- more demanding formalization - overlapping activities of the new legal entity and its members - possible conflict of interest of the new legal entity and its members

Participatory governance means that both planning, implementation and control take place in the domain of the whole group, organized on the principle of "one member, one vote", which shares tasks and has self-responsible members who monitor each other (Babič, 2019). The principle of "one member — one vote" can play a crucial role in the development and success of an organization provided the organization is set up as a learning organization. "The concept of a learning organization with its holistic approach seeks to reconcile the interests of all stakeholders. The goal is to create an environment in which meeting the goals of all stakeholders will be natural and renewable and at the same time guarantee sustainability" (Rupčić, 2017). Management is a difficult task, and participatory governance is even more difficult because it requires awareness of group dynamics and a lot of mutual trust. That is why the results of such common stories are so much better (Babič, 2019, p.42). Participatory governance means developing products and services that are not and will never become just "mine" or "yours", they are always in the domain of the community. All participants have an obligation to learn the skills of participatory governance, whether in common areas or products (Babič, 2019). Participatory governance as a management of public resources, according to the available literature, seems like a logical move towards the successful implementation of common goals. One such example can be found in the north of Croatia in the case study of the Scheier building and the participatory governance model between the NGO Cakovec Community Centre Platform and Medimurje County.

#### THE BUSINESS MODEL AND THE CREATIVE INDUSTRY

The notion of the creative industry is a notion of the 21st century. Its importance is confirmed by the fact that it directly or indirectly employs about 7 million people or 3.3 percent of the active population of the EU, and accounts for 4.2 percent of gross domestic product (Ernst & Young, 2014). Creative and cultural industries are also recognized at the level of EU policies as one of the drivers of social and territorial cohesion, creativity, and innovation, with positive spillover effects on the rest of the economy and society as a whole. We can define them as cycles of creating, producing, and distributing goods and services that use creativity and intellectual capital as primary inputs. They encompass a set of knowledge-based activities that produce material goods and intangible intellectual or artistic services with creative content, economic value, and market objectives (UNCITAD, 2018). Different cultures have different views of which sectors are involved. The paper "Mapping of creative and cultural industries in the Republic of Croatia Č from 2015 was taken as a reference point, which defines the total sector of cultural and creative industries through 12 subsectors. For this paper, the most important subsectors are: 1) museums, libraries and heritage, and 2) Art.

Osterwalder and Pigneur (2010) described a business model as the rationale of how an organization creates, delivers and captures value. The business model can al-

so be explained as a conceptual framework that represents the link between strategy and business processes, that is, explains the essence of the value creation process (Wirtz et al., 2015). In business literature models, it is possible to find a significant number of different attempts at more detailed elaborative concepts of a business model on building elements (Wirtz et al., 2015; Klang, Wallnöfer & Hacklin, 2014; DaSilva & Trkman, 2013). So, Hamel (2000) considers that the framework for observing the business model is as follows basic elements, where each of the basic elements also consists of its own sub-elements:

- 1) Strategy whose determinants are business mission, market segmentation and strategic differentiation (based on Porter's generic strategies);
- 2) Strategic resources whose determinants contain key competencies (knowhow), strategic assets and key processes. Key competencies represent knowledge of the company (so-called intellectual capital) that includes unique skills and intellectual property. Strategic assets are primarily tangible assets of enterprises, such as infrastructure and facilities, however, may also be intangible such as patents, brands, CRM (customer relationship management) and everything else that is rare and valuable to a company's business. The key processes refer to the methodologies and routines used to transform inputs into outputs;
- 3) Interaction with users consists of four elements: user support, understanding feedback, customer relationship dynamics and billing modality;
- 4) Value network is a set of relationships of the company with key business partners (suppliers, customers, investors, etc.) and allows the company access to those key resources that it does not have under its own control (Milovanović et al., 2016).

Through the knowledge and skills of management in culture, the concept of the business model to the subsector of creative industry was applied within the project New Practice — Participatory Management of the Scheier building. The aim of the project was to develop a business model and achieve the sustainability of the Scheier building for activities belonging to the two sectors (1. museums, libraries and heritage, and 2. Art.) of the creative industry.

#### ČAKOVEC COMMUNITY CENTRE PLATFORM AND THE PROJECT "NEW PRACTICES — PARTICIPATORY MANAGEMENT OF THE SCHEIER BUILDING"

The Čakovec Community Centre Platform (hereinafter: Platform) started as an initiative of about twenty NGOs, social and cultural activists and citizens, which formalized the activities of the 1729/2 Initiative at the end of August 2015. The Platform encourages and advocates democratic and participatory practices in policymaking and develops the conditions for the development of participatory democracy and the participation of ci-

tizens and NGOs in decision-making processes at the local level. For twenty years, NGOs in Međimurje County, active individuals in the local community and the local community did not have adequate space for the organization and implementation of cultural, social, socio-entrepreneurial programs and activities. In mid-2004, an initiative that brought together a dozen NGOs (some of which make up today's Platform) questioned and advocated different models for using existing public resources. In the summer of 2007, the Medimurje County became the owner of the entire area of the former barracks "Nikola Šubić Zrinski" in Čakovec, and the Regional Development Agency of Medimurje with the support of the then county government launched the initiative to put the former barracks into development and thus prevent its sale or complete decay through the "Knowledge Center" project. However, the "Knowledge Center" project did not cover the entire former barracks. At the extreme edge of the complex there was a plot with a total area of 23,920 m2 and a built-up area of 1,585 m<sup>2</sup> which was not intended for inclusion in the project. It is in this area that the informal civic initiative 1729/2, motivated by the creation of major changes in the local community, proposed and initiated the development of a new development project in the local community. In addition to the county, the Platform has established concrete cooperation with the City of Čakovec and a Partnership Agreement was signed by which all three parties express their interest in the preparation and implementation of the project Social Center Čakovec. The project is recognized as a priority development project that will define and establish a self-sustainable model of use and the management of public resources. A couple of years later, after two failed agreements and attempts to use public space, according to the invitation of the EU Council for participatory management of cultural heritage (2014 / C 463/01), the building Scheier was located as a key point for cooperation between citizens and the local authorities. The Scheier building is located within the protected cultural and historical ensemble of the city of Čakovec (in the very center of the city), as a former socio-cultural space. In the last ten years, since it has been owned by the County of Medimurje, it has not developed a management strategy. There is a lack of a public model of management and proposing, selection, contracting and transparent informing of the public about programs which result in the "privatization" of space and closing towards a new, better program as well as active involvement of the local community in (co)creation, which is in line with the EU guidelines for community-led local development. Finally, the Platform with the Medimurje County in 2017 initiated the participatory management model of the Scheier building by signing the Joint Management Agreement of the Scheier building for the period 2018-2020 and became a partner in the project "New Practices". The project aims to solve the problem of the non-existence of public socio-cultural spaces that would connect citizens, organizations, cultural institutions and decision makers through mutual learning and creating new values in the community. The purpose of the project is to improve the model of participatory management, organizational and spatial capacities of local authorities and (members) of the Platform, as well as the participatory program in the Scheier building in Čakovec and actively involve citizens in the process of creating content, policies and the co-management of public space. The project lasted 24 months and was funded from the European Social Fund. In its application form for the competition "Spaces of Participation — Development of a program for the revitalization of public spaces through a partnership between NGOs and the local community", the Platform identified the following key issues in the local environment:

- socio-cultural policy is implemented without strategy and sufficient professional guidance / there is no Cultural Strategy of counties (development is planned in the Development Strategy of Međimurje County until 2020) and the City of Čakovec, public spaces for culture are insufficiently used (Scheier, Barracks, House Ladislav Kralja, museum premises);
- cultural stakeholders are not sufficiently connected (too few long-term joint initiatives, advocacy processes), there is no open collaborative management of facilities and spaces ("closed" institutions Museum of Međimurje and the Center for Culture for "new" content) and partnership practices development and sustainability, quality and scope of content are questionable, visibility and availability of content is weaker;
- there is no open adequate space available for connecting stakeholders in culture and creating/presenting quality content (especially for contemporary, new media art) and the active involvement of citizens (as an audience or co-creator of content).

The Scheier building was chosen to address these key issues. The project activities aim to educate the local population, members of associations, local government employees about the benefits of the participatory model. The project creates a business model of the Scheier 2019/2020 building, analysis and sustainability plan of the Scheier 2019/2020 building co-management model and a communication strategy for the Scheier 2019/2020 building, which contributes to financial sustainability and visibility. By adapting the Scheier building, the space is more accessible to more diverse socio-cultural actors in the long run and better production conditions for new programs are obtained. The business model aims to increase the possibilities of renting income, which contributes to the financial sustainability and visibility of the socio-cultural center. It should be noted that the project also finances study trips of Platform employees in order to empower organizations for new ideas and projects through 'job shadowing' techniques.

# THE RESULTS OF JOINT MANAGEMENT OVER THE SCHEIER BUILDING

Until the start of participatory governance of the Scheier building, there are no official figures that can be systematically analyzed. At the beginning of the participatory gover-

nance model, through the annual reports of the manager of the Scheier building, there is a greater transparency of the results of the work and operations of the Scheier building. According to the following table, which shows the number of total concluded contracts for the use of the Scheier building, a positive trend in the use of the Scheier building can be seen since the beginning of the participatory governance. An analysis of the annual report on the use of the Scheier building (November 2019 — October 2020) in Table 3 shows an increase in the use of the building premises.

Table 3 — Comparison of the Number of Concluded Contracts (Source: own production according to the report of the manager of the Scheier building)

	The total number of concluded contracts for the use of the Scheier building in 2019	79	
T	The total number of concluded contracts for the use of the Scheier building until November 2020	130	

In the first reporting period (from November 1, 2019 to October 31, 2020) the building was used for a total of 214 days out of 365 days. In second reporting period (from November 1 to October 16, 2020) a total of 215 from 351 days. In the first year of project implementation, the focus was on developing a participatory model; business model development, sustainability model and communication strategy. From the project report, for the first time, data are available segmented by target groups of building users, by categories: civil society organizations, natural persons and other legal entities. This information is extremely useful for future analyzes and performance measurements of target group activation campaigns.

In 2020, despite the COVID-19 pandemic and measures to restrict the organization of events in the Scheier building, exhibitions (19), trainings (15), exercises/rehearsals (13), workshops (8), public talks/tribunes (8), professional gatherings (8), concerts (7), presentations (6), closed programs (4), conferences (4), performances (3), dance (3), fairs (3), meetings (3) were produced.

An analysis of the marketing activities of the Scheier building shows that additional channels of communication have been developed. The manager of the Scheier building states that four main channels of communication were used:

- 1) website https://scheier.hr/ (opened 11/2018);
- 2) Instagram profile scheierhr (opened 11/2018);
- 3) Facebook profile scheierhr (opened 10/2018);
- 4) newsletter / e-newsletter (launched 2/2019).

The results of the launched communication channels can be seen in the following table:

ı	0	0 ,	
Channel	Nι	umber of followers	Reach
Instagram		507	
Facebook		619	67,200
Web page			29,925
Newsletter		120	

**Table 4** — Communication Channel Results (Source: own production according to the report of the manager of the Scheier building.)

New communication channels have increased the visibility of the program in the Scheier building, especially use of social networks. It is important to point out the launched website with an active and up-to-date calendar of events, as well as the registration form. On it, each user can register a program in the Scheier building in a short time (in accordance with the Scheier Building Regulations). In the first year of testing the communication channels, of the selected channels, Facebook proved to be the best for distributing content and promoting the Scheier building program. It should be noted that the entire reach is organic, ie no paid promotion services have been used. During the project, documentation for the development of the Scheier building business model was prepared. The business model is a set of assumptions based on the previous experiences of actors working on the development of the center and on similar models in the world. A simple and focused approach was chosen that will enable market positioning while testing assumptions and further development of the offer. A tool (Value Proposition Canvas) has been developed that describes the needs and characteristics of the 3 groups of users targeted by SCHEIER (authors, event organizers and audiences) and how the center responds to these needs. For the purposes of the business model, we view event organizers as one group. In the communication strategy, this group is divided into event organizers that fit into the segment that the center encourages (contemporary art, innovative cultural practices, a combination of cultural and social, etc.) and other organizers. It was concluded that the SCHEIER offer is based on three services:

- Event organization
- Support for artists / authors
- Support to organizations

Support refers to the activities of renting space and equipment, education and mentoring at the following topics: event organization, partnership building and marketing.

## CONCLUSION

This paper describes a model of joint decision making and participatory governance. Both planning, implementation and control take place in the domain of the whole group, organized on the principle of "one member, one vote", which shares tasks and

has self-responsible members who monitor each other. Management is a difficult task, and participatory governance is even more difficult because it requires awareness of group dynamics and a lot of mutual trust. Furthermore, paper connects the notion of the creative industry (subsectors: 1. Museums, libraries and heritage, and 2. Art) and the business model as tool for successful business in the same industry. Business model as the rationale of how an organization creates, delivers and captures value. The paper presents the story of a non-profit organization that has been systematically advocating and revitalizing unused public spaces for years — Cakovec Community Centre Platform. Their "New Practices — Participatory Management of the Scheier Building" project in partnership with Međimurje County is an example of participatory governance model. In two years of project implementation, many results have been achieved that prove how the model works in practice. The project has spawned a business model based on the results of Joint Management over Scheier building. It was concluded that the SCHEIER offer is based on service such as: event organization, support for artists / authors and support to organizations. Support refers to the activities of renting space and equipment, education and mentoring at the following topics: event organization, partnership building and marketing. The cooperation between Međimurje County and the Platform around the Scheier building project proved to be successful according to all the given project activities. The project also increased visibility and strengthened civil society organizations on the topic of participatory governance.

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# THE DIGITIZED PARČIĆIANA: A LONG-STANDING CROATIAN LEXICAL TRADITION

#### Abstract

The paper examines a part of the computerized opus by Dragutin Antun Parčić, a noted Croatian philologist, former Franciscan tertiary, and canon of the Rome-based Pontifical Croatian College of Saint Jerome, born in Vrbnik on the island of Krk in 1832. An educator and factotum equally dexterous in astronomy, botany, geography, grammar, Glagolitic script, lexicography, Old Church Slavonic, pioneer photography, translation studies and typography, Parčić authored several editions of the Croato-Italian and Italo-Croatian dictionaries, founded on the premises of the Zagreb Philological School's opposition to the tendencies propagated by the Croatian followers of Vuk Stefanović Karadžić's linguistic doctrine, that is, the "Croatian Vukovians." As a digitized version of the 1995 reprint of Parčić's *Rječnik hrvatsko-talijanski* (Zadar, 1901) is available at the website of the Faculty of Humanities and Social Sciences in Osijek, the paper exemplifies Parčić's abundant thesaurus in an exquisite repository that was published only a year prior to his demise, his scrupulous reliance on the vernacular Croatian lexicon, and his significant contribution to the holdings of the Croatian calques and neologisms, many of which are still used nowadays.

Keywords: Dragutin Antun Parčić, lexicography, digitization, Croatian lexicon, neologisms

Dragutin Antun Parčić (Carlo A. Parčić, 1832—1902) was a Croatian theologist who sojourned in many monasteries and worked as an instructor and an appointed canon at the Pontifical Croatian College of Saint Jerome in Rome, Italy. Having also been a polyglot and a polyhistor in the domains of astronomy, botany, geography, photography, publishing, and translation studies, Parčić was especially distinguished in Glagolism and enthused over the Zagreb Philological School's lexicography in a manner similar to that of August Šenoa and other prominent Croatian writers (Vince, 1995), as opposed to the Croatian adherents of Vuk Stefanović Karadžić (the so-called "Croatian Vukovians").

Furthermore, as differentiated from his lexicological contemporaries (e.g., Ivan Broz), during his lifetime Dragutin Antun Parčić has succeeded in collecting more than merely a basic material for his intended Croatian dictionary, having edited and perfec-

<sup>&</sup>lt;sup>1</sup> This, Parčić's appointment, effective up to the moment of his demise in Rome on Christmas Day, 1902, was instrumentalized by Ivan Crnić, a noted Glagolitic historian.



Figure 1 — Dragutin A. Parčić in His Monastic Habit (Photographed by Josip Brčić)

ted a series of his Croato-Italian and Italo-Croatian lexica and having it crowned in 1901 by the third, 1,200-page edition of his major Croato-Italian lexicon (Vince, 1995).

When it particularly comes to Dragutin Antun Parčić's linguistic activity, this Third Order Franciscan interested in Glagolitic script notified the Croatian words and ascribed the Italian equivalents to them already as a senior Germano-Italian elementary school student in Krk, having compiled a small Italo-Croatian dictionary as a juvenile theologian in Zadar (Zara). As a Zadar professor, Parčić diligently collected the phrasemes and lexemes for his lexicographic thesauri, using both the older dictionaries and lexica (authored by Giacomo Micaglia [Jakov Mikalja], Ardelio Della Bella, Joakim Stulii [Joakim Stulic] and Bogoslav [Bohuslav] Šulek) and the folk informants, having circumnavigated the islands and having traveled on the mainland.

In terms of his chief printed opus, Parčić compiled three fundamental Croato-Italian dictionaries and aggrandized the lexis with each new edition, having progressed from the Illyrian and Slovincian to the Croatian language title-wise: an Illyrian-Italian lexicon (*Riečnik ilirsko-talianski: Polag najnovijih izvorah*, Zadar, 1858), a Slovincian-Italian lexicon (*Rječnik slovinsko-talijanski*, Zadar, 1858, a revised and expanded edition), and a Croatian-Italian lexicon, respectively (*Rječnik hrvatsko-talijanski: Treće popravljeno i pomnožano izdanje*, Zadar, 1901). Additionally, he edited his own works and also rendered his pre-print services to others, having thus enabled the publication of an Old Slavic chrestomathy (by Giuseppe Bercich [Josip Brčic], 1859), his own Croatian grammar in the Italian language (1873, translated to the French in 1877, with the second revised edition published in 1878), and a Glagolitic abecedarium (1894).

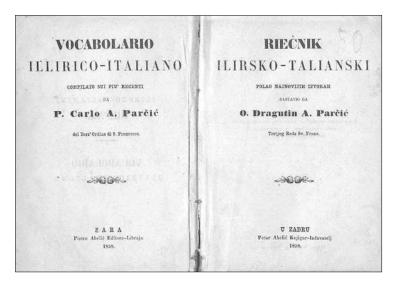




Figure 2 — Cover Pages of Dragutin A. Parčić's Vocabolario illirico-italiano (Riečnik ilirsko-talianski) and Rječnik slovinsko-talijanski (Vocabolario slavo-italiano)

What is more, he has introduced a variety of calques, neologisms, and popular expressions in his Croato-Italian dictionaries, many of which are still very usable nowadays (Jojić, 2015), while his Latin-Glagolitic dictionary remained in manuscript. Bearing in mind the fact that the 1995 reprint of the third, revised, and expanded edition of his Croato-Italian dictionary (*Rječnik hrvatsko-talijanski*, Zadar, 1901) is completely digitized (Faculty of Humanities and Social Sciences in Osijek, 2020), we will pay meticu-

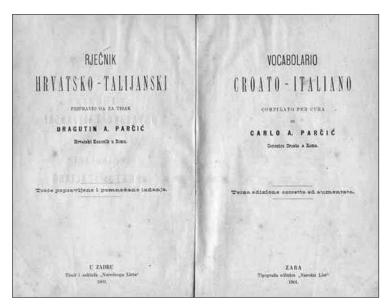


Figure 3 — Cover Page of Dragutin A. Parčić's Rječnik hrvatsko-talijanski (Vocabolario croato-italiano)

lous attention to his lexicography, place our focus on the three editions of his Croato-Italian dictionaries (while particularly emphasizing the third one), and more closely examine the neologistic tendencies reflected in the digitized *Parčićiana*.

# PARČIĆIANA REREAD: LEXICOGRAPHIC HIGHLIGHTS

Parčićiana renders a unique insight in the life and times of Dragutin Antun Parčić, a Croatian Franciscan priest, Glagolitic monk, and, above all, a prolific lexicologist, who was also recognized as an herb collector, painter, and photographer. In spite of these data, his entire authorship seems to still be insufficiently researched, primarily the segment of his creativity that coincides with the second half of the 19th century and his demise barely a year prior to the third and amended edition of the Rječnik hrvatsko-talijanski, Parčić's lexicographic magnum opus (Pavletić, 2005). Still, out of all the avenues investigated by this versatile mendicant, Parčić's lexicographic production, that is, the three notable iterations of the ample Rječnik hrvatsko-talijanski, exactly appears to be his most significant achievement, characterized by an elaborate and enriching onomasticon, which was constantly effectively supplemented by the anthroponyms and toponyms one edition after the other, pursuant to Parčić's gathered lexical materials.

**<sup>2</sup>** While Parčić's Glagolitic works mostly remained in manuscripts, it is less known that he also fathered Croatian photography, having been interested in the Krk cartography as well. Moreover, one of the oldest and best-preserved Croatian herbaria (Zadar, 1852), counting as many as 124 leaves, is attributable to Parčić, too (Badurina, 1993, p. 159).

To that point, even the subtitle of the aforementioned Parčic's Croato-Italian dictionary suggests that the third version of the *Rječnik hrvatsko-talijanski* is an edition that is "popravljeno i pomnožano" "rectified and expanded", signifying that the scope of an onomastic addendum, being Parčic's trademark ever since the first publication of his lexica, is also aggrandized to encompass more than 3,000 lexemes, commensurate to an increase in the basic lexical materials. As Parčic's onomasticon is divided in the "Osobna imena mužka i ženska" ("Male and Female Proper Names") and in the "Zemljopisna imena" ("Geographic Names"), it is worth emphasizing that this environmental segment of his contains more than 1,800 toponyms, that is, 511 names of the cities (in Croatia, its neighboring countries, Europe proper and in the United States of America), seven empires, islands, 24 European and non-European kingdoms, 750 localities (with many Slavonian ones), 21 mountains (with a surprising absence of both the major Croatian oronyms such as Dinara, Papuk, and Velebit and the global ones such as the Alps, the Himalayas, and the Ural Mountains), 40 provinces, 20 regions, four republics (in the then sense of the word) and 28 rivers all around the world.

Since Parčić, a distinguished Franciscan tertiary and a prolific and versatile Croatian linguist, resolutely promoted a follow-up to the Zagreb Philological School, he self-created numerous neologisms dictated by the technological progress, and this endeavor of his was especially useful for both the 'men of letters' and for the Croato-Italian translators from the 19th century on. Thus, in addition to the abovementioned lexemes, Parčić's toponomasticon, containing almost 1,300 units, enumerates the ethnics, ethnonyms, and ktetics (though with an astonishing nonexistence of the ethnonym "Croat," as contrasted to the existence of the toponym "Croatia"), which represent a real toponymic treasure and lexically testify to all the historical geographic alterations from the second half of the 19th century up to the present times.

Simultaneously, however, Parčić was strongly relying on the Croatian linguistic tradition while embedding it spiritually and technically in the context of European industrialization. Thus, Parčić's venture has an indubitable historical value and serves as a template for the new terminological coinages and comprehensive studies (Turk, 2006). In contemporary Croatian philology, Parčić is evaluated as a factotum especially in the spheres of his extremely prolific Croato-Italian and Italo-Croatian lexicography, highly esteemed in literati circles because of an exceptional and peculiar repository of Croatian literary language, although his enormous word-building capacity and contributions are still practically insufficiently known by the unexpert public (Derossi, 2003).

Born as Antun Parčić on 26 May 1832 in Vrbnik, an important, century-old Glagolitic center on the island of Krk, he was educated in the Glagolitic script, Italian, and Latin by Father Roman Gršković at Saint Mary's Monastery of the Franciscan tertiaries, while his formative years were continued subsequent to the year 1851 in Zadar's theological seminary under the decisive Glagolitic influence of Benedikt Mihaljević, a professor of Old Church Slavonic language. Ordained as Dragutin Antun Parčić in 1854,

he taught the Croatian language and mathematics at the Zadar Gymnasium in 1857, having initiated his monastic and pastoral operations in 1859 as a parson in Prvić-Luka, an abbot of the Third Order Franciscan Monastery in Galevac (1860?64), and a lector and provincial secretary in Krk and Zadar.

Interestingly, Parčic's secularizational aspirations, manifested as early as 1864, when his attempts to chair the department of the Old Church Slavonic language at the Zadar-based theological seminary, were initially futile, 3 he disappointedly secluded himself to Glavotok in 1871. Having found a cast-off printing press in Rijeka, he cast the Glagolitic and Italian fonts and produced the Franciscan tertiaries' publications of his own.

Yet, Parčić also clearly provides a linguistic value added, regularly absent from the works of his coevals, as his opulent toponomasticon is especially appreciated. While so doing, Parčić circumstantiates his in-depth geographic expertise of the following aspects:

- hydronyms, islands, and provinces (which are extensively listed);
- empires, monarchies, and republics (which are also extensively listed);
- oronyms (which are only briefly referenced);
- ethnics, ethnonyms, and ktetics.

Also, in Parčić's œuvres, numerous Grecisms and Latinisms are translated by a Croatian equivalent, many of which are current in the present-day usage, while some of them could be an auctorial option, that is, bedrobolja ("sciatica"), besjedništvo ("rhetoric"), biljarstvo ("botany"), biljojedac ("vegetarian"), blagoglasje ("harmony") and so forth.

Nonetheless, occasional orthographic modifications should still be applied to *Par-čiciana* to properly reflect a modernized (phonological) Croatian spelling, that is, in a cultivated style, one may thus adapt Parči*c's boljoslovje* to *boloslovlje* ("pathology"), *čovjekoslovje* to *čovjekoslovlje* ("anthropology"), *državoslovje* to *državoslovlje* ("diplomacy"), *glasbeničtvo* to *glazbeništvo* ("musicology") and so forth. On the other hand, a very long series of various terms may be absorbed even in the most modern Croatian lexis without any alteration, for example, *brzoplovka* ("speedboat"), *protunožac* ("antipode"), *skladnorednost* ("symmetry"), *sredobježnost* ("centrifugal force"), and the like.

# A SUCCINCT ANALYSIS OF PARČIĆ'S LEXICOGRAPHIC METHOD

Parčic's lexicographic work, initiated as early as in his days as a divine and assisted by his biennial educational activity as a Croatian language teacher at a Zadar-based gymnasium, when a small-sized Italo-Croatian dictionary of his (Croatian: *Riečnik ilirsko-ta-*

<sup>3</sup> Bishop Josip Juraj Strossmayer himself provided his assistance to facilitate Parčić's abandonment of the Franciscan Order in 1876.

*lianski: Polag najnovijih izvorah*, Italian: *Vocabolario illirico-italiano*) was published in Rijeka by Ercole Rezzo in 1858, was eventually extended up to more than a quadragenarian period. It is worth noting, however, that Parčić himself considered this lexicon rather an "opuscule". that is, merely a preparation for a more comprehensive and serious dictionary that would come to fruition sixteen years later.

The "real" Parčić thus emerged already in 1874, predominantly thanks to the printing efforts invested by the Zadar-based brothers Pietro Battara and Francesco Napoleone Battara (Galić, 1979, pp. 59-61), that is, owing to the emergence of the second, expanded edition of his Croato-Italian dictionary, orthographically slightly modified to properly illustrate the *jat'* reflex and consequently entitled *Rječnik slovinsko-talijanski* (Italian: *Vocabolario slavo-italiano*). Nonetheless, having completely eliminated the adjectival *ilirski* or *slovinski* designations from the third lexicon iteration, his 1901 chef d'oeuvre entitled *Rječnik hrvatsko-talijanski* (Italian: *Vocabolario croato-italiano*), Parčić secured his position and acceptance both in the well-informed Croatian lexicography and in the general reading audience, having even earned kudos and an 1875 *Vienac* laudation by the Croatian bards such as August Šenoa (1875, p. 248).

Parčić's 1858 lexicographic debut, an 847-page, two-column book with approximately 50 lexemes per page primarily dedicated to the "Illyrian youth" (Gostl, 1998, p. 114), already introduced an onomastic addendum, showcasing a 14-page list of the male and female Christian names and a 13-page list of geographic names. Analytically, its fundamental corpus comprised circa 42,000 lexemes, excluding the derivatives, idioms, and phrasemes, and adduced 900 anthroponyms and 566 toponyms.

Inspirationally, however, Parčić also deployed a more mature stratum of the Croatian thesauri: Giacomo Micaglia's synoptic Croato-Italo-Latin lexicon Blago jezika slovinskoga illi Slovnik u komu izgovarajuse rjeci slovinske latinski i diacki (Loreto / Ancona, 1649—1651), Ardelio Della Bella's comparative trilingual lexicon Dizionario italiano-latino-illirico a cui si premettono alcune brevi instruzioni grammaticali necessarie per apprendere la lingua e l'ortografia illirica (Venice, 1728), Joakim Stulli's lexicon Rjecsosloxje: U komu donosuse upotrebljenia, urednia, mucsnia istieh jezika krasnoslovja nacsini, izgovaranja i prorjecsja (Dubrovnik, 1806), Josip Drobnić's Ilirsko-němačko-talijanski mali rěčnik (Vienna, 1846?1849) and Rudolf Alois Fröhlich's [Rudolf Veselic's] Rěčnik ilirskoga i němačkoga jezika (Vienna, 1853?1854). For the preparation of his 1,110-page Riečnik talijansko-slovinski (hrvatski) (Zadar, 1868; Senj [Segna, Zengg], 1887), with a lexeme total increased to 44,000, improved distinctive Italo-Croatian phraseology, and an enhanced terminology in anatomy, architecture, arithmetic, astronomy, botany, chemistry, commerce, geometry, jurisprudence, maritime affairs, mathematics, medicine, mineralogy, philology, philosophy, physics, rhetoric, soldiership, theology and typography, Parčić consulted Bogoslav Šulek's Němačko-hrvatski rěčnik (Zagreb, 1860) as well.

A preface to Parčić's 1874 *Rječnik slovinsko-talijanski*, an augmented upgrade to its 1858 and 1868 paragons, conceptually also introduced a novel idea of vernacular corpus contributors (e.g., the Canon Mihovil Pavlinović and his then unpublicized collection) with regard to the 53,000 lexemes on its 1,014 two-column pages. Thanks to its revised abbreviations, error corrections, and onomastic appendices, the lexicon offered an array of excellently functional Stulli's and Šulek's neologistic coinages, as well as Pavlinović's equivalents and synonyms, especially in the domains of Croatian professional and scientific terminology (Brlobaš, 2003, pp. 9:20; Vajs, 2003, pp. 339:353; Vlastelić, 2011, pp. 159:175), so one may find therein the still adequate and utilizable expressions such as *dušoslovlje* ("psychology"), *vodopis* ("hydrology"), *zemljomjerstvo* ("geodesy"), *životinjarstvo* ("zoology") and many other words.

Finally, 50,000 completely new popular and scientific vocables and an onomastic appendix, comprising a total of approximately 75,000 lexemes, entered the third, rectified and expanded edition of Parčić's *Rječnik hrvatsko-talijanski* in 1901, having synthesized, at an intellectual rendezvous of the Croatian and Italian cultures, the Chakavisms (frequently mediated by the numerous Italianisms or, occasionally, by the Turkish loanwords), Kajkavisms (with the sporadic Hungarianisms, Italianisms, or even the idioms mediated via Proto-Slavic linguistic stratum, such as *dikla*, "girl"), and the newly standardized Shtokavisms. Orthographically, however, Parčić's pedagogical and philological masterpiece (Bratulić, 1995, p. 1277; Katičić, 1995, p. 1277) replicated the traditional, moderately etymological principles of the Zagreb Philological School (as propagated by Vjekoslav Babukić), having rejected Croatia's scholastic 1892 phonological writing system, Đuro Daničić's spelling innovations of d, g (currently replaced by  $d\hat{z}$ ), g (currently replaced by g), and g (currently replaced by g), as well as a novelty pertaining to what Parčić calls the "depleting," syncretized plural cases of the "Croato-Serbian language" ("Predgovor k trećemu Izdanju," 1901, p. ?).

# IN LIEU OF A CONCLUSION OR, PARČIĆ'S LINGUISTIC ACTIVITY EPITOMIZED

The third revised and expanded edition of Dragutin Antun Parčić's *Rječnik hrvatsko-ta-lijanski*, a Croato-Italian dictionary published by the Zadar-based Narodni list in 1901, that is, at the very commencement of the 20th century, is printed on an impressive total of 1,237 pages and contains as many as 90,000 entries. Besides, it holds a valuable onomastic addendum and brings forth a cornucopia of the excellent Croatian equivalents (Putanec, 1993, pp. 89-92), possibly replacing many foreign terms subsequent to just a slight orthographic modernization, to accommodate to the 21st-century rules.

Considered to be Parčic's largest and preeminent opus, the lexicon is also significant while studying the Zagreb Philological School's oppression toward the "Croatian Vukovians," as Ivan Broz and Franjo Iveković published their *Rječnik hrvatskoga jezi*-

ka in Karl Albrecht's Zagreb-based printing office in 1901, too. Yet, Parčic's toponomasticon included in the 1901 edition of the *Rječnik hrvatsko-talijanski*, an eyewitness to his lifetime and contemporaneous historical changes, is an ample and linguistically extremely significant list of the former toponyms that demonstrates the author's enviable expertise in geography as well.

Actually, all Parčic's onomasticons carefully studied Croatian dialectology, ethnology, etymology, history and mythology and have been aggrandized from the incipient 900 anthroponyms and merely 566 toponyms in the first Croato-Italian lexicon edition to the respectable 1,200 anthroponyms and 1,700 toponyms in the second edition, while the dictionary entries of the *Rječnik hrvatsko-talijanski* increased the toponymic total to 1,800.

Thus, it introduced the words such as *suncobran* ("parasol, sunshade, umbrella"), then a neologism, today a standard Croatian term, but also selectively refreshed certain long-forgotten archaisms, such as *groktalica* ("a vibrant, yodel-like Croatian song"), which could also be used in a modern literary or musicological context, and therefore, in an elevated style, the nomenclature in many scientific disciplines could still benefit from Parčic's vast thesauri.

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Jasmina OVČAR is a master engineer of architecture and urbanism completed at the Faculty of Architecture in Zagreb, 1989. She has 25 years of work experience in architectural design as managing designer as well as building supervisor, managing a privately held business. Since 2014, she works as a senior lecturer at the Polytechnic of Medimurje in Čakovec in the Study of Sustainable development, field sustainable architecture and construction, with a view to sustainable development. Jasmina's professional papers refer to the field of sustainability of architecture but in an interdisciplinary and multidisciplinary context (especially in the fields of tourism, geography, economics, etnology, urban planning).

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**Barbara PRINČIČ** is an industrial designer. Soon after her graduation, she obtained a Dutch scholarship and realised that sustainability was going to be her life orientation. Today she lectures and manages sustainability-oriented design projects at her department. She is a promotor of the reuse concept. She also lectured as a guest scholar at the National Yunlin University of Science and Technology in Taiwan. During the last 10 years, Barbara educated several environmentally responsible designers, capable of developing strategic solutions in compliance with the requirements of a circular economy. She regularly works with different companies to help them close the loop within industrial processes.

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Natasha Kathleen RUŽIĆ, Ph.D., was born in Australia were she completed a Bachelor in Education, Masters in Education — Management, Masters in Applied Linguistics and a PhD in the fields of Education/Social Sciences focusing on socio-linguisitics, computer-mediated communication and pedagogy investigating collaborative virtual transnational spaces for developing cultural understandings and skills and language. In Croatia, Natasha work in private business for 3 years and then was employed at the Research Institute of Croatian Studies of the University of Zagreb focusing on interdisciplinary research on topics relating to Croatia, the Croatian diaspora, return-migration: identity, culture and entrepreneurial behaviours. She began working at the Institute for Migration and Ethnic Studies since the beginning of 2021.

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Dina VOJKOVIĆ was born in 2002 in Split, Croatia. She attended elementary school in Vis, on the island of Vis from 2009—2017. During her elementary education, she participated at the LiDradNo state review. In 2017, she enrolled in the high school programme at the Secondary school Antun Matijašević Karamaneo Vis. In 2018, she participated at the state biology competition with a research project. In 2019, she wrote a paper on Sustainability Global Goals and her poster was part of the Swedish Institute's final exhibition. In 2020, she attended both the state competition We Are Describing Systems and the Mediterranean Islands Conference on the island of Vis with the same topic.

Goran VOJKOVIĆ, PhD, Associate Professor, was born in Split in 1971. He has more than twenty years of work experience in the civil service and private sector, working on different types of jobs; from the Governmental Office Counsellor to the Head of the Governing Council of the Port Authority of the port of Vukovar. For four years, he was a member of the Supervisory board of the JANAF company, and, for two terms, he was an external member of the Committee for Legislation of the Croatian Parliament. Also, he has great experience working on EU projects both in Croatia and Bosnia and Herzegovina. Currently, he works as an Associate Professor at the University North, and at the Faculty of Traffic and Transport, University of Zagreb, while also co-operating with other higher education institutions in Croatia.

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Filip ŽIVALJIĆ has a master's degree in cultural studies — majoring in cultural management. In the position of project manager and executive director of the Čakovec Community Centre Platform, he is establishing a model of co-management of the building "Creative Educational Center Murai". He is an external associate at the Polytechnic of Medimurje in Čakovec, and through the engagements and projects he leads, he advocates for the further development of creative industries in Croatia.

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Mateja ŽUPANČIĆ, mag. croat. et. mag. educ. croat., was born in 1993 in Zagreb. She finished high school in Zabok in 2011 and enrolled in the university program of Croatology and Communicology at the Faculty of Croatian Studies, University in Zagreb. She graduated Croatology in 2016. Currently she is employed as a high school teacher in the *Elektrostrojarska obrtnička škola* (Electrical Engineering School) in Zagreb. She is a PhD candidate at the Faculty of Teacher Education, University of Zagreb. Her scientific interests are organized around the field of Educology, pedagogy with special focus on the class organization, discipline and motivation of both students and teachers.

# **Organizers**

### INSTITUTE OF SOCIAL SCIENCES IVO PILAR

Institute of Social Sciences Ivo Pilar is a public scientific institution that was founded within the University of Zagreb on November 26th, 1991 by the decision of the University Assembly. Its areas and fields of scientific research are: a) social sciences (psychology, sociology, demography, education and rehabilitation sciences, political sciences, economics, information and communication sciences), b) humanities (history, theology, philosophy, ethnology and anthropology, religion science, philology) and c) interdisciplinary scientific areas (cognitive sciences, geography, gender studies). The Institute's head office is in Zagreb, but the Institute also has 8 regional centres (Pula, Gospić, Split, Dubrovnik, Varaždin, Osijek, Vis and Vukovar). Ivo Pilar Institute has so far taken part in more than 330 research projects, of which 60 international projects. Among the international projects, the most prominent projects are those financed by the Horison 2020, and among national projets those financed by the Croatian Science Foundation. Since its foundation the Institute has published over 150 books, including 57 collections, 43 studies, and 50 special editions, such as monographs. The Institute publish journal Društvena istraživanja — Journal for General Social Issues, which is referred in the most prominent scientific databases. The Institute has developed a comprehensive network of cooperation with foreign and local institutions, organizations, and researchers, and with international and regional governmental organizations, institutions and associations, and NGOs.

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### VERN' UNIVERSITY

VERN' University represents the essence of academic experience and knowledge gained through many years of successful organic growth from the advisory office for education in an international environment to the highest academic level, a university in the professional-scientificacademic field. Today, VERN' University consists of three faculties and one academy — the Faculty of Economics and Business, the Faculty of Computing and Technology, the Faculty of Media and Communications, the Academy of Arts — and implements ten undergraduate and seven graduate study programs in the field of computer and communication sciences, economy, finances, media, tourism and creative industries. Its presence on the international market is reflected through membership in international organizations and projects and cooperation with foreign institutions and universities such as the European Foundation for Management Development, the European Public Relations Education and Research Association, Erasmus+ Program for students, teachers and non-teaching staff, the Interdisciplinary Centre Herzliya from Israel, Glasgow Caledonian University, Vaasa and Aalto Universities from Finland and other international institutions. The topic of sustainability is the basics of academic and business activities of VERN' University as well as the courses of study programs. The experience gained through the pioneering positioning of sustainable development and social entrepreneurship in higher education, VERN' University implements through international projects with partners from the European Commission, the UK, Israel, India, Turkey, Spain, Germany, Sweden and other countries.

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he conference book offered to our attention is devoted to the socio-economic, historical, cultural and anthropological dimensions of the diverse local social communities of the islands mostly in the Croatian Adriatic, but it bears the spirit of the whole Mediterranean cultural area. The research presented at the 3<sup>rd</sup> International Multidisciplinary Scientific Conference MIC — Vis, 2020 is impressive both for its multiplicity and for the diversity of the topics and the questions and issues raised. The conference organizers can only be congratulated for this successful meeting of scientists, people and cultures from different parts of world and the Mediterranean in particular. I hope other organizations and academic institutions in other Mediterranean countries will collaborate, share in the research and test methodologies developed in these works on their territories and region, and of course, organizing new encounters of explorers and locals on Vis, despite the current limitations of the COVID-19 Pandemic.

Petko HRISTOV, PhD, Institute of Ethnology and Folklore Studies with the Ethnographic Museum, Bulgarian Academy of Sciences in Sofia, Bulgaria

he contributors, researchers from different academic circles, explored at a high level, a lot of issues and connections that define in this case, the Adriatic Sea and its islands, in the macro Mediterranean region, as a complex one that has great heterogeneity in various aspects, such as historical, geographical, anthropological, sociological, and economic. They highlighted this culturally diverse region, symbol of tradition and modernity, as capable of shaping, congregating and synergizing national identity and culture. I welcome this excellent book, congratulating the participants and organizers of this outstanding conference held in the island of Vis, for their contribution to scientific knowledge and cooperation, strengthening also the academic institutions that support them.

Juan Carlos RADOVICH, PhD, Universidad de Buenos Aires, Anthropology Department, Argentina





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