## Machine Translation vs. Human Translation: Semantic Distinctions in English-Croatian Translations

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#### UNIVERSITY OF RIJEKA

#### FACULTY OF HUMANITIES AND SOCIAL SCIENCES

#### DEPARTMENT OF ENGLISH

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# MACHINE TRANSLATION VS. HUMAN TRANSLATION: SEMANTIC DISTINCTIONS IN ENGLISH-CROATIAN TRANSLATIONS

Submitted in partial fulfillment of the requirements for the B.A. in English Language and Literature and Italian Language and Literature at the University of Rijeka

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#### ABSTRACT

Translation, a discipline that is a vital part of the knowledge and the study of a particular language, at the beginning of the last century was only associated with human knowledge and ingenuity. Nowadays, owning precisely to the same ingenuity, it is not just attributed to humans but also to the machines in a substantial way. In this paper, we will give a brief overview of translation as a discipline and its history before focusing in detail on machine translation, as one medium of translation. The human translation (HT) will be compared to a machine translation (MT) of the same texts taken from different nonliterary genres: administrative, criticism, blog, and academic, to provide some answers to the questions of whether or not machines have reached the level of proficiency that would make human translators and thus human translations obsolete in comparison, whether machine translation has been able to improve upon its original issues and in what way a human translation differs from a machine one. We will analyze these texts at a semantic level, i.e., our efforts will be focused on comparing how machine translation software deals with notions such as polysemy, context, and idioms, thus covering just a fraction of the vast area that is covered not only by machine translation but also by translation as a whole. The findings of this paper are in no way definitive given the small sample size of texts and also the fact that only a single machine translation software (Matecat) was used in the process.

Keywords: human translation, machine translation, Matecat, English, Croatian, semantics

#### List of abbreviations

MT- machine translation HT- human translation ST- source text TT- target text TL- target language

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#### 1) INTRODUCTION

The reason why translation studies have become more prevalent and important nowadays is due to three factors: "the proliferation of specialized translating and interpreting courses, the proliferation of conferences, books, and journals, and the rise in the prosperity of international organizations" (Munday 2010: 6). Due to these factors practical aspect of translation has seen a steady increase in the amount of work in the translation department e.g., the importance of translation of documents for every member state of the EU has increased from 20000 in 1995 to 280000 in 2001 (Hatim and Munday 2004: 112) showing that the need for translation work has increased tenfold in 6 years.

But translation has not always been a standalone discipline as it is nowadays; originally it was embedded and studied only in the context of a particular foreign language as means of teaching the grammar of that language. The definition of translation proposed by Munday states that "it can refer to the general subject, field, the product (the text that has been translated) or the process (the act of producing the translation, otherwise known as translating.)" (Munday 2010: 5) And according to the Merriam Webster online dictionary translation can be defined as: "an act, process, or instance of translating"

Context, polysemy, idiomatic meanings, and deictic expressions are an integral part of semantic analysis and thus a vital part of this paper whose purpose is to compare the translations of a machine translation software to human translations, with the focus on the former one, to analyze how successful a machine is in dealing with complex semantic aspects of the translation process. Translation of idiomatic meanings, for example, are crucial in determining whether MT is translating the text 'word for word' or if it is analyzing the text on sematic level and taking into consideration the different, fixed meaning that an idiom has and that it cannot be inferred from word-by-word- translation. Given the developments in MT in the last decade due to the algorithmic nature of its "learning", especially for the English language, we will give a conclusion on whether MT has improved enough in these years.

In this paper, we will analyze four texts that were translated by both a human translator and a machine translation software "Matecat" in order to find differences on the semantic level between the two. The findings of this paper are in no way definitive given the small sample size of texts and also the fact that only a single machine translation software (Matecat) was used in the process, but they will serve as an insight into the nuances that tell apart a work of a machine from a work of a human translator. The author of this paper is the HT of the first three texts,

and for the last one a golden standard was used to compare MT to HT. This gives only a single HT text to compare to a single MT text which might give more biased results than more than it would if more than one HT were used. Within translation, there are numerous areas, methods, and tools employed in the process of translating a particular text on which we will not focus our attention given that it would be outside the scope of this paper.

#### 2) HISTORY OF TRANSLATION

Even though translating is as old as the language itself, the act of written translation takes us back as far as the Roman empire period with a translation of Homer's Odyssey into Latin in 250 BC by Livius Andronicus, a slave of Greek origin. Translation has just recently been established as a standalone academic discipline, more precisely in the second half of the 20<sup>th</sup> century. Before that, translation had normally been merely an element of language learning in modern language courses (Munday 2010:7). In that period translation was used as a part of a grammar-translation method (Munday 2010:7) as the main way of teaching both grammar and translation techniques to practice grammatical structures that were thought in schools. The main issue with this approach was that those sentences were artificially created in order to exemplify the grammatical structure that was taught in schools and later on translated into other modern foreign languages as well as Greek and Latin. Due to that fact, it may partly explain why academia considered it to be of secondary status (Munday 2010:8) adding to this that the analysis of translated texts and translation, in general, was generally frowned upon since its main purpose is to help the student become fluent in learning how to read in the original without having to translate it first. The decline of this approach started in the 1960s and 1970s in many English-language countries due to the introduction and subsequent boom of the direct method or communicative approach to English language teaching. (Munday 2010:8) In this approach the goal was to recreate the conditions that would be used if that foreign language was used as a mother tongue, meaning that the usage of students' mother tongue i.e., English, was forbidden, and thus the need for translating the foreign language was removed from beginner and intermediate levels of learning and restricted to higher-level and university language courses and professional translator training. Across the Atlantic Ocean, there was also a rising interest in translation via the translation workshop concept designed specifically for literary translation as a means of introducing the new translations into the target culture. "Running parallel to this approach was that of comparative literature, where literature is studied and compared transnationally and transculturally, necessitating the reading of some literature in translation" (Munday 2010:8). Another way in which translation was used was in the so-called contrastive

analysis, introduced in the 1930s, from the name of which it can be deduced that different languages were put into contrast to make apart both their distinctive features as well as find similarities between them. This approach peaked in the 1960s and 1970s having a strong influence over other studies such as Vinay and Darbelnet's (1958) and Catford's (1965) just to name a few, but the approach had a major flaw in its design. It did not incorporate sociocultural and pragmatic factors, nor the role of translation as a communicative act. (Munday 2010:9). As previously mentioned, the beginning of the second part of the 20<sup>th</sup> century was a vital part in the creation of a systematic, and mostly linguistic-oriented approach to the study of translation with authors such as Jean-Paul Vinay and Jean Darbelnet, Alfred Malblanc, Eugine Nida, and Georges Mounin being the front-runners in the creation of a standalone discipline of translation. Nowadays the discipline is generally known as 'translation studies', thanks to the Duch-based US scholar James S. Holmes. (Munday 2010: 5)

Within the wider process of creating translation as a standalone discipline, there was another, more precise history unfolding within that one at the same time. The history that we are talking about and that is crucial for this paper is the history of machine translation (hereafter MT). The history of MT starts during the Second World War with the invention of the Bombe, a machine designed by the mathematician Alan Turing to help translate Nazi communications. After the war and at the beginning of the Cold War the MT that could provide instantaneous Russian-English translations was heavily funded by the American government and at the same time other military forces such as the USSR, France, UK, and Japan all had invested in the MT devices but on a smaller scale comparatively speaking to that of the US. These first-generation systems were known as 'direct' systems since they were basically word-based 'directreplacement' systems; each source text (hereafter ST) word would be looked up and replaced by a corresponding target language (hereafter TL) term. (Hatim and Munday 2004: 115) In the 1960s the interest in machine translation plummets due to the issues with word-for-word translation being insufficient for the quality machine translation and the criticism by Yehoshua Bar-Hillel in his Report on the State of Machine Translation in the United States and Great Britain (1959). Bar-Hillel believed that in order to create a quality translation one must take into consideration the real-world knowledge (Hatim Munday 2004: 116) thus making the task impossible for a machine, making the comparison between the work of a machine and a human translation redundant. In a brief overview of the history of the field, Martin Kay (1980/2003) discusses some of the obstacles to a successful MT including "words with multiple meanings, sentences with multiple grammatical structures, uncertainty about what a pronoun refers to, and other problems of grammar" (Hatim and Munday 2004: 116). From the 1970s onward there has been an uplift in the usage of MT mostly due to it being used for more specific situations such as the METRO railway system as opposed to general translation practices. MT developments over recent decades have focused on second-generation 'indirect' systems, which add an intermediate phase between ST and TT with the interlingual approach<sup>1</sup> and the transfer approach<sup>2</sup> being the methods of choice.

## 3) MACHINE TRANSLATION AND ITS DIFFICULTIES ON A SEMANTIC LEVEL

Machine translation (MT) can be defined as a fully automatic process that starts with a text in one language and produces a corresponding text in another language, using a machine of some kind (Melby 2020: 419). The purpose of the MT is, at the same time, its main issue. The goal of MT is for it to be much faster (meaning more productive) than a human and more economical. (Ivir 1978: 26) If we analyze the aforementioned goal through the lens of it being its major downside, we can immediately point out the fact that even though machines are much faster in the raw process of translating the ST into the TT, we must consider the quality of the final product. The problem lies not only in the fact that the product of MT is a rough version that requires additional rereading and polishing by a human translator but also in the fact that for a certain ST to be translated via machine the text must first be prepared by a human for it to be read and correctly interpreted by a machine.

In the process of finding a solution to the problem of how to maximize the quality of the translated text one major type of written text was completely excluded as a subject of MT: literary texts. Literary texts with their seldomly literal nature, poetry above all, were excluded due to the fact that the human capacity to use ordinary words to produce completely different meanings is one of the things that creates major problems for MT software. "Machine requires a logical rigidity and does not tolerate ad hoc solutions and visual metaphors instead of clear descriptions and scientific explanations" (Ivir 1978: 27). With this in mind Hatim and Munday (2004: 115) argue that: "the goal of fully automatic or Machine Translation (MT) remains elusive although recent developments have been more promising". The two most well-known MT systems are SYSTRAN, used for the translation of webpages, and Candide-a system that

<sup>&</sup>lt;sup>1</sup> The Source Text (ST) meaning is represented in an abstract for before being reconstituted in the Target Text (TT) (Hatim and Munday 2004).

 $<sup>^{2}</sup>$  The transfer approach consists of three stages: (1) analysis and representation of ST syntactic structure; (2) transfer into TL structure; (3) synthesis of output from that structure (Sommers 1998: 145)

represents the statistical approach to MT. This approach uses corpus<sup>3</sup> or nowadays more than one corpus in the process, thus making the work of a machine more reliable and in some way closer to the original goal of MT of being a faster and more efficient translator than humans.

Seeing how thrilling and vast the area of MT is, and not to mention translation in general, for the purpose of this paper we have focused on just a small part, i.e., on the semantic aspect of the translation process. But before we move on to analysis and comparison of the texts themselves, we must first give some definitions that will help us to better understand what we will be looking for and comparing. Semantics can be defined as the historical and psychological study and the classification of changes in the signification of words or forms viewed as factors in linguistic development. (Merriam-Webster) With the keyword being meaning we must focus on different meanings a single word, or a phrase can have that may prove difficult for MT software. One of the things we will be analyzing in these texts are idioms. They can be defined as fixed, non-compositional phrases consisting of more than one word. 'Non-compositional phrase' means that the meaning of the phrase cannot be inferred from the meanings of individual words. (Brala-Vukanović 2013: 101). These fixed phrases, found in all types of texts, will be crucial in determining whether or not MT has improved enough not only to recognize that a particular phrase cannot be translated word for word but also if it is able to find an equivalent in the TL that has the same or the closest meaning to the original. Moving on, we have perhaps the biggest and the most common semantic issue which is polysemy. It can be defined as "the fact of having more than one meaning" (Cambridge Dictionary). According to Brala-Vukanović (2013: 101) "the implied meaning is to a large extent based on clues that come both from the text as a whole and from the real world in which the text is situated." This means that if we are talking about the text that is in direct proximity to the word the meaning of which we are looking for, we are talking about the co-text i.e., linguistic context. If we are talking about either physical, situational, or world events surrounding situations we are talking about context i.e., physical context. But it is not only polysemy that requires context to deduce the true meaning of the word but also different deictic expressions. Deictic expressions can be defined as "words that cannot be interpreted without 'access' to surrounding co(n)text" (Brala-Vukanović 2013: 103), meaning that co(n)text, plays a crucial part in the translation process. Through the

<sup>&</sup>lt;sup>3</sup> A corpus is collection of naturally-occurring texts (i.e., texts which had been written for a communicative context and not artificially invented by the language researcher) that could then be processed and analyzed with software to investigate the use and patterns of the word-forms it contained (Munday 2010: 180).

analysis of the four texts that follow we will see if the MT has made progress regarding these elements or if it is still as rigid as Ivir claimed almost 50 years ago.

#### 4) ORIGINAL AND TRANSLATED TEXTS

#### 4.1. Text 1- Anticipation and uncertainty about the future after the Coronavirus

#### The original

Život je oduvijek bio neizvjestan, samo smo toga od neki dan postali svjesni. Iako mnoge stvari ostaju izvan kontrole, naš način razmišljanja ključan je za suočavanje s teškim okolnostima i susret s nepoznatim. Trenutna pandemija COVID-19 pojačala je neizvjesnost u pogledu ekonomije, zaposlenosti, financija, odnosa i, naravno, tjelesnog i mentalnog zdravlja.

Ipak, ljudi žude za sigurnošću, žele imati kontrolu nad svojim životom i upravljati s onim što nam izaziva nelagodu, strah i tjeskobu. Međutim, trenutni stres nas može emocionalno isprazniti i zarobiti u silaznoj spirali beskrajnih "što ako" scenarija koji nikako ne mogu popraviti trenutno stanje. I dok neki uživaju u riziku i žive nepredvidive živote, ipak velika većina smatra da je nasumičnost života duboko potresna. Ako osjećate da su vas briga i tjeskoba preplavile, znajte da niste sami, a na ovom brodu bez kormila zajedno tražimo tračak svjetla u daljini.

#### Život u neizvjesnosti

Živimo u neizvjesnim vremenima. Znamo da je koronavirus opasan, ali još uvijek nisu poznate sve informacije o njegovom utjecaju na organizam. Znamo da postoje rizične skupine, ali i oni koji su potvrdili da postoje iznimke. Još uvijek ne možemo s potpunom sigurnošću odrediti stopu smrtnosti, ali znamo da se moramo držati određenih mjera opreza jer i oporavak od koronavirusa ne mora značiti da neće ostati nikakvih respiratornih posljedica.

Znanstveni podaci su još uvijek ograničeni, a ova vrsta neizvjesnosti pridonosi našem neznanju koji potiče globalni strah od zaraze i smrtnosti. Međutim, ima nešto pozitivno u cijeloj priči, a to su podaci istraživanja koji pokazuju da ljudi mogu prihvatiti neizvjesnost te da se mogu nositi s "neznanjem" oko budućnosti. Iako uvijek težimo uspostavljanju maksimalne sigurnosti u svojemu životu, svjesni smo da nikada nećemo znati što točno donosi novi dan, tjedan, mjesec.

Zbog toga su psiholozi u svojim istraživanjima uspjeli pronaći zanimljivu pojavu. Naime, s obzirom na to da ljudi ne vole nesigurnost, posebno u pogledu budućnosti, hipoteza je da ljudi imaju pozitivnu reakciju i više vjeruju informacijama kada je komunikator otvoren oko nesigurnosti u činjenicama i brojkama. Drugim riječima, kada nam osoba kojoj vjerujemo otvoreno prizna da je stanje neizvjesno i da nema konkretnih informacija, ljudi će mu i dalje vjerovati unatoč tome što im nije dao sigurnost koju traže. Poanta je u otvorenosti i prihvaćanju neizvjesnosti, a ne na izbjegavanju i ulijevanju lažnog povjerenja na temelju nerealnih informacija.

No, kada bi pandemija bila jedini problem, možda bi ipak bilo lakše. Osim straha od zaraze i potresa u glavnom hrvatskom gradu koji je potresao brojne živote na ovaj ili onaj način, mnogi građani su ostali bez posla te se suočavaju s ozbiljnom financijskom krizom. Iako se završetak pandemije nazire s obzirom na opadanje broja zaraženih, logično rješenje ekonomskoj krizi još uvijek nije na vidiku. Najizglednije je da ćemo se još godinama pokušavati izvući iz minusa u koje nam je koronavirus priredio, a uz malo sreće ćemo i uspjeti.

Jedino se možemo nadati da će relaksiranje epidemioloških mjera opreza uskoro doći do svoje posljednje faze te da ćemo osjetiti dašak one "normale" koju smo prije imali, iako je ono što je trenutno izvjesno upravo to da će nam "nova normala" ipak postati novi obrazac života. Kako prihvatiti činjenicu da je život s maskama, rukavicama i socijalnom distancom normalan? Kako se pomiriti sa životom bez zagrljaja i bliskih kontakata? Kako prevladati strah od zaraze i vjerovati da ćemo se uskoro opet probijati u prve redove nekog ludog koncerta? Ne znamo.

#### Psihičke posljedice pandemije

Iako smo se u povijesti čovječanstva već suočili s različitim pandemijama, podaci ukazuju na to da izvanredna stanja u javnom zdravstvu mogu imati trajne posljedice na psihičko stanje stanovništva. U slučaju pandemije COVID-19, neki od ovih učinaka su očigledni: mnogi su izgubili posao i trenutno imaju značajnih financijskih problema, neki su se suočili s gubitkom voljenih osoba zbog koronavirusa, a nekima su se bliski odnosi pogoršali zbog karantene.

U istraživačkom projektu koji još uvijek traje, američki psiholozi procjenjuju prijavljene razine straha i tjeskobe kod gotovo 7000 odraslih pojedinaca iz Kanade i SAD-a. I dok se čini da se 75% njih odlično suočava s novonastalom situacijom, čak 25% ljudi je razvilo ono što se trenutno popularno naziva sindrom COVID stresa.

Takvi ljudi osjećaju snažan strah od zaraze, intenzivno su zabrinuti za socijalni i ekonomski utjecaj koronavirusa te konstantno provjeravaju internet kako bi saznali najnovije podatke o zaraženima, a to ujedno i pogoršava njihovo stanje. Ti ljudi su također skloni ksenofobiji koja

označava intenzivan strah od stranaca i nepoznatih ljudi za koje se boje da bi mogli biti prenositelji virusa.

Uz sve navedeno, prisutna je i tjeskoba zbog vlastite smrtnosti, kao i smrtnosti bliskih ljudi. Strahovi se potiču i masovnim medijima koji koriste sve vrste informacija kako bi manipulirali populacijom i držali ih u neizvjesnosti. Na temelju studija dosadašnjih katastrofa (poput poplava, uragana i zemljotresa), procijenjeno je da 10% ljudi pogođenih traumatičnim događajima razvije ozbiljne psihološke probleme poput poremećaja raspoloženja, anksioznih poremećaja ili posttraumatskog stresnog poremećaja (PTSP). Ovi simptomi se obično javljaju ubrzo nakon doživljene katastrofe, a za Zagrepčane koji su doživjeli potres uz aktualnu pandemiju, psihičko stanje je još uvijek u procesu stabilizacije, što je sasvim normalno s obzirom na stres kojega su doživjeli.

No, čak je i sama pandemija dovoljna da razvije takve posljedice. Nažalost, dosadašnja istraživanja su potvrdila te rezultate. Brojni ljudi koji su bili hospitalizirani zbog pandemije SARS 2003. godine, kasnije su razvili PTSP. Četverogodišnje praćenje 70 preživjelih otkrilo je da je 44% njih razvilo neku vrstu poremećaja koji se zadržao u svojem punom intenzitetu godinama.

Vjerojatno je i da bi oni koji nisu zaraženi koronavirusom također mogli razviti određene psihološke simptome zbog karantene. Naime, izolacija i zatočenost, pa premda trajala samo nekoliko tjedana, može uzrokovati trajnu anksioznost. Osobe koje su u karanteni duže vrijeme, posebno ako se nalaze u skučenom zatvorenom prostoru ili ako, još gore, žive u kući s osobama koje su sklone agresivnom i nasilnom ponašanju, mogu biti posebno osjetljive na razvoj simptoma PTSP-a za vrijeme ili nakon pandemije.

#### Pandemija u digitalnom dobu

Ostale psihološke promjene imat će više veze s ekološkim i društvenim promjenama. COVID-19 je prisilio društvo na isprobavanje potpuno novog načina života. Nastava u školi preselila se na male ekrane, radni sastanci se održavaju preko videopoziva, a namirnice se dostavljaju na kućni prag.

Mogli bismo reći da smo pravi sretnici jer proživljavamo globalnu pandemiju u digitalnom dobu, gdje je internet omogućio povlačenje iz vanjskog svijeta bez težih posljedica u svakodnevici. I prije pandemije, mnogi su radili od kuće, kupovali putem interneta i naručivali

hranu putem dostave. No, kada većina društva funkcionira u takvim uvjetima, nije teško zaključiti da se način života potpuno mijenja.

I nakon što koronavirus postane prošlost, shvatit ćemo da se život nikada u potpunosti neće vratiti u normalu. Mnogi će ipak ostati u "digitalnoj svakodnevici" i povući se u sigurnost doma, a simptomi opsesivno-kompulzivnih poremećaja i straha od bakterija, zaraze i bilo kakvih onečišćenih površina će biti sve češća posljedica ovoga stanja.

Drugim riječima, kada osoba s određenim genetskim predispozicijama za razvoj određenog poremećaja ima traumatično iskustvo s infekcijama koje predstavljaju okolišne čimbenike nastanka određene bolesti, vrlo je moguće da će razviti takve fobije koje su nažalost kronične.

Ipak, postoji razlog za optimizam. Mnogi ljudi koji su dobrovoljno pomagali drugima tijekom pandemije iskusit će novu svrhu i smisao u svojem životu. Oni koji su se bolje prilagodili izolaciji, tj. ljudi koji su otvoreniji za nova iskustva, koji su optimistični i emocionalno stabilni, imaju veću vjerojatnost da će se dobro snaći za vrijeme trajanja pandemije, ali i poslije nje. Ne posjeduju svi ljudi ove karakteristike, ali ljudi mogu poboljšati svoju otpornost učenjem novih strategija suočavanja, kroz vježbe i metode kognitivno-bihevioralne terapije i slične tehnike.

Kako se nositi s neizvjesnim situacijama?

U nekontroliranim okolnostima nije lako ublažiti anksioznost i suočiti se s nepoznatim. Međutim, postoje koraci koji vam mogu pomoći kako biste se s više samopouzdanja suočiti s neizvjesnim situacijama. Ono što je važno odmah naglasiti jest da briga apsolutno ništa neće promijeniti nego vam samo otežati u pronalasku smislenih rješenja.

Ljudi često misle da će ih briga zaštititi i pripremiti za najgore jer ako dovoljno dugo meditiraju nad nekim problemom možda dođu do svih mogućnosti.

Nažalost, to baš tako ne funkcionira, pogotovo ako želite sačuvati psihičko zdravlje. Kronična zabrinutost vam ne može dati veću kontrolu nad događajima koje je nemoguće kontrolirati – kao što je to COVID-19. Ta briga vam samo oduzima uživanje u sadašnjem trenutku, troši vam energiju i ne da vam spavati. Srećom, postoje zdraviji načini za rješavanje neizvjesnosti, a njih ćete postići prilagodbom vlastitog razmišljanja.

Kontrolirajte stvari koje možete kontrolirati

Iako ne možete kontrolirati oporavak ekonomije i širenje virusa na globalnoj razini, niste potpuno nemoćni. Bez obzira na vaš strah ili osobne okolnosti, umjesto da brinete, možete pripremiti svoj um na poduzimanje akcija nad aspektima koje je moguće kontrolirati.

Primjerice, ako ste izgubili posao u ovoj situaciji, možete uložiti svoje vrijeme u traženje poslova, slanje životopisa i umrežavanje s potencijalnim kontaktima koji vam mogu ponuditi poslovne prilike.

Slično tome, ako ste zabrinuti za svoje zdravlje zbog pandemije, pridržavanjem epidemioloških mjera možete utjecati na usporavanje širenja virusa. Kontroliranjem stvari koje možete kontrolirati odmaknut ćete misli od neučinkovite zabrinutosti.

Naravno, svi se ipak nalazimo u nekim drugačijim okolnostima te je ponekad jedino što možete kontrola emocija. Koliko god bilo teško, pokušajte se aktivno nositi sa svojim emocijama te ih nikako nemojte potiskivati jer ćete s time napraviti samo još veću štetu te povećati anksioznost i stres. Iskusite nesigurnost, pomirite se s okolnostima, prihvatite neizvjesnost, pronađite ono što vam pruža mir i dopustite sebi "loše dane". Zapamtite, loš dan ne znači loš život!

Nemojte pretjerivati u uspostavljanju sigurnosti

Ulaskom u karantenu smo svi shvatili da se život može promijeniti u trenu te da je ispunjen neočekivanim događajima i iznenađenjima. No, to nije uvijek loše. Za svako neugodno iznenađenje postoje i dobre stvari kojih obično budemo svjesni tek s odmakom vremena. Suočavanje s neizvjesnošću može pomoći u prilagodbi na trenutnu situaciju, prevladavanju izazova i povećanju psihološke otpornosti na stres. Pritom se mijenjate, rastete kao osoba i učite neke nove stvari.

Stoga, umjesto da neprestanim provjeravanjem najnovijih informacija o koronavirusu pokušate kontrolirati svoj strah od pandemije, radije to vrijeme provedite u nekim zabavnijim aktivnostima. Jer, ako ćemo baš realno, što je danas uopće sigurno? Ima li netko posao za cijeli život, jamstvo dobrog zdravlja ili apsolutnu sigurnost oko toga što će donijeti sutra? Bez obzira koliko se trudili planirati i pripremiti za svaki mogući ishod, jedina prava istina je da će život uvijek naći način da vas iznenadi. Sve težnje za sigurnošću (koje u realnosti nema) rezultiraju jedino brigom i tjeskobom.

Dok vi razmišljajte o 945. verziji "što ako" scenarija, 1945. nova prilika je upravo prošla pored vas, a da niste ni primijetili. Briga sa sobom nosi brojne negativne emocije koje vam onemogućuju da iskoristite vrijeme koje trenutno imate i koje više nikada nećete moći vratiti.

#### Prigrlite neizvjesnost kao način života

Bez obzira koliko se trudili ukloniti svaku sumnju i nestabilnost iz života, istina je da svakoga dana pristajete na bezbroj neizvjesnih kompromisa. Svaki put kada prelazite cestu na zebri, vozite automobil ili jedete hranu iz restorana, prihvaćate određeni rizik. U tom trenutku, niste niti svjesni da imate povjerenja u to da će se promet zaustaviti dok prelazite cestu, da nećete imati automobilsku nesreću i da je sve što jedete iz restorana sigurno. Šanse da se u ovim okolnostima nešto loše dogodi su male, tako da uvijek iznova prihvaćate rizik i nastavljate dalje, ne zahtijevajući sigurnost.

Kako biste lakše prigrlili neizvjesnost, pokušajte prepoznati okidače koji vam izazivaju brigu u određenim situacijama. U ovim vremenima, izvori stresa su obično vanjski. Čitanje pesimističnih članaka i slušanje negativnih vijesti pojačava stres i strah bez ikakvog temelja, a zbog neizvjesnosti u kojoj se nalazimo smo skloni svemu povjerovati. Stoga, ograničite svoju izloženost medijima kako biste vrijeme mogli provesti u nekim ugodnijim aktivnostima.

#### Usredotočite se na sadašnjost

Umjesto da se upuštate u uzaludne napore kako biste stekli kontrolu nad onim što je nemoguće kontrolirati, prihvatite neizvjesnost kao način života. Usredotočite se na sadašnji trenutak, duboko udahnite i iskoristite dan kojega imate jer onaj sutra nikada neće biti zagarantiran.

Prihvaćanje neizvjesnosti ne znači da ne biste trebali imati plan za neke nepredviđene životne okolnosti. Uvijek je dobro imati ušteđevinu za slučaj neočekivanih troškova, držati zaštitnu opremu pri ruci ako živite na području kojemu prijeti potres ili uragan i sl. Dobro je imati plan A i plan B, ali ovih preostalih 28 slova ipak ostavite jezikoslovlju jer život se događa kada mi radimo planove. Jednostavnije bi ga bilo prihvatiti u njegovoj nepredvidivosti i slučajnosti koliko god je to moguće jer ne mora značiti da nam nekad od tih "slučajnosti" neće preokrenuti svijet na nešto puno bolje od onoga što uopće možemo zamisliti.

Uz sve navedeno, vrijedno je spomenuti i one klasične metode održavanja psihičkog i fizičkog zdravlja, a to su redovita tjelovježba koja je najučinkovitiji tretman za rješavanje stresa i tjeskobe, zdrava i uravnotežena prehrana koja vam daje energiju za svaki dan te vrijeme za opuštanje koje vam osigurava odmor i predah od životne jurnjave. Krenite već danas jer za sutra još ne znamo sigurno hoće li stići.

#### **Human Translation**

Life has always been uncertain, but we have just recently become fully aware of this fact. Even though many things remain out of control, it is our way of thinking that is crucial when confronted with difficult circumstances and the unknown. The current COVID-19 pandemic has increased the uncertainness regarding economy, employment, financing, relations, and without a doubt, physical and mental health.

Nevertheless, people yearn for safety, wanting to have control over their lives as well as things that make them uncomfortable, instills fear and anxiety. However, stress that we are experiencing now can both emotionally drain us and confine us to an endless spiral of "what if" scenarios that can, in no way, fix the current situation. And while some thrive in the face of risk and lead unpredictable lives, the majority finds that the randomness of life to be deeply disturbing. If you feel overwhelmed by worry and anxiety, know that you are not alone; we are all just along for the ride, searching for a light at the end of the tunnel.

#### Living in uncertainty

We live in times of uncertainty. We know that Coronavirus is dangerous, but the facts regarding its impact on our organism are still not fully known. We know that there are groups of people who are at high risk from the virus, but also those that provide exceptions to that rule. We can't determine the mortality rate with utmost certainty, but we do know that we must abide by a set of precautionary rules because respiratory complications may persist even after recuperating from the Coronavirus.

With scientific data still being limited, this type of uncertainty contributes to our uncertainty that ultimately induces global fear of infection and mortality. Nevertheless, every cloud has a silver lining, and that is the research data showing that people can accept uncertainty and that they can handle "the unknown" regarding the future. Even though we strive towards establishing the highest level of safety in our lives we are aware that we will never know what a new day, a week or a month has in store for us.

It is because of this that psychologists have managed to observe an interesting phenomenon in their research. Given the fact that people do not like uncertainty, especially regarding the future, the hypothesis is made that people are prone to having a positive reaction and are more willing to believe information coming from a communicator that is open towards uncertainty expressed in facts and numbers. In other words, when a person that we trust openly admits that the situation is uncertain and that there is no concrete information, people will still believe them even though they failed to provide them with the comfort that they seek. The point is in being open to and able to accept the uncertainness, and not in avoiding the situation and instilling a false sense of trust based on fake information.

But, it would have been easier were pandemic our only problem. Besides the fear of being infected and the earthquake in the Croatian capital that, in one way or the other, shook the lives of many, some citizens have lost their jobs and are faced with a serious financial crisis. Even though the end of the pandemic is within sights given the decrease in the number of infected, the logical solution to the economic crisis is still out of sight. The likeliest outcome is that we will be pulling ourselves out of the consequences that coronavirus has caused for us in years to come and with a bit of luck we will succeed.

The only thing we can hope for is that by easing of the precautionary epidemiological measures will soon arrive to its final phase and that we will be able to feel a whiff of that "normal" that we used to have, even though the thing that is certain at the moment is precisely the fact that the "new normal" will still become our new way of life. How to accept the fact that wearing masks, gloves and social distancing is normal? How to make peace with a life without hugs and close contacts? How to overcome the fear of infection and how to believe that soon we will be pushing to the front rows of some crazy concert? We don't know.

Psychological effects of the pandemic

Even though we have faced different pandemics throughout humanity's history, data shows that states of emergency in public healthcare can have long term effects on the psychological condition of its population. In the case of COVID-19 pandemic, some of these effects are obvious: many have lost their jobs and are currently in serious financial problems, some have dealt with the loss of loved ones as a result of coronavirus, and for others close relationships have deteriorated due to the quarantine.

In a scientific project that is still carried out, American psychologists are evaluating the reported levels of fear and anxiety in around 7000 grown individuals from Canada and USA. And though it appears that 75% of them are coping with the emerging situation excellently, still 25% of people have developed what is currently commonly known as COVID stress syndrome.

These people have a strong fear of being infected, are intensely concerned for the social and economic impact of the Coronavirus, and are constantly browsing the internet to find the newest data regarding the infected which in turn makes their condition even worse. Those people are also prone to xenophobia: an intense fear of strangers whom they suspect might be carriers of the virus.

With this in mind, there is also the presence of anxiety regarding our own mortality as well as the mortality of people close to us. Fears are also stimulated by mass-media that use all types of information in order to manipulate the population and keep it in suspense. Based on the studies of previous disasters (such as floods, hurricanes, and earthquakes), it is estimated that 10% of the people affected by traumatic events develop serious psychological issues such as mood disorder, anxiety disorder or post-traumatic stress disorder (PTSD). These symptoms usually develop soon after the experienced disaster, as for citizens of Zagreb that have experienced an earthquake alongside the current pandemic, their psychological state is still in the process of stabilization, which is completely normal given the stress that they experienced.

But, the pandemic itself could lead to such consequences, and, unfortunately, the researches so far have confirmed such results. Numerous people that were hospitalized due to the SARS pandemic in 2003, have later developed PTSD. Four-year monitoring of 70 survivors has revealed that 44% of them have developed some type of a disorder that remained in its full intensity in the following years.

It is possible that those that weren't infected with coronavirus might also develop certain psychological symptoms due to the quarantine. Isolation and confinement particularly, though lasting just a few weeks, may cause a lasting anxiety. People that are in quarantine for longer, especially if they are in confined closed places, or even worse, if they live in a household with people that are prone to aggressive and violent behavior might be especially prone to developing symptoms of PTSD during the time, or after the pandemic.

#### Pandemic in the digital age

Other psychological changes will have something to do with the ecological and social changes. COVID-19 has forced society into testing a completely new lifestyle. Classes have been moved from a classroom to a remote environment, business meetings are being conducted via videocall, and groceries are being delivered to our doorstep.

We could say that we are the lucky ones for experiencing a global pandemic in a digital age where Internet has allowed us to retreat from the outside world without serious consequences to our everyday life. Even before the pandemic, many had worked from home, had bought via Internet, and had ordered food via takeout. But, when most of the society functions in these conditions, it is not hard to conclude that the lifestyle completely changes.

Even when the Coronavirus becomes a thing of the past, we will realize that our lives will never completely return to normal. Many will remain in the "digital everyday life" and retreat to the safety of their homes, and symptoms of the obsessive-compulsive disorders and fear of germs, infection and any kind of contaminated spaces will be a more frequent consequence of this state.

In other words, when a person with a particular genetic predispositions for the development of a particular disorder has a traumatic experience with infections that introduce surrounding factors that create a particular disease, it is very likely that they will develop such phobias that are unfortunately chronic.

Still, there are reasons for optimism. Many that have voluntarily helped others during the pandemic will experience and find a new purpose and meaning in life. Those that have adapted better to the quarantine, i.e., those people that are more open towards new experiences, that are optimistic and emotionally stable, have a higher chance of adapting well not only during the pandemic but also after it passes. Not all people possess these characteristics, but people can improve their resilience by learning new strategies for confronting these kinds of situations through practice and by using methods of cognitive-behavioral therapy and similar techniques.

How to deal with uncertain situations?

In uncontrollable circumstances it is not simple to ease our anxiety and face the unknown. Nevertheless, there are steps that can help one in dealing with uncertain situations with more confidence. What is important to stress is that worrying won't change a thing and will only make it harder for you to find reasonable solutions.

People often think that worrying will protect them or help them prepare for the worst because if they think about a problem for long enough, they might stumble upon all possibilities.

Unfortunately, it doesn't work that way, especially if you wish to preserve your psychological health. Chronic worry can't give you more control over events that are impossible to control-such as COVID-19, and it can only deprive you of enjoying the moment, it wastes your energy, and it deprives you of your sleep. Luckily, there are healthier ways for dealing with uncertainty, and those you will achieve by adjusting your own way of thinking.

Control the things that you can control

Even though you can't control the economic recovery and the spread of the virus on the global scale, you aren't completely powerless. Instead of worrying, regardless of your fear or personal circumstances, you can prepare your mind to act on those aspects that are possible to control.

For example, if you've lost your job in this situation, you can invest your time into finding new jobs, sending resumes and networking with potential contacts that can offer you business opportunities. Similarly, if you are worried about your health due to the pandemic, by abiding to the epidemiological measures, you may influence the slowing down the spread of the virus. By controlling the things that you can control you will divert your thoughts from inefficient worry.

Of course, each of us is faced with their own circumstances and sometimes the only thing that you can do is to control your emotions. As hard as it is, you have to try and actively deal with your emotions. Under no circumstances should you suppress them because that will only backfire by increasing your anxiety and stress levels. Experience the insecurity, make peace with the circumstances, embrace the uncertainty, find the thing that gives you peace and allow yourself a "rough day", and remember; a rough day does not mean a rough life!

Don't overdo it with establishing safety

Being quarantined, we've all figured out that life can change in an instant and that it is filled with unexpected events and surprises, but that is not always a bad thing. For every inconvenience there are good things as well that we become aware of only when in hindsight. Facing the uncertainty can help in adjusting to the current situation, overcoming challenges, and increasing the levels of psychological resistance to stress and during said period you change, you grow as a person and learn some new things.

With that in mind, rather than trying to control your fear of the pandemic by endlessly checking for new information regarding COVID, your time would be better spent in some more fun activities; because honestly, what is safe today anyways? Does anyone have a job for a lifetime, a guarantee of health or absolute safety regarding what tomorrow brings? No matter the amount of trying, planning, and preparing for every possible outcome, the only real truth is that life will always find a way to surprise you and that all those aspirations for safety (that doesn't really exist) only result in worry and anxiety.

While you are thinking about version 945 of a "what if" scenario a chance no. 1945 just went by you without you even noticing. Worry brings a lot of negative emotions that inhibits you from using the time you currently have and will never be able to have back.

#### Embrace the uncertainty as a lifestyle

No matter how much you try to remove every doubt and instability from your life the truth is that every day you accept numerous uncertain compromises. Every time you walk across the street on the crosswalk, when you drive a car or eat food from a restaurant you accept a certain risk. In that moment, you are not even aware of that you have confidence that the traffic will stop as you are crossing the street, that you won't have a car crash and that everything you are eating is safe. The chances of something bad happening in these instances are small and so you are accepting the risk time and again without demanding safety.

In order to have an easier time embracing uncertainty try and recognize triggers that make you worry in certain situations. In times like these outside sources are most common sources of stress. Reading pessimistic articles and listening to negative news is a baseless way of increasing fear and stress, and due to uncertainty, that we are currently in, we tend to believe in anything we hear. Therefore, limit your exposure to the media so that you can spend time doing something more pleasant.

#### Focus on the present

Instead of engaging in fruitless labors in order to gain control over that which is impossible to control, accept the uncertainty as a lifestyle by focusing on the present, taking a deep breath, and making the most out of the day you have because who knows if tomorrow will come at all.

Accepting uncertainty does not mean that you shouldn't have a plan for some unpredictable life circumstances. It is always good to have savings in case of unexpected expenses, having protective equipment at arm's length if you live in an area with a possibility of an earthquake or a hurricane etc. It is good to have a plan A and a plan B, but the rest of the alphabet is better left to linguists because life passes by while we make plans. It would be easier to accept it in its unpredictability and randomness as much as possible because it does not mean that those "coincidences" can't turn our life into something much better than we can possibly imagine.

With all this being said, it is also worth pointing out those classic methods of retaining both physical and mental health: regular exercising (the most efficient treatment for relieving stress and anxiety), balanced diet (giving you energy for every day), and time for relaxing (ensuring

you rest and respite from the rush that is life). Start today because we don't yet know if tomorrow will come.

#### **Machine Translation**

Life has always been uncertain, only some of us became aware of it the other day. While many things remain out of control, our way of thinking is crucial to dealing with difficult circumstances and meeting the unknown. The current COVID-19 pandemic has heightened uncertainty about the economy, employment, finances, relationships, and, of course, physical and mental health.

Still, people crave security, want to be in control of their lives and manage what causes us discomfort, fear and anxiety. However, current stress can emotionally empty us and trap us in a downward spiral of endless "what ifs" scenarios that cannot possibly remedy the current situation. And while some enjoy the risk of living unpredictable lives, the vast majority still find the randomness of life deeply shocking. If you feel that worry and anxiety have overwhelmed you, know that you are not alone, and on this rudderless ship together we seek a glimmer of light in the distance.

#### Life in suspense

We live in uncertain times. We know that the coronavirus is dangerous, but not all information on its impact on the organism is yet known. We know that there are risk groups, but also those who have confirmed that there are exceptions. We still can't determine the mortality rate with absolute certainty, but we do know that we must adhere to certain precautions, because even recovering from the coronavirus does not mean that there will be no respiratory consequences.

Scientific data is still limited, and this kind of uncertainty contributes to our ignorance that fuels global fears of infection and mortality. However, there is something positive about the whole story, which is research data that shows that people can accept uncertainty and that they can deal with "ignorance" about the future. While we are always striving to establish maximum security in our lives, we are aware that we will never know exactly what a new day, week, month brings.

This is why psychologists have managed to find an interesting phenomenon in their research. Namely, given that people do not like uncertainty, especially with regard to the future, the hypothesis is that people have a positive reaction and trust information more when the communicator is open about uncertainty in facts and figures. In other words, when a person we trust openly admits to us that the situation is uncertain and that there is no concrete information, people will still believe him/her despite not giving them the security they seek. The point is to be open and accept uncertainty, not to avoid and instill false trust based on unrealistic information.

But if the pandemic were the only problem, it might still be easier. Apart from the fear of contagion and earthquakes in the Croatian capital, which has shaken many lives in one way or another, many citizens have lost their jobs and are facing a serious financial crisis. Although the end of the pandemic looms in view of the decline in the number of infected, a logical solution to the economic crisis is still not in sight. It is most likely that for years to come, we will try to get out of the deadlock that the coronavirus has put us through, and with any luck, we will succeed.

We can only hope that the relaxation of epidemiological precautions will soon reach its final stage and that we will feel the breath of the "normal" that we had before, although what is currently certain is that the "new normal" will nevertheless become a new life pattern for us. How do you accept the fact that life with masks, gloves and social distancing is normal? How to come to terms with life without hugs and close contacts? How do you overcome the fear of contagion and believe that we're about to break into the front lines of some crazy concert again? We don 't know .

#### Psychological consequences of the pandemic

Although we have already faced different pandemics in the history of mankind, the data indicate that public health emergencies can have lasting consequences on the psychological condition of the population. In the case of COVID-19, some of these effects are obvious: many have lost their jobs and are currently experiencing significant financial problems, some have faced the loss of loved ones due to the coronavirus, and some have worsened close relationships due to quarantine.

In a still ongoing research project, American psychologists estimate reported levels of fear and anxiety in nearly 7,000 adult individuals from Canada and the United States. And while 75% seem to be facing the new situation excellently, as many as 25% of people have developed what is currently popularly called COVID stress syndrome.

Such people feel a strong fear of infection, are intensively concerned about the social and economic impact of the coronavirus and constantly check the internet to find out the latest

information about the infected, and this also worsens their condition. These people are also prone to xenophobia, which signifies intense fears of strangers and unknown people who they fear may be carriers of the virus.

In addition to all of the above, there is also anxiety about own mortality, as well as the mortality of close people. Fears are also fuelled by the mass media that use all kinds of information to manipulate the population and keep them in suspense. Based on studies of past disasters (such as floods, hurricanes and earthquakes), it has been estimated that 10% of people affected by traumatic events develop serious psychological problems such as mood disorders, anxiety disorders or post-traumatic stress disorder (PTSD). These symptoms usually occur soon after the disaster, and for the people of Zagreb who experienced an earthquake with the current pandemic, the mental state is still in the process of stabilization, which is quite normal given the stress they experienced.

But even a pandemic alone is enough to develop such consequences. Unfortunately, research to date has confirmed these results. Many people who were hospitalized for the SARS pandemic in 2003 later developed PTSD. A four-year follow-up of 70 survivors revealed that 44% of them had developed some sort of disorder that had remained at its full intensity for years.

It is also likely that those who are not infected with the coronavirus could also develop certain psychological symptoms due to quarantine. Namely, isolation and confinement, even though it lasted only a few weeks, can cause permanent anxiety. People who have been quarantined for a long time, especially if they are in a confined space or if, worse, they live in a house with people who are prone to aggressive and violent behavior, may be particularly vulnerable to developing symptoms of PTSD during or after the pandemic.

#### Pandemic in the digital age

Other psychological changes will have more to do with environmental and social changes. COVID-19 has forced society to try a whole new way of life. School classes have moved to small screens, work meetings are held via video calls, and groceries are delivered to the doorstep.

We could say that we are truly fortunate because we are experiencing a global pandemic in the digital age, where the Internet has allowed us to withdraw from the outside world without any serious consequences in our daily lives. Even before the pandemic, many were working from

home, buying online and ordering food through delivery. But when most societies function in such conditions, it is not difficult to conclude that the way of life is completely changing.

And once the coronavirus is in the past, we'll realize that life will never fully return to normal. Many will nevertheless remain in the "digital everyday" and retreat to home safety, and the symptoms of obsessive-compulsive disorders and fear of bacteria, infection and any polluted surfaces will be an increasingly common consequence of this condition.

In other words, when a person with certain genetic predispositions for the development of a particular disorder has a traumatic experience with infections that represent environmental factors for the development of a particular disease, it is very possible that they will develop such phobias that are unfortunately chronic.

However, there is reason for optimism. Many people who volunteered to help others during the pandemic will experience a new purpose and meaning in their lives. Those who have adapted better to isolation, i.e. people who are more open to new experiences, who are optimistic and emotionally stable, are more likely to cope well during the pandemic, but also after it. Not all people possess these characteristics, but people can improve their resilience by learning new coping strategies, through cognitive-behavioral therapy exercises and methods and similar techniques.

How do you deal with uncertain situations?

Under uncontrollable circumstances, it is not easy to relieve anxiety and confront the unknown. However, there are steps that can help you to face uncertain situations with more confidence. What is important to emphasize right away is that care will not change anything at all, but will only make it harder for you to find meaningful solutions.

People often think that caring will protect them and prepare them for the worst, because if they meditate on a problem long enough, they may come up with all the possibilities.

Unfortunately, that's not exactly how it works, especially if you want to preserve mental health. Chronic concerns can't give you more control over uncontrollable events like COVID-19. This concern only takes away your enjoyment of the present moment, consumes your energy and will not let you sleep. Fortunately, there are healthier ways to deal with uncertainties, which you will achieve by adjusting your own thinking.

Control things you can control

Although you cannot control the recovery of the economy and the spread of the virus globally, you are not completely powerless. Regardless of your fear or personal circumstances, instead of worrying, you can prepare your mind to take action on controllable aspects.

For example, if you've lost your job in this situation, you can invest your time looking for jobs, submitting resumes, and networking with potential contacts who can offer you work opportunities.

Similarly, if you are concerned about your health due to the pandemic, adhering to epidemiological measures can affect the slowdown of the spread of the virus. Controlling the things you can control will take your mind off your ineffective concerns.

Of course, we all find ourselves in different circumstances, and sometimes the only thing you can do is control your emotions. As hard as it is, try to actively deal with your emotions and do not repress them, as this will only cause more damage and increase anxiety and stress. Experience uncertainty, come to terms with the circumstances, accept uncertainty, find what gives you peace, and allow yourself "bad days." Remember, a bad day doesn't mean a bad life!

Do not exaggerate in establishing safety

By entering the quarantine, we all realized that life can change in an instant and is filled with unexpected events and surprises. But it's not always bad. For any unpleasant surprise, there are good things that we are usually aware of with the passage of time. Dealing with uncertainty can help adapt to the current situation, overcome challenges and increase psychological resilience to stress. In doing so, you change, grow as a person and learn new things.

So, instead of constantly checking the latest information about the coronavirus to try to control your fear of the pandemic, you might want to spend that time in some more fun activities. Because if we're being realistic, what's safe today anyway? Does anyone have a job for life, a guarantee of good health or absolute certainty about what tomorrow will bring? No matter how hard you try to plan and prepare for every possible outcome, the only real truth is that life will always find a way to surprise you. All aspirations for security (which in reality are not there) result only in worry and anxiety.

While you're thinking about the 945th version of the "what if" scenario, in 1945 a new opportunity just passed you by without you even noticing. Care carries with it a number of negative emotions that make it impossible for you to take advantage of the time that you currently have and that you will never be able to return.

#### Embrace uncertainty as a way of life

No matter how hard you try to remove every doubt and instability from your life, the truth is that every day you agree to countless uncertain compromises. Every time you cross the road on a zebra, drive a car or eat food from a restaurant, you accept a certain risk. At that point, you are not even aware that you have confidence that traffic will stop as you cross the road, that you will not have a car accident, and that everything you eat from the restaurant is safe. The chances of something bad happening in these circumstances are slim, so you take risks over and over again and move on, without requiring security.

To help you embrace uncertainty, try to identify triggers that cause you to worry in certain situations. In these times, sources of stress are usually external. Reading pessimistic articles and listening to negative news reinforces stress and fear without any foundation, and because of the uncertainty we find ourselves in, we tend to believe everything. Therefore, limit your exposure to the media so that you can spend time in some more enjoyable activities.

#### Focus on the present

Instead of making futile efforts to gain control of what is impossible to control, accept uncertainty as a way of life. Focus on the present moment, take a deep breath and take advantage of the day you have because tomorrow will never be guaranteed.

Embracing uncertainty doesn't mean you shouldn't have a contingency plan. It is always good to have savings in case of unexpected expenses, keep protective equipment at hand if you live in an area threatened by an earthquake or hurricane, etc. It's good to have a plan A and a plan B, but leave these remaining 28 letters to linguistics because life happens when we make plans. It would be easier to accept it in its unpredictability and coincidences as much as possible, because it doesn't have to mean that sometimes one of these "coincidences" won't turn our world into something much better than we can even imagine.

In addition to all of the above, it is worth mentioning those classic methods of maintaining mental and physical health, which are regular exercise, which is the most effective treatment for dealing with stress and anxiety, a healthy and balanced diet that gives you energy for every day and relaxation time that ensures you rest and rest from life chasing. Leave today, because tomorrow we don't know for sure if it will arrive.

**4.2. Text 2-** Has Kerempuh had a more shallow, less ambitious, and altogether worse play that was such an artistic let down than this one? Unfortunately, no.

#### The original

Predstava »Happy end«, autorski projekt Nikole Zavišića i Dore Golub, prvi je repertoarni naslov koji potpisuje ravnateljica Sonja Kovačić kao nova čelna osoba Kerempuha, doduše navodno naslijeđen od prethodne uprave, ali toliko ispod razine elementarnog kazališnog zanata da se moramo ozbiljno zapitati zašto Sonja Kovačić (inače u mom iskustvu vrlo sposobna producentica i teatrofil) nije iskoristila svoju moć upravljanja satiričkim teatrom i zaustavila izvedbu ove bezidejne srednjoškolske priredbe o bezidejnosti.

Kako je moguće da u profesionalnom zagrebačkom gradskom teatru ikada, ma u kojoj varijanti uprave, igra tako banalan tekst o »mladoj djevojci« koja ne zna što bi sa sobom pa samo stoji na sceni i vergla opća mjesta prazne komunikacije (tipa »joj, slatko« i »ja bih dečka«), u toliko nestručnoj režiji jeftinih skečeva, s toliko neduhovitih i lijevom nogom odigranih glumačkih izvedbi?

Kako je moguće da itko u bilo kojem teatru pristaje na ovakvo kreveljenje i prenemaganje? Je li ugledno satiričko kazalište kao Kerempuh stvarno spremno na toliku automarginalizaciju po pitanju umjetničkih dosega?

#### Nije duhovito sve što je glupo

Jasno mi je da ne moraju svugdje u Hrvatskoj postojati niti vladati kriteriji profesionalne izvedbe. Sigurno da je u malom mjestašcu s pitoreksnim institucijama u sastavu krčme i crkve sve moguće, pa tako i da se pod »kulturom« misli odlazak u slastičarnicu, a pod »umjetnošću« online dopisivanje oko cijene vjenčanica.

Ali »Happy end« igra u kazalištu koje bi moralo znati što je umjetnički nepismen tekst, kao i što je to duboki šovinizam svođenja glavnog lika mlade djevojke Maše na topić koji ističe poprsje i na njeno stalno scensko samopodsjećanje da je toliko glupa, »stidljiva« i sklona isključivo kršenju ručica i zaljubljivanju da to postaje identični, devedesetominutni refren najniže razine razbijanja ušiju publike.

Ego-trip protagonistice ili »Mašin put kroz maštu« nepodnošljiv je, jer mašte nema na pozornici. I tekst i izvedba ostavljaju dojam lošeg tripa na kaotičnim koktelima narkotika.

Umjesto bilo kakvog kreativnog, propitivalačkog ili bar nadopisivalačkog momenta deklišejizacije glavne junakinje (pretpostavke da nijedna cura nije samo lovac na romansu ili

bar ironije autorskog tima prema ispraznosti citiranog komunikacijskog smeća), u predstavu su uvršteni samo talozi i talozi Mašine sentimentalizacije.

Kičersku i ispraznu pop glazbu potpisuju Willem Miličević i Melita Lovričević, a pokret, kao novu kolekciju banalnosti, Anja Đurinović.

Pred nama, dakle, definitivno nije nikakav »glam-rock spektakl«, kako je najavljena predstava (s neumjesnim oduševljenjem prije premijere), nego izrazito banalna pričica o curi koja se toliko i samo želi zaljubiti da se na kraju zaljubljuje u lik iz vlastite mašte.

»Štefica Cvek u raljama života« Dubravke Ugrešić pritom je klasična satira na temu obaveznog zaljubljivanja (promašeno je na jednom mjestu citirana i u ovoj predstavi), dok je »Happy end« mješavina apologije lokalpatriotizma (na imenicu Slavonija i pridjev slavonsko svaki put je slijedio aplauz premijerne publike) te raznježenosti nad nekom tobože generalnom »glupošću« mladih djevojaka.

Čak ni na premijernoj izvedbi okupljena publika predstavu nije nalazila smiješnom, nije se kolektivno smijala »šalama« (prdež i psovanja inače izazivaju bar malo bulevarskog kikotanja, ali ovoj predstavi nisu pomogli ni ti najvulgarniji elementi koje koristi).

Naprotiv, mnogo je lica u gledalištu promatralo »Happy end« na isti način na koji promatramo ljude koji ne znaju pričati viceve, ali nastavljaju ih nizati i onda blamaža traje li traje.

Na neki bizaran način ovo je i predstava koja se ne srami svojeg socijalnog primitivizma: ne samo da infantilizira i trivijalizira izvedbu (čak i okvirom »bajke«), nego je i veoma odlučna u tome da ni ne stremi kazalištu kao umjetnosti, odnosno kazalištu koje bi nadilazilo »cajke, krek, speed i burek« mentalitet.

Za nju umjetnost nije važna, jer je »prekomplicirana«.

Tu nešto moraš razmišljati, osjećati, analizirati, riskirati, imati temu... Prezahtjevno.

Kako je jednom izjavila glazbenica Ida Prester: »Klinci ne žele gubiti vrijeme na 'umjetnost', svi bi se odmah utopili u lovi.

Sve je instant: i spotovi i izvođači. Ako ne vide nešto primamljivo - ćao, doviđenja«.

#### Čemu služe kazališni kriteriji?

Neću navoditi imena glumaca koji nastupaju u ovoj predstavi, jer nisu napravili uloge, s iznimkom Dražena Čučeka koji uspješno izvodi niz sarkastično uokvirenih malih gegova i zaigran je čak i u kontekstu opisanog valjanja u blatu žutila.

Ali vratit ću se na pitanje čemu služe kriteriji u kazalištu.

Recimo tome da kvaziestrada ostane na kvaziestradi, propali TV-sitcom ostane na televiziji, a da u kazalištu igraju predstave koje o tom mediju znaju barem onoliko koliko je potrebno da ih razlikujemo od promašene srednjoškolske priredbe (izrazito šovinističkih stavova).

Ne pamtim u Kerempuhu goru, pliću, neambiciozniju i umjetnički podbačeniju predstavu od »Happy enda«.

Jedini razlog zašto o njoj pišem je zato što treba sve poduzeti da se ovakvi repertoarni naslovi ne ponavljaju, pa makar to značilo osnivanje novog tijela Repertoarnih Aktivista u sastavu kritičara, glumačkih i redateljskih umjetnika, dramaturga i plesača, kostimografa i scenografa, teatrologa i glazbenika.

Ako već Ministarstvo kulture i Grad Zagreb »sve« financiraju i nije ih briga imaju li kazališta repertoare ili ne, onda je možda vrijeme za kolektivnog protagonista iz struke teatra koji bi javno i sustavno govorio o tome čemu služe i profesionalni kriteriji igranja i repertoarna profiliranost umjetničkih kazališnih kuća.

Kerempuh, naime, nije komercijalni gažeraj. Ne mora imati trbušne plesačice i prostačke viceve da bi se dopao najmanjem zajedničkom nazivniku publike i time uspio platiti svoje troškove hladnog pogona i izvođače.

Privatan teatar EXIT, koji doslovce živi od publike, ima deset puta sofisticiranije predstave od Kerempuha.

Pritom nemojmo zaboraviti da je Kerempuh gradsko kazalište koje ima i vrlo ozbiljan gradski budžet, izričito namijenjen kazališnoj umjetnosti, a ne estradi.

Za vrijeme ravnateljskog mandata Romana Šuškovića s Kerempuhove su scene postepeno, ali sustavno uklonjeni svi projekti koji teatar odmiču od zabavišta i inzistiraju na profesionalno rafiniranom stvaralačkom eksperimentu, poznatim i pod imenom umjetnost.

To ujedno znači da nova ravnateljica, Sonja Kovačić, ima – težak – zadatak okrenuti Kerempuhov repertoarni kompas u smjeru suprotnom od Šuškovića.

»Happy end« je repertoarna točka niže od koje se ne smije padati. Barem ne ako ovo kazalište kani zadržati svoju umjetničku licencu.

#### **Human Translation**

The play "Happy End" is a project by Dora Golub and Nikola Zavišić and is the first title in the repertoire approved by the newly appointed head of the Kerempuh Theatre: Sonja Kovačić. Even though the repertoire was allegedly passed down by the previous management, its quality is so beneath the basic levels of theatre craft that we must seriously ask ourselves why Sonja Kovačić, (in my experience a very capable producer and a theatre lover), has not used her power of managing a satirical theatre and stopped the performance of this idealess high school play about idealessness.

How is it ever possible that in a Zagreb's professional town theatre, no matter the present management, plays such a banal text about "a young girl" that does not know what to do with herself, so she just stands on the stage and blabs typical empty phrases (such as "aww, so cute" and "I want a boyfriend"), with a directing so unprofessional and filled with cheap bits, with such humorless and half assed acting portrayals?

How is it possible that anyone in any theatre accepts this kind of moping and affectations? Is a respectable satirical theatre such as Kerempuh really ready for such auto marginalization when it comes to artistic reaches?

#### Not everything that is stupid is funny

I understand that criteria of professional performance do not have to exist nor dominate everywhere in Croatia. Sure enough, everything is possible in a small village with picturesque institutions as a part of a tavern or a church, that even going to a pastry shop is considered "culture", and that online chatting regarding a price of a wedding dress is considered "art".

But "Happy End" is playing in a theatre that has to know what an artistically illiterate text is, as well as what is heavy chauvinism by reducing a lead role of a young girl Maša to a crop top that accentuates her cleavage and her continuous self-reminding of how stupid, "shy", and inclined only to sitting with her arms folded and falling in love she is, and for audience this becomes an identical, ninety-minute ear piercing, brain washing chorus of the worst kind.

Protagonist's ego-trip or "Maša's journey through her imagination" is unbearable because imagination is what is lacking on stage. Both the text and the performance leave an impression of a bad trip on a chaotic cocktail of narcotics.

Instead of any type of creative, investigative, or even more-than-just-describing moment to remove cliché features of the protagonist (assumption that no girl is just looking for her prince charming or at least the irony of the production team towards the futility of the cited communicational trash), the play consists only of layers upon layers of Maša's sentimentalization.

Inane and kitsch pop music is produced by Willem Miličević and Melita Lovričević, and theatrical movement, as a new collection of banality, by Anja Đurinović.

We definitely do not have some "glam-rock spectacle" on our hands, despite the play being promoted as one (with out of place elation before the premiere), but a thoroughly banal story about a girl that so desperately wants to be in love that she ultimately falls in love with a guy from her own imagination.

Thus *Štefica Cvek in the clutches of life* by Dubravka Ugrešić is a classical satire tackling a theme of falling in love (misquoted even in this play at one point), whereas "Happy end" is a mixture of justification of patriotism (there was an applause from the premiere audience following words such as "Slavonija" or "slavonsko") and being emotional when presented with a generic young girl's "nonsenses".

Not even those invited to the premiere found the play funny, they didn't collectively laugh at "jokes" (farts and swearing usually generate at least a bit of bourgeois giggling, but even with those most vulgar elements employed this play was beyond help).

On the contrary, faces of many in the audience treated "Happy End" in the same way they would treat people who don't know how to tell jokes, but they just keep on telling them one after another and so the embarrassment just goes on and on.

In a bizarre way, this play isn't ashamed of its social primitivism either: not only does it infantilizes and trivializes the performance (even in the context of a "fairy tale"), but also it is determined in not leaning towards theatre as an art form, i.e., theatre that would go above and beyond "country music, crack, speed and burek/kebab" mentality.

For it art is irrelevant because it is "too complicated". For something like that you would have to think, feel, analyze, risk, have a theme... too demanding.

As the musician Ida Prester once stated: "Kids don't want to waste their time on "art", they would prefer just being filthy rich. Everything is instantaneous: both the music videos and the artists. If they don't see something alluring- bye, adios:"

#### What is the purpose of theatre criteria?

I won't list out the names of actors of this play because they didn't create roles to play, with the exception of Dražen Čuček who successfully performs a variety of sarcastic bits and is playful even in the context of already described rolling in the tabloid mud.

But I'll come back to the question of what the purpose of theatre criteria is.

Let's just add to that the fact that semi-entertainment business stays in the semi-entertainment business, a failed TV sitcom stays on the television, and that the theatre should be reserved for plays that follow the minimum theatre criteria necessary to distinguish them from a failed high school play (with extremely chauvinist views).

In the entire history of Kerempuh I can't remember a more shallow, less ambitious, and altogether worse play that was such an artistic let down than "Happy End".

The only reason I am writing about it is so that these type of repertoire titles are never repeated even if that means establishing a new organization: "Repertoire Activists" that will consist of critics, acting and directing artists, playwrights, dancers, scenographers, costume designers, theatrologists, and musicians.

Since the Ministry of Culture and the city of Zagreb are willing to provide funds for "anything" and do not care whether theatres have a repertoire or not, then it might be the time for a spokesperson for the theatre profession to speak up publicly and systematically about what professional criteria for acting and repertoire profiling of artistic theatres.

In fact, Kerempuh is not a commercial gig venue. It doesn't have to have belly dancers and vulgar jokes to appeal to the average audience just so it can pay off its own performers and overhead expenses.

The private theatre EXIT, that literally lives off of its public, has ten times more sophisticated plays than Kerempuh does.

Let us not forget that Kerempuh is a city theatre that receives a substantial funding from the city that is intended exclusively for theatre art and not for the entertainment business.

During Roman Šušković's management term, Kerempuh gradually but systematically removed all projects that pushed the theatre away from a fun fair and that insisted on a professionally refined creative experiment, also known as art. At the same time, that means that the new manager, Sonja Kovačić, has a difficult task of recalibrating the direction of Kerempuh's repertoire and steering it in an opposite direction from that of Šušković.

"Happy End" is a point on the repertoire below which they must not fall. At least not if this theatre intends to retain its "artistic license".

#### **Machine Translation**

The play "Happy end", the author's project of Nikola Zavišić and Dora Golub, is the first repertoire title signed by the director Sonja Kovačić as the new head of Kerempuh, although supposedly inherited from the previous administration, but so far below the level of elementary theatre craft that we have to seriously wonder why Sonja Kovačić (otherwise in my experience a very capable producer and theatre philanthropist) did not use her power to manage the satirical theatre and stop the performance of this idealistic high school performance on idealism.

How is it possible that in the professional Zagreb city theatre ever, in any variant of the administration, plays such a banal text about a "young girl" who does not know what to do with herself, so she just stands on the stage and verges general places of empty communication (of the type "her, sweet" and "I would like a boyfriend"), in so many unprofessional direction of cheap sketches, with so many humorless and left-legged acting performances?

How can anyone in any theatre agree to this moaning and moaning? Is a respectable satirical theatre like Kerempuh really ready for such automarginalization in terms of artistic reach?

#### Not everything that's stupid is funny.

It is clear to me that professional performance criteria do not have to exist or rule everywhere in Croatia. Certainly, in a small village with pitorex institutions within the inn and church, everything is possible, so that by "culture" is meant going to the pastry shop, and by "art" is meant online correspondence about the price of wedding dresses.

But "Happy end" plays in a theatre that should know what an artistically illiterate text is, as well as the profound chauvinism of bringing the main character of the young girl Waves to a top that highlights the bust and her constant stage self-remembrance that she is so stupid, "shy" and prone exclusively to breaking the arms and falling in love that it becomes the identical, ninetyminute chorus of the lowest level of breaking the audience's ears. The ego-trip of the protagonist or "Machine's way through the imagination" is unbearable, because the imagination is not on the stage. Both the text and the performance give the impression of a bad trip on chaotic cocktails of narcotics.

Instead of any creative, questioning or at least superimposing moment of declision of the main heroine (assuming that no girl is just a romantic hunter or at least the irony of the author's team according to the vanity of the cited communication trash), only the precipitates and precipitates of the Sentimentalization Machine are included in the play.

The kitsch and empty pop music is signed by Willem Miličević and Melita Lovričević, and the movement, as a new collection of banality, Anja Đurinović.

Therefore, there is definitely no "glam-rock spectacle" in front of us, as the performance was announced (with inappropriate enthusiasm before the premiere), but a highly banal story about a girl who falls in love with a character from her own imagination.

"Štefica Cvek in the Jaws of Life" by Dubravka Ugrešić is a classic satire on the subject of compulsory falling in love (it was misquoted in one place in this play), while "Happy end" is a mixture of local patriotism apology (Slavonia and the adjective Slavonian each time followed by the applause of the premier audience) and tenderness over some supposedly general "stupidity" of young girls.

Even at the premiere, the gathered audience did not find the play funny, they did not laugh collectively at the "jokes" (farting and swearing usually cause at least a little boulevard giggling, but even those most vulgar elements they use did not help this play).

On the contrary, many faces in the audience watched the "Happy End" in the same way that we observe people who can't tell jokes, but continue to make them, and then shame if it lasts.

In a bizarre way, this is also a play that is not ashamed of its social primitivism: it not only infantilizes and trivializes performance (even with the framework of a "fairy tale"), but it is also very determined not to even strive for theatre as an art, i.e. a theatre that would transcend the "taiki, crack, speed and burek" mentality.

For her, art is not important, because it is "too complicated".

There is something you have to think, feel, analyze, take risks, have a topic... Too demanding.

As musician Ida Prester once said: "Kids don't want to waste time on 'art', they would all immediately drown in money.

Everything is instant: both videos and performers. If they don't see something tempting – byebye. "

#### What are the theatrical criteria for?

I will not mention the names of the actors who perform in this play, because they did not make the roles, with the exception of Dražen Čuček, who successfully performs a series of sarcastically framed small gags and is playful even in the context of the described rolling in the mud of yellowing.

But I will return to the question of what the criteria in the theatre are for.

Let's say that the quasiestrade stays on quasiestrade, the failed TV-sitcom stays on television, and the theatre plays plays plays that they know about this medium at least as much as it takes to distinguish them from a missed high school performance (strongly chauvinistic attitudes).

I do not remember in Kerempuh a worse, shallower, more unambitious and artistically inferior show than "Happy End".

The only reason I write about it is because everything must be done so that such repertoire titles do not repeat themselves, even if it means the establishment of a new body of Repertoire Activists composed of critics, actors and directors, dramatists and dancers, costume and set designers, theatre and musicians.

If the Ministry of Culture and the City of Zagreb already "finance" everything and do not care whether the theatres have repertoires or not, then maybe it is time for a collective protagonist from the theatre profession who would publicly and systematically talk about what the professional criteria of playing and the repertoire of artistic theatre houses are for.

Kerempuh, namely, is not a commercial gazer. He doesn't have to have belly dancers and dirty jokes to appeal to the smallest common denominator of the audience and thus be able to pay his own cold-drive costs and performers.

The private exit theatre, which literally lives off the audience, has ten times more sophisticated performances than Kerempuh.

In doing so, let us not forget that Kerempuh is a city theatre that also has a very serious city budget, specifically intended for theatre arts, not scenery.

During Roman Šušković's term as director, Kerempuh's scene gradually but systematically removed all projects that move the theatre away from the kindergarten and insist on a professionally refined creative experiment, also known as art.

This also means that the new director, Sonja Kovačić, has the difficult task of turning Kerempuh's repertoire compass in the opposite direction to Šušković.

"Happy end" is a repertoire point below which one must not fall. At least not if this theater intends to keep its artistic license.

### 4.3. Text 3- Literary theory

### The original

### PREDGOVOR

Ova je knjiga namijenjena učenicima srednjih škola, studentima književnosti i svima onima koji se žele upoznati s osnovnim pojmovima teorije književnosti i nekim osnovnim problemima znanstvenog proučavanja književnosti. Ona pokušava objasniti čitaocu porijeklo, uporabu i namjenu pojedinih pojmova koji se najčešće upotrebljavaju u teoriji književnosti, uputiti ga u svrhe, zadatke i metode proučavanja književnosti i omogućiti mu neku orijentaciju u različitim pravcima razvoja suvremene znanosti o književnosti. Nastojao sam da izbor problema i način izlaganja budu pristupačni svakome, bez obzira na njegovo obrazovanje i prethodno poznavanje teorije književnosti, ali sam se pri tome strogo čuvao takvih pojednostavnjivanja kakva bi mogla dovesti u pitanje potrebu da se uvijek zadrži ona razina znanosti o književnosti ispod koje, smatram, danas više ne smije ići ni tekuća književna kritika, niti književnoteorijska i književnokritička publicistika, a najmanje pak nastava književnosti.

Mislim da nije potrebno posebno napominjati kako sam u pisanju tako zamišljene knjige susreo s mnogim teškoćama. Neke od njih proizlaze iz neriješenih terminoloških problema, neke iz stanja u suvremenoj znanosti o književnosti, a neke iz protuslovlja između složenosti predmeta koji se obrađuje i potrebe za kratkim i jednostavnim izlaganjem. U kojoj sam mjeri uspio takve teškoće savladati, to, naravno, treba da sude čitaoci. Želim jedino u tom smislu upozoriti kako ovu knjigu ne treba shvatiti i ocijeniti kao izlaganje sustavne znanstvene teorije književnosti, nego kao izlaganje koje treba da služi kao uvod u razumijevanje odnosno sustavno razvijanje znanstvene teorije književnosti. Rečeno u poredbi: ona se odnosi prema teoriji književnosti kao što se prema teoriji šahovske igre odnosi početnica u kojoj se doduše usput spominju i načela kombinatorike i pozicione igre, ali u kojoj je ipak najveći dio posvećen uputama o pravilima

kretanja figura po ploči, o nazivima figura i o njihovoj vrijednosti, te o načinima kako se uopće može završiti šahovska partija.

Nastala je ova knjiga na osnovi desetogodišnjeg iskustva koje stekoh na katedri za teoriju i metodologiju proučavanja književnosti Odsjeka za komparativnu književnost Filozofskog fakulteta u Zagrebu. Da je napišem, izravno me potakao rad sa studentima; u tom smislu ona je zamišljena kao sustavno izlaganje one građe koja služi tek kao temelj na kojem se može dalje graditi doista suvremena nastava književnosti na sveučilištu. U njenom općem nacrtu, izboru pojmova i problema, pa i u mnogim načelnim stavovima, nisam se mogao mnogo osloniti na slična naša ili strana djela, naravno ne zato što dobrih djela takve vrste ne bi bilo, nego zato što su naša slična djela znatno drugačije osnovne namjene ili su ponešto zastarjela (što je prirodno u burnom razvoju znanosti o književnosti posljednjih desetljeća), dok su strana slična djela rađena na osnovi drugačijeg izbora književnih djela i redovno znatno različite tradicije proučavanja književnosti od one na kojoj se razvijala i razvija naša znanost o književnosti. Dakako da pri tome ova knjiga ne teži nekoj posebnoj samostalnosti i originalnosti pod svaku cijenu; djelu ove vrste, smatram, to bi više štetilo no koristilo. Želim tako jedino kazati da sam se u objašnjenjima, tezama i u rasporedu izlaganja služio dosta različitim izvorima i uzorima (na koje, uostalom, upućuje i literatura na kraju knjige), pri čemu ipak smatram kako su mi brojne rasprave u časopisu Umjetnost riječi, zbornik Uvod u književnost i, dakako moje vlastite knjige Ideja i priča i Pitanja poetike najviše poslužile i kao izvor podataka i kao temelj sintetičkim zaključcima.

Zagreb, u prosincu 1974. Autor

# 1. PRIRODA KNJIŽEVNOSTI I PROUČAVANJE KNJIŽEVNOSTI

### NAZIV I POJAM KNJIŽEVNOST

Naša riječ "književnost" izaziva pomisao na knjige. Riječ "literatura" opet, kojom se ponekad služimo jer gotovo svi evropski jezici upotrebljavaju naziv za književnost prema latinskoj riječi literatura, upućuje da je književnost ono što je napisano jer je izvedena od riječi littera, slovo. Jedino riječ "pjesništvo", ako njome ne označavamo samo dio književnosti (poeziju nasuprot prozi), nego književnost u cjelini, usmjeruje nas u drugom pravcu. I tada, međutim, nerijetko pjesništvo, preko naše riječi "pjesma", povezujemo isključivo s pjevanjem i glazbom. Tako nijedan od ovih naziva, ako se povedemo za doslovnim značenjima riječi i uobičajenim

primislima koje one izazivaju, ne odgovara zapravo onom što danas označavamo kao književnost.

Književnost, naime, recimo najprije, nije nipošto samo ono što je napisano u knjigama. Pored pisane književnosti, koja, doduše, čini najveći dio onog što danas zamišljamo kada govorimo o književnosti, postoji i usmena književnost. Usmena književnost pak nije samo ona književnost koja je nastala i koja se dugo vremena širila usmenom predajom u vrijeme kada pismenost bijaše rijetkost (tzv. Narodna književnost), nego i ona književnost koja i danas nastaje, širi se i razvija bilo predajom "od usta do usta", bilo pak tehničkim sredstvima koja ne traže da se književnost zapisuje. Oba tipa usmene književnosti od velike su važnosti za razumijevanje prirode književnosti i stvaranje odgovarajućeg naziva i pojma književnosti.

Književnošću, spomenimo zatim, rijetko nazivamo sve ono što je sadržano u knjigama. Mnogo češće riječ "književnost" rabimo u užem smislu, smatrajući da tek određena djela valja uvrstiti u pojam književnosti, dok ostala napisana djela pripadaju znanostima, filozofiji, izvještajima o istinitim događajima, ili pak nekim drugim područjima ljudske djelatnosti, odnosno nekim drugim vrstama "zapisa". Upravo zato i riječju "literatura" označavamo danas najčešće ono što je napisano o nekom predmetu, tj. zbir djela koja se odnose na neko znanstveno područje (npr. "literatura" na kraju ove knjige znači djela iz područja teorije književnosti), a ne književnost kao književnost. Pojam književnosti tako je ujedno i širi i uži od onog pojma na koji bismo neposredno mogli pomisliti na temelju njenog uobičajenog imena.

Zbog toga ono što nazivamo književnošću treba razumjeti na osnovi shvaćanja posebne prirode književnih djela, odnosno na osnovi shvaćanja književnosti kao umjetnosti. Naziv "umjetnička književnost" u tom smislu prikladno označava razliku između znanstvenih djela i književnih djela u užem smislu riječi. Stariji, u nas često upotrebljavan naziv "lijepa književnost" nešto je manje prikladan jer ne pretpostavlja samo stanovito jedinstvo umjetnosti i ljepote, nego i osobito shvaćanje ljepote, takvo shvaćanje kakvo danas rijetko imamo na umu prilikom ocjenjivanja književnih i umjetničkih djela. Stoga i nazivom "beletristika", prema francuskom belles lettres (što bismo mogli prevesti kao "lijepa književnost"), označavamo danas uglavnom dio umjetničke književnosti (redovni: romane i novele), a ne umjetničku književnost u cjelini.

Valja, međutim, reći da i naziv "pjesništvo", ako ga ne povezujemo s pjevanjem, i ako ga shvatimo u širem smislu od onog na koje upozorava opreka poezije i proze, može također razmjerno prikladno označiti ono što smo nazvali umjetničkom književnošću. Pjesništvo odgovara nazivu "poezija", izvedenom od grčke riječi poiesis "što znači "proizvodnja" odnosno

"stvaralaštvo". Ako imamo na umu da književnik odnosno pjesnik proizvodi književno djelo prema posebnim zakonitostima koje traže da je ovladao pjesničkim umijećem naziv "pjesništvo" kao i naziv "umjetnička književnost", podjednako dobro upućuje na potrebu da se književnost shvati kao stvaralačka jezična djelatnost osobite vrste. Pojam književnosti ili pjesništva u tom smislu povezuje književnika odnosno pjesnika s književnim djelom kao njegovim proizvodom i sa slušaocima odnosno čitaocima bez kojih nema istinske književnosti. Književnost, naime, živi jedino ako postoje oni koji književna djela razumiju kao umjetnička djela i upravo ih tako čitaju ili slušaju.

Kao stvaralačka djelatnost, takva djelatnost kojom se oblikuje djelo koje će služiti kao izvor posebnog zadovoljstva i spoznaje, književnost se može usporediti s glazbom, slikarstvom, kiparstvom, arhitekturom i ostalim sličnim djelatnostima koje obuhvaćamo zajedničkim imenom umjetnost. Umjetnost je posebna ljudska djelatnost, takva djelatnost u kojoj ljudska moć oblikovanja dovodi do stvaranja smislenih tvorevina osobite vrijednosti: umjetničkih djela. Umjetnička djela sadrže ljudsko iskustvo života i svijeta izraženo na takav način na koji se ono inače ne može izraziti; umjetnost je u tom smislu samosvojna i nezamjenjiva. Za razliku od znanosti ili filozofije, npr.; koje pokušavaju ostvariti određenu sustavnu sliku stvarnosti, umjetnička djela ne sadrže samo svojevrsnu spoznaju stvarnosti nego i oblikuju novu stvarnost. Velika umjetnost tako daje životu određenu dimenziju smisla koji se odnosi prema onome što još nije, prema budućnosti. Tako je umjetnost jedan od načina kojim čovjek stvara svoj svijet. Ona životnim pojavama daje nov, ljudski smisao, i time otvara takav obzor razumijevanja života i svijeta bez kojeg nema istinskog ljudskog života.

### KNJIŽEVNOST I JEZIK

Književnost se naziva umjetnost riječi kada se želi istaknuti kako je upravo jezik ona "građa" od koje se gradi književno djelo. Time je ujedno naglašen poseban položaj književnosti među ostalim umjetnostima. Jezik, naime, nije građa u onom istom smislu u kojem su boje građa slikarstva, a tonovi građa glazbe; jezik nije "sirova građa", već je sam po sebi izvanredno složena duhovna tvorevina. Stoga bez razumijevanja prirode jezika nema ni razumijevanja prirode književnosti. I odnos književnosti prema zbilji valja zato razmatrati u okviru odnosa jezika prema zbilji. Književnost se, tako reći: posredno, preko jezika, odnosi prema zbilji, te proučavanje književnosti kao umjetnosti uvijek na ovaj ili onaj način pretpostavlja određeno shvaćanje jezika.

Književno djelo, prije svega, jezična je tvorevina kao bilo koja jezična tvorevina. Ako ono što je na nekom jeziku zapisano, odnosno na bilo koji drugačiji način utvrđeno, nazovemo tekstom (prema latinskom textum, tkanje, tkanina, sveza riječi), književni tekst prirodno se može proučavati kao bilo kakav tekst. Kako razumijevanje svakog teksta ovisi o kontekstu (prema lat. Contextum, skupa tkano, prepleteno), tj. o onoj pretpostavljenoj govornoj ili misaonoj cjelini unutar koje tek izrečeno ili napisano dobiva pravi smisao, tek kontekst daje nekom jezičnom tekstu onaj smisao koji ga čini umjetničkim djelom. A to znači da proučavanje književnosti počinje kada analiziramo one osobine književnog teksta koje omogućuju da ga u određenom kontekstu razumijemo ne kao bilo kakav jezični izraz, nego kao umjetnički jezični izraz.

Uzmimo npr. rečenicu: "Ubili su ga ciglama." Ta se rečenica može shvatiti kao izvještaj o zločinu i može se razmatrati s obzirom na način kako je izgrađena na osnovi izbora pojedinih glasova, riječi, njihovih oblika i načina njihova povezivanja. Ona se, dakle, može proučavati kao bilo koja jezična tvorevina, a ako smo je pročitali npr. u Večernjem listu, prirodno će nas zanimati i da li je ona istinita ili je izmišljena zbog kako se to kaže: senzacije. Njeno razumijevanje tada se oslanja na tzv. stvarni kontekst, a analiza njene gramatičke pravilnosti ili nepravilnosti neće naravno biti od posebnog interesa za proučavanje književnosti. Ista rečenica, međutim, početak je pjesme Ivana Slamniga i ujedno njen naslov. I u tom slučaju može se razmatrati njena jezična struktura kao i u prvom slučaju, ali sada pitanje o njenoj istinitosti postaje bespredmetno. Njen smisao nije sada shvatljiv u nekom stvarnom kontekstu. I Slamnigova pjesma, doduše, govori o nečem što bismo mogli označiti kao zločin, ali ona ne govori ni o kakvu zbiljskom zločinu, odnosno, za njeno razumijevanje kao pjesme sasvim je svejedno da li je ona nastala na osnovi nekog zbiljskog zločina ili ne. Ako je rečenica "Ubili su ga ciglama" stih jedne pjesme, a ne razumijevamo je uopće na osnovi njene istinitosti ili neistinitosti, nego na osnovi cjeline našeg vlastitog životnog iskustva u kojem spominjanje ubojstva ciglama može izazvati niz primisli na temelju kojih stvaramo "sliku" onog o čemu pjesma govori i ostvarujemo tako jedno njeno moguće značenje.

To pokazuje kako književno djelo, za razliku od jezičnih tvorevina nastalih u običnom govoru, ima poseban, vlastiti smisao, takav smisao koji je razumljiv izvan neposrednih okolnosti u kojima su njegove riječi izgovorene. Smisao književnog djela "održava" se, tako reći, i nakon što se promijenila konkretna situacija u kojoj su njegove riječi izgovorene odnosno napisane. Dok "ubili su ga ciglama" u Večernjem listu znači nešto tek u okviru stvarnog zločina, i bez tog opisa odnosno bez našeg odnosa prema tom stvarnom zločinu nema nikakvo značenje, iste riječi u Slamnigovoj pjesmi "zadržavaju" svoj smisao i bez bilo kakva "stvarnog konteksta". To ujedno znači da je književno djelo u najširem smislu riječi svaka jezična tvorevina koja se "održava u vremenu", tj. koju barem neka grupa ljudi prihvaća i pamti, smatrajući je vrijednom pamćenja odnosno nekog drugog načina "zadržavanja" i izvan neposrednih okolnosti njena nastanka (takva su djela npr. različite uzrečice, slučajno nastali stihovi, vicevi, priče o nekim događajima ili ličnostima i sl.). Ipak, iako je u svim, čak i slučajno nastalim, takvim jezičnim tvorevinama prisutna ona ista stvaralačka djelatnost i stvaralačka moć jezika kao i u najglasovitijim književnim djelima, književnim djelima u užem smislu nazivamo samo takva ostvarenja koja su od veće važnosti za cjelokupnu kulturu, tj. takva ostvarenja koja u sebi sadrže iskustvo čitavih naroda pa i čovječanstva u cjelini.

Naravno, činjenica što razumijevanje jezika u književnom djelu presudno uvjetuje razlikovanje umjetničkih književnih djela od drugih jezičnih tvorevina nipošto ne znači da i sam tekst umjetničkog djela nema onih osobina koje ga razlikuju od bilo kakva teksta. Posebne osobine umjetničkog teksta jedino ne određuju presudno razumijevanje književnog teksta, odnosno, isključivo na analizi teksta uzetog bez konteksta nemoguće je utvrditi književnu vrijednost. Književna vrijednost teksta temelji se na stvaralačkim mogućnostima samog jezika, koji nije naprosto sredstvo sporazumijevanja (poput prometnih znakova npr.), nego nosi sam u sebi mogućnost ostvarivanja sasvim novog smisla odnosno oblikovanja novog smislenog svijeta. Osobine teksta služe tako samo kao poticaj da se jezik razumije u njegovoj "svjetotvornoj" dimenziji. Tako kad čitamo npr. spomenute stihove :

Ubili su ga, ciglama: crvenim, ciglama,

pod zidom, pod zidom, pod zidom.

Postajemo na temelju načina govora svjesni da tu nije riječ o izvještaju o nekom zbiljskom zločinu, jer za takav izvještaj ne bi bilo potrebno triput ponoviti gdje se zločin dogodio, nit "razlomiti" kazivanje zarezima. U pjesmi, međutim, ponavljanja i zarezi nisu nipošto suvišni; naprotiv, upravo te osobine teksta omogućuju da izgovoreno bude prihvaćeno kao poseban način kazivanja u kojem se smisao naprosto ne treba ostvariti isključivim pozivanjem na stvarnu životnu situaciju iz koje je kazivanje poteklo. Ponavljanje je tako posebno upozorilo na neke riječi, a zarezi su nas naveli da riječi čitamo i shvaćamo na neki način "izdvojeno", izvan njihova prirodnog slijeda koji sam po sebi zahtijeva i "prirodan kontekst". Tako nas sam tekst pjesme upravo "prisiljava" da ne pazimo tek na ono što je rečeno, nego i na način kako je

rečeno, na način kako se pjesma "služi" jezikom, na jezik kao jezik, a ne samo na jezik kao sredstvo sporazumijevanja i prenošenja unaprijed poznatih sadržaja iskustva.

Naravno, time nije rečeno kako se jezik u pjesmi, i preko njega sama pjesma odnosno književno djelo, nikako ne odnosi prema stvarnosti. Time je rečeno samo da se jezik u pjesmi ne odnosi prema stvarnosti na isti način na koji se prema stvarnosti odnosi jezik svakodnevnog govora npr.; da se ne odnosi kao "imenovanje" unaprijed poznatih stvari i životnih odnosa, nego kao novi smisleni sustav prema starom sustavu; kao oblikovanje novog svijeta prema starom, poznatom svijetu; kao stvaranje novog iskustva prema starom iskustvu o cjelini svijeta i života.

### **Human Translation**

### PREFACE

This book is intended for high school students, students of literature and all those who wish to get acquainted with the basic concepts of literary theory and some fundamental questions regarding the scientific study of literature. It aims to explain to the reader the origin, the usage and the purpose of specific concepts that are most frequently used in literary theory, to direct them towards the purpose, the tasks, and the methods of literary analysis, as well as to give them some sort of a waypoint through different literary movements in the development of contemporary literary science. I tried to adjust the selected problems and their exposition in such a way as to make them equally understandable to all regardless of their education and previous knowledge of literary theory. At the same time, I was weary of such simplifications that might bring into question the need to maintain the level of literary science under which, in my opinion, neither the current literary criticism nor the literary-theoretical and literary-critical journalism and least of all the literary teachings should go beneath.

It goes without saying that in the process of writing such a book I had faced many difficulties. Some of them stem from unresolved terminological issues, some from the situation in the contemporary literary science, and some from the contradiction between the need for a short and simple exposition and the complexity of the subject at hand. Of course, only the readers can judge how successful I was in tackling these issues. I only wish to draw attention to the fact that this book is not meant to be interpreted and evaluated as a systematic exposition of scientific literary theory, but rather as an exposition that should be used as an introduction to the understanding i.e., a systematic development of scientific literary theory. The book analogically relates to the literary theory in the same way that a chess beginner relates to the chess theory in which, however, positional play and the principles of combinatorics are mentioned, but the focus is mostly on the instructions regarding the movement of the pieces on the board, their names, values, and on the ways in which a chess match can end.

This book was created based on ten years of experience that I have as head of studies on the theory and methodology at the Faculty of Humanities and Social Sciences, department of Comparative literature at the University of Zagreb. Directly through working with my students, I was inspired to write the book and organize it in such a way that it represents a systematic exposition of the fundamental materials upon which truly, contemporary, literary classes at university level can be further built upon. In its general outline, in the selection of the terms and problems, or even in many general views, I could not rely on similar work, either domestic or international, which, however, does not imply that there is no quality work on the subject. The reason is that similar domestic works have a vastly different purpose, or are outdated, which is not unusual given the uproarious development of literary science in the past few decades, whereas similar international works are based on a differently selected literary works and are regularly based on different traditions of literary analysis from the one that was developed and is being developed by our literary science. It would do more harm than good to a book of this type to strive towards some special independence or originality, which, clearly, is not what this book strives to do. I merely wish to point out that I used a variety of sources in explanations, hypotheses and in the arrangement of the exposition, (to which also implies the works cited list at the end of the book), out of which I believe that numerous debates in the Umjetnost riječi magazine, Uvod u književnost proceedings, and, of course, my books Ideja i priča and Pitanja poetike have been used the most both as a source of data and as the basis for synthetic conclusions.

Zagreb, December 1974. The author

### 1. THE NATURE AND THE STUDY OF LITERATURE

### THE NAME AND CONCEPT OF LITERATURE

The Croatian word "književnost" evokes the idea of a book(s). The word "literature" on the other hand, which we sometimes use because almost all European languages use this term for literature from the Latin literatura, points out to the fact that literature is that which is written given its origin word littera, a letter. Only the Croatian word "pjesništvo" meaning poetry, if it is not specifically used as a part of literature (poetry as opposed to prose), but as literature in its

entirety, points us in another direction. Even then, however, poetry is often related, via the Croatian word "pjesma", exclusively to singing and music. This way none of these terms, if we follow the literal meanings of words and their connotations, corresponds to that which nowadays is considered literature.

Literature, first and foremost, is in no way only that which is written in books. In addition to written literature, although, making up the majority of what is perceived as literature, there is also oral literature. Oral literature, on the other hand, is not only the literature made and spread around using oral means in times when literacy was a rarity (so called Folk literature), but also the literature that is being created nowadays, spread, and developed either by "word of mouth", or by using technical means that do not require it to be written down. Both types of oral literature are of great importance for the understanding of the nature of literature and the creation of the adequate term for literature.

Literature, let us make mention, seldomly refers to everything contained in books. Much often is the word "literature" used in its narrower sense, deeming that only selected works are worthy of being recognized under the term literature, while others belong to science, philosophy, accounts of real events, or even some other aspects of human activity, or, in other words, some other types of "records". Precisely for that reason, nowadays, with the word "literature", we mostly describe that which is written on a subject, i.e., the collection of works pertaining to a particular area of scientific research (e.g., "references" at the end of this book means the works from the area of literary theory), and not literature as a whole. The term literature is at the same time narrower and broader that the term that we could analogically think of based on its common name.

Hence that which we call literature must be understood on the basis of comprehension of the specialized nature of literary works, that is, the basis of understanding literature as art. The term "artistic literature" in that sense aptly marks the difference between scientific works and literary works in the narrow sense of the word. Older, and locally oftentimes used term "fiction" is less appropriate because it does not only assume the unity of art and beauty, but also the personal understanding of beauty, which is an understanding that is nowadays seldomly thought of when assessing the literary works and works of art. Therefore, we use the term "fiction", derived from the French phrase belles lettres (which could be literally translated as "pretty letters"), to describe a part of artistic literature (regular: novels and novellas), and not artistic literature in its entirety.

It is worth mentioning that the term "poetry" as well, if not connected to singing, and if understood in the broader sense than that to which the poetry vs. prose opposition warns us about, may also proportionately mark what we have termed artistic literature. Poetry correlates to the Greek term poiesis, meaning "production", or "creation". By keeping in mind that the author or the poet creates a literary work by using special rules that imply he has mastered the art of poetry, the term "poetry" as well as the term "artistic literature", point out in an equal way the need for the literature to be understood as a particular type of a creative linguistic activity. In that sense, the term literature or poetry binds an author or a poet with the literary work as its/his product, and with listeners or readers without whom there is not true literature. Literature, in fact, lives only if there are those that understand literary works as works of art and read or listen to them as such.

As a craft, such activity that forms a work that will serve as a source of special satisfaction and learning, literature can be compared to music, painting, sculpturing, architecture, and other similar crafts that come under the common name art. Art is a special human activity, such an activity in which the human ability to shape results in meaningful creations of particular value: works of art. Works of art contain human experience of life and world expressed in such a way in which it cannot usually be expressed; in that sense, art is independent and irreplaceable. Unlike science or philosophy for example, that try to create a systematic image of reality, works of art do not only contain its own cognition of reality but at the same time create a new reality. In that way, a great work of art gives life a certain dimension of sense that pertains to that which does not yet exist, to future; making art one of the ways in which man creates his own world. It gives a new, human sense to life occurrences, thus opening a path to the understanding of life and world without which there is no true human life.

### LITERATURE AND LANGUAGE

Literature is called the art of words when we want to point out the fact that language is precisely the building block used to construct a literary work. This also underlines the special position of literature among other art forms. Language, in fact, is not material in the same sense that colors are in painting, notes are in music; language is not a "crude material", but rather in it of itself extraordinarily complex immaterial construct. In that sense, without the understanding of the nature of a language there is no understanding of the nature of literature. The relation between literature and reality ought to be considered in the context of the relation between language and reality. Literature relates to reality in, so to speak, indirect way, and its study as art presumes, in one way or another, a specific understanding of language.

Literary work, first and foremost, is a linguistic construct, same as any other linguistic construct. If that which is written down in some language, or in any other way identified, we call a text (from Latin textum, weaving, fabric, linking of words), then a literary text can naturally be analyzed as any type of text. Since the understanding of every text depends on the context (from Latin Contextum, woven together, intertwined), i.e., the assumed oral or coherent unit only in which things that are said or written gain their proper meaning, only context gives a linguistic text the meaning which makes it a work of art. This means that the study of literature begins when we analyze those characteristics of a literary text that allow us to understand it in a specific context not as any linguistic expression, but rather as an artistic linguistic expression.

Let us illustrate this with the following example: "They killed him with bricks." This sentence can be interpreted as a report of a crime and it can be interpreted in a way in which it is constructed based on the choices of individual sounds, words, their formation, and their interconnection. It can be analyzed as any linguistic product, and if we have read it for example in Večernji list, naturally, it will interest us whether it is truthful or fabricated for sensation purposes. Its comprehension relies on the so-called real-life context, and the analysis of its grammatical correctness or incorrectness will obviously not be of special importance for literary research. The same sentence, however, marks the beginning of the poem by Ivan Slamnig and simultaneously its title. In this case its linguistic structure can be interpreted in the same way as in the first case, but in this case the question of its truthfulness is irrelevant, thus making its meaning incomprehensible in a real context. Although Slamnig's poem talks about something that we might consider a crime, it does not talk about any real crime, meaning that for it to be understood as a poem it is completely irrelevant whether it is based on a real crime or not. If the sentence: "They killed him with bricks" is a line of a poem, we don't understand it based on its truthfulness or falseness, but on the basis of our own life experience in its entirety in which the notion of being murdered by bricks might trigger a sequence of afterthoughts based on which we create an "image" of what the poem is about, and we realize one of its potential meanings.

This shows that a literary work, as opposed to linguistic construct created in everyday speech, has its own special meaning, a meaning that is comprehensible outside of the immediate context in which words are uttered. The purpose of a literary work "endures" even after the specific situation in which words were spoken or written down has changed. Whereas "They killed him

with bricks" in Večernji list carries some information in relation to the real-life crime, even without that description or without our contribution to this real-life crime it has no meaning, those same words in Slamnig's poem "retain" its meaning even without any "real-life context". At the same time, this means that a literary work in its broadest sense of the word is any linguistic creation that is "reflected in time", i.e., that at least some group of people accepts and remembers, making it worth remembering or "preserving" in some other manner even outside of immediate circumstances of its creation (such are for example sayings, accidentally created verses, jokes, stories of an event or a person and so on). Even though the creative activity and the creative power of a language, present even in those accidentally made linguistic creations, is the same as is in the most renowned literary works, we only call literary works in narrower sense those creations that are of larger importance for the overall culture, i.e., those creations that in themselves contain the experience of entire nations, even humanity as a whole.

Of course, the fact that the understanding of a language in a literary work decisively conditions a distinction between artistic literary work and other linguistic creations, it does not mean that the artistic work itself does not have those features that distinguish it from a generic text. Based only on special features of an artistic text, the decisive understanding of a literary text cannot be determined, i.e., it is impossible to determine literary value based exclusively on an analysis of a text which does not consider the context as well. The literary value of a text is based on creative possibilities of language itself, which is not just a means of communication (like traffic signs for example) but carries in itself a possibility to create a completely new meaning or a possibility to shape a new sensible world. The characteristics of a text serve just as an incentive for the language to be understood in its "world-creating" dimension. So, when reading for example previously mentioned verses:

They killed him, with bricks: red, bricks,

Under the wall, under the wall, under the wall.

We become aware, based on the wording that it is not the case of a report of a real crime, because for such a report it would not be necessary to repeat three times where the crime occurred, nor to break apart the narrative with commas. On the other hand, in a poem, repetitions and commas are in no way redundant; on the contrary, it is precisely those features that allow the utterance to be accepted as a special way of expression in which the sense should not be realized by only referring to a real-life situation from which the saying originated. In that way, repetition made a special point out to some words, and commas made us read and understand words in a somewhat "dissociated" way, outside of their natural sequence that requires in it of itself a "natural context" as well. So, the text of the poem itself "forces" us not only to pay attention to that which is said, but also to the way in which it is said, to the way in which the poem "uses" language, on language as a whole, and not only as a means of communication and transference of pre-known content of experience.

Of course, this does not mean that the language in a poem, and through it the poem itself or a literary work, does in no way relate to reality. It only means that the language in a poem does not relate to reality in the same way in which the everyday spoken language does; for example: it does not relate as a "naming" of pre-known things and life relations, but as a new meaningful system opposed to the old system; as shaping for a new world opposed to the old, known world; as creation of new experiences opposed to old experiences about world unity and life.

### **Machine Translation**

### PREFACE

This book is intended for secondary school students, literature students and all those who want to get acquainted with the basic concepts of the theory of literature and some basic problems of scientific study of literature. It attempts to explain to the reader the origin, use and purpose of certain terms most commonly used in the theory of literature, instruct him in the purposes, tasks and methods of literature study and allow him some orientation in various directions of the development of contemporary science of literature. I tried to make the choice of the problem and the way of presentation accessible to everyone, regardless of their education and previous knowledge of the theory of literature, but I strictly kept to such simplifications as might call into question the need to always keep the level of literature science below which, I believe, today neither current literary criticism, nor literary-theoretical and literary-critical publishing, and least of all literature teaching, should go.

I do not think it necessary to mention in particular how I encountered many difficulties in writing such an imaginary book. Some of them arise from unresolved terminological problems, some from the state of contemporary science of literature, and some from the contradiction between the complexity of the subject being dealt with and the need for a short and simple presentation. The extent to which I have managed to overcome such difficulties, this, of course, should be judged by the readers. I would like to point out only in this regard that this book should not be understood and assessed as an exposition of the systematic scientific theory of literature, but as an exposition that should serve as an introduction to the understanding or

systematic development of the scientific theory of literature. In comparison, it refers to the theory of literature, as in the theory of chess, it refers to a beginner, in which the principles of combinatorics and positional games are mentioned, but in which the greatest part is devoted to instructions on the rules of movement of figures on the board, on the names of figures and their value, and on the ways in which the chess game can be completed.

This book was created on the basis of ten years of experience I gained at the Department of Theory and Methodology of Literature of the Department of Comparative Literature of the Faculty of Humanities and Social Sciences in Zagreb. To write it, I was directly encouraged by the work with students; in this sense, it was conceived as a systematic exposition of the material that serves only as a foundation on which to further build a truly contemporary teaching of literature at the university. In her general draft, the choice of terms and problems, even in many principled attitudes, I could not rely much on similar works of ours or foreign ones, of course not because there would be no good works of this kind, but because our similar works are of a significantly different basic purpose or are somewhat outdated (which is natural in the tumultuous development of literature science in recent decades), while foreign similar works were made on the basis of a different selection of literary works and regularly significantly different traditions of literature study from the one on which our science of literature was developed and developed. Of course, this book does not strive for any special independence and originality at all costs; a work of this kind, I think, would be more damaging than useful. I would just like to say that I have used a lot of different sources and models in my explanations, theses and presentation schedule (to which, after all, the literature at the end of the book refers), and yet I believe that numerous discussions in the journal Art of Word, the Proceedings Introduction to Literature and, of course, my own books Idea and Story and Questions of Poetics served me most as a source of data and as a basis for synthetic conclusions.

Zagreb, December 1974 Author

### 1. NATURE OF LITERATURE AND STUDY OF LITERATURE

### TITLE AND TERM LITERATURE

Our word "literature" evokes the thought of books. The word "literature" again, which we sometimes use because almost all European languages use the name for literature according to the Latin word literature, suggests that literature is what is written because it is derived from the word littera, the letter. Only the word "poetry", if we use it not only to denote a part of literature (poetry versus prose), but also literature as a whole, directs us in a different direction. And then, however, we often associate poetry, through our word "song", exclusively with singing and music. Thus, none of these names, if we follow the literal meanings of words and the usual thoughts that they provoke, actually correspond to what we today call literature.

Literature, first of all, is by no means just what is written in books. In addition to written literature, which, however, accounts for the largest part of what we imagine today when we talk about literature, there is also oral literature. Oral literature, however, is not only that literature that was created and that for a long time spread through oral tradition at a time when literacy was rare (the so-called Folk literature), but also that literature which is still emerging today, is expanding and developing either by handing it over "from mouth to mouth", or by technical means that do not require literature to be written down. Both types of oral literature are of great importance for understanding the nature of literature and creating the appropriate title and notion of literature.

Literature, let us then mention, is rarely referred to as all that is contained in books. We use the word "literature" much more often in the narrow sense, considering that only certain works should be included in the notion of literature, while other written works belong to science, philosophy, reports of true events, or some other areas of human activity, or some other types of "records". This is why we use the word "literature" to denote what is written about a subject most often today, i.e. the sum of works related to a scientific field (e.g. "literature" at the end of this book means works from the field of literature theory), not literature as literature. The notion of literature is also wider and narrower than the one that we could directly think of based on its common name.

Therefore, what we call literature should be understood on the basis of understanding the special nature of literary works, or on the basis of understanding literature as art. The name "artistic literature" in this sense appropriately denotes the difference between scientific works and literary works in the narrow sense of the word. The older, often used term "beautiful literature" in us is somewhat less appropriate because it assumes not only a certain unity of art and beauty, but also a special understanding of beauty, such an understanding as we rarely have in mind today when evaluating literary and artistic works. Therefore, according to the French belles lettres (which we could translate as "beautiful literature"), we call today mostly art literature (regular: novels and novels), and not art literature as a whole.

It should be said, however, that even the name "poetry", if we do not associate it with singing, and if we understand it in a broader sense than the one it warns against the contradiction of poetry and prose, can also commensurate appropriately mark what we have called artistic literature. Poetry corresponds to the name "poetry", derived from the Greek word poiesis , meaning "production" or "creation". If we bear in mind that a writer or poet produces a literary work according to special laws that require that he has mastered the poetic art of the name "poetry" as well as the name "artistic literature", it equally well indicates the need for literature or poetry in this sense connects the writer or poet with the literary work as its product and with listeners or readers without whom there is no true literature. Literature only lives if there are those who understand literary works as works of art and thus read or listen to them.

As a creative activity, such an activity that shapes a work that will serve as a source of special pleasure and cognition, literature can be compared to music, painting, sculpture, architecture and other similar activities that we jointly name art. Art is a special human activity, such an activity in which the human power of design leads to the creation of meaningful creations of special value: works of art. Art works contain the human experience of life and the world expressed in such a way that it cannot otherwise be expressed; art is in this sense self-contained and irreplaceable. Unlike science or philosophy, for example; which attempt to create a certain systematic picture of reality, works of art not only contain a kind of realization of reality, but also shape a new reality. The great art thus gives life a certain dimension of meaning that relates to what it has not yet done, to the future. Thus, art is one of the ways in which man creates his world. It gives life a new, human meaning, and thus opens such a horizon of understanding life and the world without which there is no true human life.

### LITERATURE AND LANGUAGE

Literature is called the art of words when it is desired to point out that it is the language that is the "material" from which the literary work is built. This also emphasized the special position of literature among other arts. Namely, language is not a material in the same sense that the colors are the material of painting, and the tones of music; language is not a "raw material", but is itself an extremely complex spiritual creation. Therefore, without understanding the nature of language, there is no understanding the nature of literature. The relationship of literature to reality should therefore be considered in the context of the relationship of language to reality. Literature, so to speak: indirectly, through language, refers to reality, and the study of literature as an art always in one way or another assumes a certain understanding of language.

A literary work, first of all, is a linguistic creation like any linguistic creation. If what is written in a language, or in any other way established, is called text (according to Latin textum, weave, fabric, fresh words), literary text can naturally be studied as any text. How the understanding of each text depends on the context (according to lat. Contextum, together woven, intertwined), i.e. about that presumed speech or thought whole within which only the spoken or written gets real meaning, only the context gives some linguistic text that meaning that makes it a work of art. And that means that the study of literature begins when we analyze those properties of literary text that allow us to understand it in a particular context not as any linguistic expression, but as an artistic linguistic expression.

Take, for example, the phrase, "They killed him with bricks." This sentence can be understood as a report of a crime and can be considered in terms of how it is built on the basis of the choice of individual voices, words, their forms and the way in which they are linked. It can, therefore, be studied as any linguistic creation, and if we have read it, for example, in the Vecernji list, we will naturally be interested in whether it is true or invented because of what it is called: sensations. Her understanding then relies on the so-called real context, and the analysis of her grammatical regularity or irregularity will of course not be of particular interest for the study of literature. The same sentence, however, is the beginning of Ivan Slamnig's poem and also its title. In this case, too, one can consider its linguistic structure as in the first case, but now the question of its veracity becomes irrelevant. Its meaning is not now comprehensible in any real context. And Slamnig's poem, though, speaks of something that we could call a crime, but it does not speak of any real crime, that is, for her understanding as a poem, it makes no difference whether it was created on the basis of a real crime or not. If the sentence "They killed him with bricks" is a verse of a song, and we do not understand it at all on the basis of its truthfulness or untruthfulness, but on the basis of the whole of our own life experience in which the mention of brick killing can cause a series of thoughts on the basis of which we create the "image" of what the song speaks of and thus realize one possible meaning of it.

This shows how a literary work, unlike linguistic creations created in ordinary speech, has a special, own meaning, such a meaning that is understandable beyond the immediate circumstances in which its words are spoken. The meaning of the literary work is "maintained", so to speak, even after the concrete situation in which his words were spoken or written has changed. While "killed with bricks" in Vecernji list means something only within the real crime,

and without that description or without our relationship to that real crime has no meaning, the same words in Slamnig's poem "retain" their meaning and without any "real context". This also means that a literary work in the broadest sense of the word is any linguistic creation that is "maintained in time", i.e. which at least some group of people accepts and remembers, considering it worth remembering or some other way of "retaining" and beyond the immediate circumstances of its creation (such works are e.g. different sentences, accidental verses, jokes, stories about some events or personalities, etc.). However, although the same creative activity and the creative power of language is present in all such linguistic creations, even accidentally created, as in the most notable literary works, literary works in the narrow sense are only called such realizations that are of greater importance for the entire culture, i.e. such realizations that contain the experience of entire peoples and humanity as a whole.

Of course, the fact that the understanding of language in a literary work crucially makes it necessary to distinguish artistic literary works from other linguistic creations does not in any way mean that the text of the work itself does not have those qualities that distinguish it from any text. The special features of artistic text do not determine the crucial understanding of literary text, that is, solely on the analysis of text taken without context, it is impossible to determine the literary value. The literary value of the text is based on the creative possibilities of the language itself, which is not a simple means of communication (such as traffic signs, for example), but carries within itself the possibility of making a completely new sense, i.e. forming a new meaningful world. The properties of the text thus serve only as an incentive to understand the language in its "worldly" dimension. So when we read e.g. the mentioned verses :

They killed him with bricks: red bricks, red bricks,

under the wall, under the wall, under the wall.

Based on the way we speak, we become aware that this is not a report of a real crime, because for such a report it would not be necessary to repeat three times where the crime occurred, nor to "break" the saying with commas. In the poem, however, repetitions and commas are by no means superfluous; on the contrary, it is precisely these qualities of the text that make it possible for the spoken to be accepted as a special way of saying in which meaning should simply not be realized by exclusive reference to the real life situation from which it originated. The repetition thus specifically warned about some words, and commas led us to read and understand words in a way "isolated", beyond their natural sequence which itself requires a "natural context". Thus, the text of the song itself "forces" us not only to pay attention to what has been said, but also in the way it has been said, in the way that the song "serves" the language, to language as a language, and not only to language as a means of communicating and transmitting the known contents of the experience.

Of course, this does not say how the language in the poem, and through it the poem itself, or literary work, is in no way related to reality. This is just to say that the language in the poem does not relate to reality in the same way that the language of everyday speech refers to reality, for example; that it does not refer to it as the "naming" of things and life relationships known in advance, but as a new meaningful system according to the old system; as the shaping of a new world according to the old, known world; as the creation of a new experience according to the old experience of the whole of the world and life.

**4.4. Text 4-** Cost effectiveness analysis of the present intermodal maritime transport solutions within the MIMOSA project

# The original

Aktivnosti	1.	Analiza	potražnje	prijevoza	talijanskih
putnika					

U sklopu ove aktivnosti izrađena je analiza potražnje prijevoza talijanskih putnika koji su boravili u Hrvatskoj u razdoblju od 2010. do 2021. godine, odnosno u razdoblju prije Covid-19 pandemije virusa (2010. – 2019.) i za vrijeme trajanja Covid-19 pandemije virusa (2020. - 2021.) kako bi se ostvario jasan uvid u čimbenike koji utječu na prijevoznu potražnju talijanskih putnika.

Javno dostupnim podacima prikupljenih sekundarnim istraživanjem (engl. *desk research*), utvrđeno je da Hrvatsku godišnje posjeti oko 1.100.000 talijanskih turista što čini oko 8 % od ukupnog broja dolazaka svih turista. Od ukupnog broja talijanskih turista oko 82 % ih boravi na kopnu, dok preostalih 18 % boravi na hrvatskim otocima, a najveći broj dolazaka talijanskih turista biježe otoci Krk, Pag i Rab. Temeljem analize utvrđeno je da su otoci na području sjevernog Jadrana posjećeniji od otoka u Dalmaciji što se dovodi u korelaciju s blizinom Hrvatske i Italije na području sjevernog Jadrana. Osim toga, otoci Lošinj i Pag imajudirektne pomorske linije s Italijom što također ukazuje na utjecaj kvalitete prijevozne povezanosti i

broja turističkih dolazaka. Nadalje, analizom načina prijevoza talijanskih turista zaključeno je da povoljan geoprometni odnos Italije i Hrvatske u kontekstu pomorskog prometa nije dovoljno iskorišten jer čak oko 86 % talijanskih turista koriti osobni automobili za dolazak u Hrvatsku i kretanje unutar nje, dok je pomorski prijevoz korišten zasamo 3,6 % putovanja talijanskih turista u Hrvatsku.

Primarno istraživanje provedeno je u razdoblju od 16. kolovoza 2021. godine do 13. rujna 2021. anketiranjem relevantnih turističkih institucija/agencija u Hrvatskoj i Italiji te anketiranjem talijanskih turista u pet hrvatskih pomorskih luka. Rezultati anketiranja turističkih agencija/zajednica ukazuju kako su blizina Hrvatske i prirodne ljepote te gastronomska ponuda glavni razlozi dolaska talijanskih turista u Republici Hrvatskoj. S druge strane, turističke institucije/agencije smatraju da turiste odbija neadekvatno postojeće stanje pomorskog prometa na području obuhvata. Manjkavosti se uglavnom odnose na lošupovezanost između otoka te otoka i kopna, neadekvatnu informiranost turista, visoke cijene pomorskog prijevoza i prijevoza po pozivu na lokalnoj razini. Rezultati anketiranja ukazuju na zadovoljavajuću upoznatost turističkih institucija/agencija s pojmom multimodalnosti te određeni udio potiče korisnike na korištenje takvog načina prijevoza. Međutim, s ciljem povećanja broja putnika u multimodalnom prometnom sustavu, nužan je njegov sustavan razvoj.

Pandemija virusa Covid-19 imala je snažan negativan utjecaj na turističke aktivnosti. U 2020. godini zabilježen je pad broja dolazaka talijanskih turista za 79,5 % u odnosu na 2019. godinu. Rezultati anketa ukazuju na to da je čak 80 % ispitanih talijanskih turista promijenilo navike putovanja te da tijekom razdoblja pandemije Covid-19 izbjegavaju sustave masovnogprijevoza putnika i preferiraju putovanje osobnim automobilom.

## Aktivnosti 2. Analiza postojećih multimodalnih prometnih rješenja

U sklopu ove aktivnosti, temeljem sekundarnog istraživanja, izrađena je analiza stanja postojeće ponude pomorskog, autobusnog, biciklističkog i taksi prijevoza za hrvatske otoke povezane pomorskom linijom (trajektna, brodska i brzobrodska linija) s kopnom kako bi se omogućio pregled postojećih multimodalnih prometnih rješenja.

Hrvatski su otoci s kopnom povezani s 60 pomorskih linija. U prosjeku je svaki otok iz prve skupine otoka (više od 5.000 stanovnika) opslužen s 24 isplova tjedno, iz druge skupine otoka

(između 500 i 5.000 stanovnika) sa 60 isplova tjedno, dok su otoci iz treće skupine otoka (manje od 500 stanovnika) opsluženi s prosječno 129 isplova tjedno. Najveći prosječnitjedni broj isplova broje otoci Pelješac s 235 isplova, Korčula s 221 isplovom i Ugljan s 156 isplova, a najmanje otok Vele Srakane s pet isplova i otoci Obonjan i Biševo s četiri isplova.Broj isplova značajno se razlikuje ovisno o broju stanovnika na otoku i udaljenosti otoka od kopna. Analizom demografske pokrivenosti otoka pomorskim prijevozom utvrđeno je da 20otoka ima potpunu demografsku pokrivenost pomorskim lukama, a riječ je o, u pravilu manjim otocima s iznimkom otoka Raba. Otoci Vis i Hvar imaju izrazito dobru demografskupokrivenost, a otoci Mljet s 23 %, Šolta s 20 % i Čiovo s 18 % imaju najnižu razinu demografske pokrivenosti od svih otoka. Analizom pomorskog prometa između Italije i Hrvatske, prema podacima iz 2021. godine, na relaciji Italija – Hrvatska prometovalo je devet međunarodnih pomorskih linija. Zbog posljedica pandemije virusa Covid-19 ukinute su međunarodne linije Zadar - Ancona, Umag – Venecija, Rovinj – Trst i Poreč - Trst.

Postojanje i kvaliteta usluge javnog putničkog prijevoza na otocima razlikuje se od otoka do otoka. Tako je sustav autobusnog javnog prijevoza zastupljen na većim otocima, točnije na19 otoka, autotaksi prijevoz na 19 otoka, brodski taksi prijevoz na 45 otoka, sustavi javnih bicikala na 16 otoka i sustavi električnih romobila na 16 otoka. Pozitivno je to što razvoj i implementacija sustava javnih bicikala i javnih električnih romobila na otocima postepeno raste i zauzima važno mjesto u rješavanju prometnih zagušenja i prometne povezanosti. Povećanjem ponude usluga javnih bicikala i javnih električnih romobila na područjima pomorskih luka znatno bi se poboljšala i povećala ponuda multimodalnosti prema svim korisnicima.

Analizom usklađenosti linijskog autobusnog prijevoza i linijskog pomorskog prijevoza na području obuhvata utvrđeno je da je samo 17 % autobusnih polazaka/dolazaka usklađenos polascima/dolascima pomorskih linija.

Zaključno u analizi utvrđeno je da se putovanja na području Hrvatske ne mogu adekvatno ostvariti unutar integriranog prometnog sustava jer on nije dovoljno razvijen. Multimodalni promet se na području obuhvata ostvaruje isključivo trajektnim putovanjima, putem 62 trajektne luke koje omogućavaju kombiniranje cestovnog i pomorskog načina prijevoza. Multimodalnost ostalih načina prijevoza ostvaruje se isključivo neplanirano.

Uz kvantitativnu i kvalitativnu analizu postojeće prometne ponude i razine multimodalnosti, izrađeni su i kartografski prikazi stanja multimodalnih prometnih rješenja na području

obuhvata Analize multimodalnosti pomoću geografskih informacijskih sustava (dalje u tekstu: GIS). Prikazane su sve pomorske luke opslužene linijskim pomorskim putničkim prijevozom u Hrvatskoj i pomorske luke u Italiji koje imaju prometnu vezu s Hrvatskom.

### Aktivnosti 3. Ocjena učinkovitosti trenutnih multimodalnih prometnihrješenja

U sklopu ove aktivnosti izrađena je analiza političkih, ekonomskih, društvenih, tehnoloških, pravnih i okolišnih aspekata (PESTLE) postojećeg stanja multimodalnog prometa na području obuhvata. Identificirani su ključni čimbenici vanjskog okruženja koji imaju izravan ili neizravan utjecaj na razvoj multimodalnog prometnog sustava s naglaskom na pomorski prijevoz na području Hrvatske.

PESTLE analiza pokazala je kako članstvo Republike Hrvatske u Europskoj uniji i dostupnost sredstava iz EU fondova ima ili može imati pozitivan utjecaj na razvoj multimodalnosti. S druge strane, velik broj jedinica lokalne samouprave otežava administrativne procese i implementaciju projekata. S ekonomskog aspekta, utvrđene su pozitivne okolnosti u vanjskom okruženju koje se očituju kroz rast BDP-a prije pandemije virusa Covid-19 i smanjenje stope nezaposlenosti.

Također, vidljiv je trend ekonomskog oporavka od posljedica pandemije. Međutim, negativni utjecaj na unaprjeđenje povezanosti hrvatskih otoka te razvoj i implementaciju multimodalnih pomorskih rješenja s ekonomskog aspekta očituje se u izazovima koje za razvoj multimodalnog prijevoza predstavlja manja troškovna učinkovitost pomorskog od cestovnog prijevoza.

Društveni kontekst razvoja multimodalnosti predstavlja izazov zbog negativnih demografskih trendova uzrokovanih negativnim prirodnim i prostornim migracijama, osobito na otocima. Međutim, kvalitetnija povezanost otoka može doprinijeti smanjenju negativnih demografskih trendova, osobito u kontekstu smanjenja prostornih migracija iz otoka i ruralnih naselja u veće gradove.

Nadalje, multimodalna prometna rješenja, zbog sve većeg razvoja tehnologije, imaju dobre preduvjete za budući razvoj. Razvoj tehnologije ima potencijal omogućiti racionalizaciju procesa organizacije prijevoza, učinkovitija i troškovno optimalnija prijevozna sredstva, kvalitetniji sustav pretputnog, putnog i poslijeputnog informiranja putnika i sl. Pritom je važno uzeti u obzir čimbenike vezane uz okolišni aspekt, odnosno nužno unaprjeđenje

konvencionalnih tehnologija u pomorskom prijevozu s ciljem smanjenja negativnih utjecajana okoliš. To je podržano i strateškim dokumentima na europskoj i nacionalnoj razini koji naglašavaju važnost razvoja multimodalnosti i integriranog prometnog sustava, osobito u pogledu smanjenja prometnih zagušenja i ekološkog onečišćenja.

Osim PESTLE analize, u sklopu ove aktivnosti su definirani pokazatelji učinkovitosti trenutnih multimodalnih prometnih rješenja u svrhu ocjene učinkovitosti postojećih multimodalnih prometnih rješenja. Pokazatelji učinkovitosti koji su obuhvaćeni u izračun ocjene učinkovitosti trenutnih multimodalnih prometnih rješenja su:

- broj autobusnih linija po otoku,
- broj pomorskih luka s kojima je otok povezan pomorskim prijevozom (izravne linije),
- međunarodne pomorske linije prema Italiji,
- demografska pokrivenost,
- broj stanovnika na pomorskim linijama s kojima je otok povezan,
- odnos broja pomorskih linija i gustoće naseljenosti otoka,
- prosječan broj pomorskih polazaka tjedno po otoku,
- prosječan broj polazaka/dolazaka autobusnih linija na otoku,
- dostupnost usluge autobusnog linijskog prijevoza putnika na otoku,
- dostupnost usluge autotaksi prijevoza putnika na otoku,
- dostupnost usluge brodski taksi prijevoza putnika na otoku,
- > postojanje sustava iznajmljivanja bicikala/romobila na otoku,
- > razina usklađenosti pomorskih i autobusnih linija na otoku,
- postojanje trajektne luke na otoku,
- > postojanje sustava iznajmljivanja bicikala/romobila u luci.

Bodovanjem pokazatelja utvrđeno je da prosječna ocjena postojećeg stanja multimodalnosti iznosi 3,4 boda od maksimalnih 10 bodova, što kvantitativno dokazuje nezadovoljavajuće stanje postojećih multimodalnih prometnih rješenja. Najbolje je ocijenjen otok Pag s ocjenom 6,96, a najlošije ocijenjen je otok Vele Srakane s ocjenom 1,6.

# Aktivnost 4. Prijedlog i metodologija izrade pokazatelja učinkovitosti provedbe multimodalnih prometnih rješenja

U sklopu ove aktivnosti izrađena je strukturirana baza podataka koja prikazuje podatke prikupljene kroz Aktivnosti 1, 2 i 3 na način da omogućava redovito godišnje ažuriranje

podataka.

Uz bazu podataka, izrađen je popis potencijalnih pokazatelja učinkovitosti provedbe multimodalnih prometnih rješenja i predložena je metodologija praćenja razvoja multimodalnih prometnih rješenja na području obuhvata. Metodologija vrednovanja, izračuna i praćenja pokazatelja multimodalnih prometnih rješenja također je prikazana u bazi podataka koja je izrađena u sklopu ove aktivnosti, a predloženi pokazatelji učinkovitosti provedbe multimodalnih prometnih rješenja su:

- > postojanje trajektne luke na otoku,
- razvoj biciklističke infrastrukture na otoku [km/km<sup>2</sup>],
- prosječan broj polazaka pomorskih linija tjedno po otoku,
- broj pomorskih međunarodnih linija prema Italiji,
- broj polazaka na međunarodnim pomorskim linijama prema liniji po otoku,
- uspostava car sharing sustava u luci na alternativna goriva,
- uspostava integrirane putničke karte na otoku,
- uspostava sustava za iznajmljivanje bicikala/romobila na području luke,
- prosječan broj dnevnih polazaka autobusnih linija na otoku,
- > razina usklađenosti pomorskih i autobusnih linija na otoku,
- provedba promidžbe sustava multimodalnosti na otoku,
- broj linija na kojima prometuju brodovi na alternativni pogon,
- troškovna učinkovitost multimodalnog prijevoza.

# Aktivnost 5. Prijedlozi poboljšanja primjene novih modela multimodalnihprometnih rješenja

Kako bi se osigurao širi uvid u razvojne mogućnosti multimodalnog prometnog sustava u svrhu ideacije potencijalnih rješenja koja se mogu implementirati na području obuhvata, u sklopu ove aktivnosti provedena je analiza i izrađen je katalog primjera dobre prakse multimodalnih prometnih rješenja iz Europe i svijeta, uključujući i pomorski prijevoz. Na temelju analiziranih primjera vidljivo je da se korištenje integriranog tarifnog sustava uz usklađivanje voznih redova predstavlja kao najvažniji element uspostave kvalitetnog multimodalnog prometnog sustava. Na turistički aktivnim područjima učestalo je korištenje pretplatničkih kartica za turiste putem kojih se korisnicima omogućava neograničena usluga javnog prijevoza uz dodatne beneficije u okviru turističkihponuda.

Na temelju kataloga dobre prakse i lokalnih razvojnih potencijala, izrađeni su prijedlozi

poboljšanja prijevoza putnika na području obuhvata Analize primjenom multimodalnih prometnih rješenja za kratkoročno, srednjoročno i dugoročno razdoblje. Prijedlozi poboljšanja odnose se na:

# Kratkoročno:

- Razvoj suvremenog sustava informiranja putnika u stvarnom vremenu,
- Razvoj suvremenog sustava naplate karata u javnom putničkom prijevozu (eticketing),
- > Promidžba i vidljivost multimodalnih prometnih rješenja,
- Razvoj sustava praćenja i evaluacije učinkovitosti provedbe multimodalnih prometnih rješenja,
- Nadopuna strategija i prostorno-planskih dokumenata na razinama jedinica lokalne samouprave,
- Implementacija sustava pogodnosti za korištenje pomorskog prijevoza na relaciji Hrvatska - Italija.

# Srednjoročno:

- Implementacija i razvoj javnih sustava mikromobilnosti (javni bicikli, romobilii sl.),
- Organizacija i usklađivanje postojećih pomorskih i autobusnih linija javnogprijevoza,
- Implementacija novih komunalnih linija autobusnog prijevoza na razinamajedinice lokalne samouprave ili otoka s vozilima na alternativna goriva,
- Implementacija novih pomorskih linija za povezivanje otoka i kopna i otokameđusobno,
- ▶ Uspostava prijevoza na poziv (engl. *on demand*),
- Uspostava novih međunarodnih pomorskih linija s Italijom,
- Razvoj biciklističke infrastrukture na otocima,
- Razvoj car sharing sustava na otocima s naglaskom na vozila na alternativnagoriva.

# Dugoročno:

- Uspostava integriranog prijevoza putnika formiranje tarifne unije i prometne uprave,
- > Izgradnja intermodalnih putničkih terminala,

- Razvoj postojećih i izgradnja novih pomorskih luka,
- Modernizacija flote pomorskog prijevoza s brodovima na alternativni pogon
  autonomna vozila.

Slijedom toga predložena su četiri pilot projekta poboljšanja multimodalnog prijevoza primjenom novih modela/rješenja za tri skupine otoka ovisno o broju stanovnika:

# Pilot projekt za I. skupinu otoka (do 500 stanovnika):

 Uspostava sustava javnih bicikala na području pomorskih luka i ostalihglavnih interesnih točaka na području otoka Zlarina.

## Pilot projekt za II. skupinu otoka (od 500 do 5.000 stanovnika):

 Uspostava sustava javnog autobusnog prijevoza s vozilima na alternativnipogon na otoku Cresu.

## Pilot projekti za III. skupinu otoka (više od 5.000 stanovnika):

- Izgradnja Park&Ride terminala na području pomorskih luka koji omogućava korisnicima dugotrajno parkiranje vozila i korištenje pomorskog prijevoza u cijenu parkirališne karte na otoku Brač.
- Uspostava međunarodne pomorske linije između otoka III. skupine i Italije,odnosno uvođenje međunarodne linije Korčula – Pescara.

Naglasak predloženih pilot projekata je na implementaciji prometnih rješenja uključujući prijevozna sredstva s manjom emisijom CO2. Pilot projekti se mogu implementirati i na ostale hrvatske otoke, ovisno o skupinama, odnosno broju stanovnika.

S ciljem uspješnog daljnjeg razvoja održivog i multimodalnog prometnog sustava u sklopu projekta MIMOSA predlaže se sustavno pristupiti promicanju implementacije multimodalnih prometnih rješenja, komunikaciji s relevantnim dionicima, revidiranju prostorno-planske dokumentacije, izradi planova održive mobilnosti na lokalnim razinama te kontinuirano provoditi aktivnosti planiranja i praćenja razvoja i implementacije.

## Human translation

## Activity 1. Analysis of the transport demand of Italian passengers

As part of this activity, an analysis of the transport demand of Italian passengers who stayed in Croatia in the period from 2010 to 2021 was made, i.e., in the period before the Covid-19 pandemic (2010-2019) and during the Covid-19 pandemic (2020-2021), to gain a clear insight into the factors affecting the transport demand of Italian passengers.

Public available data, obtained with methods of secondary research (i.e., desk research), showed that annually about 1.100.000 Italian tourists visit Croatia, which is about 8 % of the total number of arrivals of all tourists. Of the total number of Italian tourists, about 82% stay on the mainland, while the remaining 18 % stay on the Croatian islands, and the largest number of arrivals of Italian tourists record islands of Krk, Pag and Rab. Based on the analysis, it was determined that the islands in the northern Adriatic are more visited than the islands in Dalmatia, which is correlated with the proximity of Croatia and Italy in the northern Adriatic. In addition, the islands of Lošinj and Pag have direct maritime routes with Italy, which also indicates the impact of the quality of transport connections and the number of tourist arrivals. Furthermore, the analysis of the mode of transport that Italian tourists use concluded that the favourable geotraffic relationship between Italy and Croatia in the context of maritime transport is not sufficiently used because about 86 % of Italian tourists use cars to come to Croatia and move within it, while maritime transport was only used by 3,6 % of Italian tourists who travel to Croatia.

The primary research was conducted in the period from 16 August 2021 to 13 September 2021 by surveying relevant tourist institutions/agencies in Croatia and Italy and by surveying Italian tourists in five Croatian seaports. The results of the survey of tourist institutions/agencies indicate that the proximity of Croatia, natural beauty, and the gastronomic offer are the main reasons for the arrival of Italian tourists in the Republic of Croatia. On the other hand, tourist institutions/agencies think that tourists are inadequately repelled by the current state of maritime transport in the covered area. Deficiencies are mainly related to poor connections between islands and islands and the mainland, inadequate information for tourists, high prices of maritime transport and on demand transport at the local level. The results of the survey indicate a satisfactory familiarity of tourist institutions/agencies with the concept of multimodality and a certain share encourages users to use such a mode of transport. However, to increase the number of passengers in a multimodal transport system, its systematic development is necessary.

The Covid-19 pandemic has had a strong negative impact on tourism activities. In 2020, the number of arrivals of Italian tourists decreased by 79,5 % compared to 2019. The results of the questionnaire indicate that as many as 80 % of respondents have changed their travel habits and

that during the Covid-19 pandemic period they avoided mass passenger transport systems and preferred to travel by car.

#### Activity 2. Analysis of current multimodal transport solutions

As part of this activity, based on secondary research, an analysis of the existing offer of maritime, bus, bicycle and taxi transport for Croatian islands connected by sea (ferry, ship, and high-speed line) with the mainland was made to enable an overview of existing multimodal transport solutions.

Croatian islands are connected to the mainland with 60 maritime lines. On average, each island from the first group of islands (more than 5.000 inhabitants) is served with 24 departures per week, from the second group of islands (between 500 and 5.000 inhabitants) with 60 departures per week, while islands from the third group of islands (less than 500 inhabitants) are served with an average of 129 departures per week. The highest average weekly number of departures have islands Pelješac with 235 departures, Korčula with 221 departures and Uglian with 156 departures, and the smallest the island of Vela Srakane with five departures and the islands of Obonjan and Biševo with four departures. The number of departures varies significantly depending on the number of inhabitants on the island and the distance of the island from the mainland. The analysis of the demographic coverage of the islands by maritime transport showed that 20 islands have a complete demographic coverage of seaports, and these are, typically, smaller islands with the exception of the island of Rab. The islands of Vis and Hvar have extremely good demographic coverage, while the islands Mljet with 23 %, Šolta with 20 % and Čiovo with 18 % have the lowest level of demographic coverage of all the islands. By analysing maritime traffic between Italy and Croatia, it was determined that, according to the data from 2021, nine international maritime lines operated on the Italy-Croatia route. Due to the consequences of the Covid-19 pandemic, the international maritime lines Zadar - Ancona, Umag - Venice, Rovinj - Trieste and Poreč - Trieste were cancelled.

The existence and quality of public passenger transport services on islands varies from island to island. Thus, the bus public transport system is represented on larger islands, more precisely on 19 islands, taxi transport on 19 islands, boat taxi transport on 45 islands, public bicycle systems on 16 islands and electric scooter systems on 16 islands. On the positive side, the development and implementation of a public bicycle system and public electric scooters on the islands is gradually growing and occupies an important place in addressing traffic congestion

and traffic connectivity. Increasing the offer of public bicycle and public electric scooter services in the areas of seaports would significantly improve and increase the offer of multimodality to all users.

The analysis of the harmonization of regular bus transport and regular maritime transport in the coverage area established that only 17 % of bus departures/arrivals are harmonized with departures/arrivals of maritime lines.

In conclusion, the analysis found that travel in Croatia cannot be adequately realized within the integrated transport system because it is not sufficiently developed. Multimodal traffic in the coverage area is realized exclusively by ferry travel, through 62 ferry ports that enable the combination of road and maritime transport. The multimodality of other modes of transport is realized exclusively unplanned.

In addition to quantitative and qualitative analysis of the existing transport offer and the level of multimodality, cartographic representations of the state of multimodal transport solutions in the scope of Multimodality Analysis using Geographic Information Systems (hereinafter: GIS) were made. All seaports served by regular maritime passenger transport in Croatia and seaports in Italy that have a transport connection with Croatia are shown.

### Activity 3. Evaluation of the efficiency of current multimodal transport solutions

As part of this activity, an analysis of the political, economic, social, technological, legal, and environmental aspects (PESTLE) of the current state of multimodal transport in coverage area was made. The key factors of the external environment that have a direct or indirect impact on the development of a multimodal transport system with an emphasis on maritime transport in Croatia have been identified.

PESTLE analysis showed that the membership of the Republic of Croatia in the European Union and the availability of EU funds has or may have a positive impact on the development of multimodality. On the other hand, project implementation is difficult due to complicate administrative processes of many local self-government units. From an economic point of view, positive circumstances in the external environment have been identified, which are manifested through GDP growth before the Covid-19 pandemic and a decrease in the unemployment rate.

Also, the trend of economic recovery from the consequences of the pandemic is visible. However, the negative impact on improving the connectivity of Croatian islands and the development and implementation of multimodal maritime solutions from an economic point of view is reflected in the challenges posed by lower cost-effectiveness of maritime than road transport for the development of multimodal transport.

The social context of multimodality development is challenging due to negative demographic trends caused by negative natural and spatial migrations, especially on islands. However, better connectivity of islands can contribute to reducing negative demographic trends, especially in the context of reducing spatial migration from islands and rural settlements to larger cities.

Furthermore, multimodal transport solutions, due to the increasing development of technology, have good preconditions for future development. The development of technology has the potential to enable the process of transport organization, more efficient and cost-optimal means of transport, a better system of pre-travel, travel, and post- passenger information, etc. It is important to consider environmental factors, i.e., the necessary improvement of conventional technologies with the aim of reducing negative environmental impacts. This is also supported by strategic documents at European and national level which emphasize the importance of developing multimodality and an integrated transport system, in particular with regard to reducing traffic congestion and environmental pollution.

In addition to the PESTLE analysis, this activity defines the efficiency indicators of current multimodal transport solutions to assess the effectiveness of existing multimodal transport solutions. The efficiency indicators included in the calculation of the efficiency assessment of current multimodal transport solutions are:

- number of bus lines per island,
- number of seaports to which the island is connected by sea transport (direct lines),
- ▶ international shipping lines to Italy,
- demographic coverage,
- number of inhabitants on the maritime lines with which the island is connected,
- the ratio of the number of maritime lines and the population density of the island,
- average number of sea departures per week per island,
- average number of departures/arrivals of bus lines on the island,
- availability of the bus service of regular passenger transport on the island,

- availability of taxi service for passengers on the island,
- availability of boat-taxi transport service for passengers on the island,
- existence of a bicycle/scooter rental system on the island,
- the level of compliance of maritime and bus lines on the island,
- the existence of a ferry port on the island,
- existence of a bicycle/scooter rental system in the port.

By evaluating the indicators, it was determined that the average assessment of the current state of multimodality is 3,4 points out of a maximum of 10 points, which quantitatively proves the unsatisfactory state of existing multimodal transport solutions. The island of Pag was rated the best with a score of 6,96, and the island of Vele Srakane was rated the worst with a score of 1,6.

# Activity 4. Proposal and methodology for developing performance indicators for the implementation of multimodal transport solutions

As part of this activity, a structured database was created that shows the data collected through Activities 1, 2 and 3 in a way that allows regular annual data updates.

In addition to the database, a list of potential indicators of the effectiveness of the implementation of multimodal transport solutions has been developed and a methodology for monitoring the development of multimodal transport solutions in the coverage area has been proposed. The methodology for evaluating, calculating, and monitoring the indicators of multimodal transport solutions is also presented in the database developed as part of this activity, and the proposed indicators of the effectiveness of the implementation of multimodal transport solutions are:

- ► the existence of a ferry port on the island,
- development of cycling infrastructure on the island [km/km2],
- average number of departures of maritime transport lines per week per island,
- number of international maritime lines to Italy,
- number of departures on international maritime routes per island,

- establishment of a car sharing system in the port on alternative fuels,
- establishment of an integrated travel card on the island,
- establishment of a bicycle/scooter rental system in the port area,
- the average number of daily bus departures on the island,
- the level of compliance of maritime and bus lines on the island,
- ▶ implementation of the promotion of the multimodality system on the island,
- the number of lines on which alternative-powered ships operate,
- cost-effectiveness of multimodal transport.

# Activity 5. Proposal to improve multimodal transport by applying new models of multimodal transport solutions

To provide a broader insight into the development possibilities of a multimodal transport system to ideate potential solutions that can be implemented in the coverage area, as a part of this activity an analysis was conducted and catalog of good practice examples of multimodal transport solutions from Europe and the world, including maritime transport was developed. Based on the analysed examples, it can be seen that the use of an integrated tariff system with timetable harmonization is presented as the most important element in establishing a quality multimodal transport system. In tourist-active areas, the use of subscription cards for tourists has become more frequent, through which users are provided with an unlimited public transport service with additional benefits within the tourist offers.

Based on the catalogue of good practice and local development potentials, proposals have been made to improve passenger transport in the scope of the Analysis by applying multimodal transport solutions for the short, medium, and long term. Suggestions for improvement relate to:

- In the short term:
  - Development of a modern real-time passenger information system,
  - Development of a modern ticket collection system in public passenger transport (e-ticketing),

- Promotion and visibility of multimodal transport solutions,
- Development of a system for monitoring and evaluating the effectiveness of the implementation of multimodal transport solutions,
- Supplementation of the strategic and spatial planning documents at the levels of local self-government units,
- Implementation of the system of benefits for the use of maritime transport on the route Croatia Italy.
- Medium term:
  - Implementation and development of public micromobility systems (public bicycles, scooters, etc.),
  - Organization and coordination of existing sea and bus public transport lines,
  - Implementation of new communal bus transport lines at the levels of local selfgovernment units or islands with alternative fuel vehicles,
  - Implementation of new maritime lines to connect islands and mainland and islands with each other,
  - Establishment of on demand transport,
  - Establishment of new international shipping lines with Italy,
  - Development of cycling infrastructure on the islands,
  - Development of car sharing systems on islands with an emphasis on alternative fuel vehicles.
- Long term:
  - Establishment of integrated passenger transport formation of a tariff union and transport administration,
  - Construction of intermodal passenger terminals,
  - Development of existing and construction of new seaports,
  - Modernization of the maritime transport fleet with alternative propulsion ships
    - autonomous vehicles.

Consequently, four pilot projects have been proposed to improve multimodal transport by applying new models/solutions for three groups of islands depending on the population:

• Pilot project for the first group of islands (up to 500 inhabitants):

Establishment of a public bicycle system around seaports and other main points of interest in the island of Zlarin.

▶ Pilot project for II. group of islands (from 500 to 5.000 inhabitants):

Establishment of a public bus transport system with alternative propulsion vehicles on the island of Cres.

▶ Pilot projects for III. group of islands (more than 5.000 inhabitants):

► Construction of a Park & Ride terminal around seaports, which allows users to park vehicles for a long time and use maritime transport in the price of a parking ticket on the island of Brač.

Establishment of an international maritime line between the III. group of islands and Italy, i.e., the introduction of the international line Korčula - Pescara.

The emphasis of the proposed pilot projects is on the implementation of transport solutions including means of transport with lower CO2 emissions. Pilot projects can be implemented on other Croatian islands, depending on the groups or population.

With the aim of successful further development of a sustainable and multimodal transport system within the MIMOSA project, it is proposed to systematically approach the promotion of implementation of multimodal transport solutions, communication with relevant stakeholders, revision of spatial planning documentation, development of sustainable mobility plans at local levels and continuous implementation of planning and monitoring activities.

# **Machine Translation**

Activities 1. Demand analysis of the transport of Italian passengers

As part of this activity, an analysis of the demand for transport of Italian passengers who stayed in Croatia in the period from 2010 to 2021, i.e. in the period before the Covid-19

## pandemic (2010 - 2019) and for

covid-19 pandemic duration (2020) - 2021) in order to gain a clear insight into the factors affecting the transport demand of Italian passengers.

Publicly available data collected by the secondary research (*desk research*), it was found that Croatia is visited annually by about 1,100,000 Italian tourists, which makes up about 8% of the total number of arrivals of all tourists. Of the total number of Italian tourists, about 82% reside on the mainland, while the remaining 18% resides on Croatian islands, and the largest number of arrivals of Italian tourists flee the islands of Krk, Pag and Rab. Based on the analysis, it was found that the islands in the northern Adriatic are more visited than the islands in Dalmatia, which is correlated with the proximity of Croatia and Italy in the northern Adriatic. In addition, the islands of Lošinj and Pag have direct maritime routes with Italy, which also indicates the impact of the quality of transport connections and the number of tourist arrivals. Furthermore, the analysis of the mode of transport of Italian tourists concluded that the favorable geo-traffic relationship between Italy and Croatia in the context of maritime transport was not sufficiently exploited, since as many as 86% of Italian tourists use passenger cars to come to and move within Croatia, while maritime transport was used for only 3.6% of Italian tourists' trips to Croatia.

The primary survey was conducted in the period from 16 August 2021 to 13 September 2021 by surveying relevant tourist institutions/agencies in Croatia and Italy and by surveying Italian tourists in five Croatian maritime ports. The results of the survey of tourist agencies/communities indicate that the proximity of Croatia and natural beauty and gastronomic offer are the main reasons for the arrival of Italian tourists in the Republic of Croatia. On the other hand, tourist institutions/agencies consider that tourists are rejected by the inadequate existing state of maritime transport in the area of coverage. The shortcomings mainly relate to the poor connection between the island and the island and the mainland, inadequate information to tourists, high maritime transport prices and locally-based transport. The results of the survey indicate a satisfactory familiarity of tourist institutions/agencies with the notion of multimodality and a certain share encourages users to use such a mode of transport. However, in order to increase the number of passengers in the multimodal transport system, systematic development is necessary.

The Covid-19 pandemic had a strong negative impact on tourism activities. In 2020, the number of arrivals of Italian tourists decreased by 79.5% compared to 2019. Poll results indicate that as many as 80% of Italian tourists surveyed have changed their travel habits and

that they avoid mass passenger transport systems during the Covid-19 pandemic and prefer to travel by car.

### Activities 2. Analysis of existing multimodal transport solutions

As part of this activity, based on the secondary research, an analysis of the status of the existing offer of maritime, bus, bicycle and taxi transport for Croatian islands connected by a maritime line (ferry, ship and high-speed line) with the mainland was made in order to enable an overview of the existing multimodal transport solutions.

Croatian islands are connected to the mainland by 60 maritime lines. On average, each island from the first group of islands (more than 5,000 inhabitants) was served with 24 sailings per week, from the second group of islands (between 500 and 5,000 inhabitants) with 60 sailings per week, while the islands from the third group of islands (less than 500 inhabitants) were served with an average of 129 sailings per week. The largest average weekly number of sails are the islands of Pelješac with 235 sails, Korčula with 221 sails and Ugljan with 156 sails, and the smallest island of Vela Srakana with five sails and the islands of Obonjan and Biševo with four sails. The number of sailings varies significantly depending on the number of inhabitants on the island and the distance of the island from the mainland. The analysis of the demographic coverage of the island by maritime transport revealed that 20 islands have full demographic coverage of maritime ports, and these are, as a rule, smaller islands with the exception of the island of Rab. The islands of Vis and Hvar have very good demographic coverage, and the islands of Mljet with 23%, Solta with 20% and Ciovo with 18% have the lowest level of demographic coverage of all islands. The analysis of maritime traffic between Italy and Croatia, according to the data from 2021, on the route Italy - Croatia, nine international maritime lines were operated. Due to the consequences of the Covid-19 pandemic, international routes Zadar - Ancona, Umag - Venice, Rovinj - Trieste and Poreč -Trieste were abolished.

The existence and quality of public passenger transport services on the islands varies from island to island. Thus, the bus public transport system is represented on the larger islands, namely on 19 islands, taxi transport on 19 islands, boat taxi transport on 45 islands, public bicycle systems on 16 islands and electric scooter systems on 16 islands. On the positive side, the development and implementation of public bicycle systems and public electric scooters.

on the islands is gradually growing and occupies an important place in addressing traffic congestion and transport connectivity. Increasing the supply of public bicycles and public electric scooters in maritime ports would significantly improve and increase the supply of multimodality to all users.

An analysis of the compliance of regular bus transport and regular maritime transport in the area of coverage revealed that only 17% of bus departures/arrivals are in line with the departures/arrivals of maritime lines.

In conclusion, the analysis found that travel on the territory of Croatia cannot be adequately accomplished within the integrated transport system because it is not sufficiently developed. Multimodal transport in the area of coverage is achieved exclusively by ferry journeys, through 62 ferry ports that enable the combination of road and maritime modes of transport. The multimodality of other modes of transport is achieved exclusively unplanned.

In addition to the quantitative and qualitative analysis of the existing transport offer and the level of multimodality, cartographic representations of the state of multimodal transport solutions in the area of Multimodality Analysis using Geographic Information Systems (hereinafter: GIS) have been made. All seaports served by regular maritime passenger transport in Croatia and seaports in Italy that have a transport connection with Croatia are shown.

#### Activities 3. Evaluation of the effectiveness of current multimodal transport solutions

As part of this activity, an analysis of the political, economic, social, technological, legal and environmental aspects (PESTLE) of the current state of multimodal transport in the area of coverage was prepared. The key factors of the external environment that have a direct or indirect impact on the development of a multimodal transport system with an emphasis on maritime transport in Croatia have been identified.

PESTLE analysis showed that the membership of the Republic of Croatia in the European Union and the availability of funds from EU funds has or can have a positive impact on the development of multimodality. On the other hand, a large number of local government units make administrative processes and project implementation more difficult. From an economic point of view, positive circumstances have been identified in the external environment, which are manifested through GDP growth before the Covid-19 pandemic and a reduction in the unemployment rate.

Also, there is a trend of economic recovery from the consequences of the pandemic. However, the negative impact on improving the connectivity of Croatian islands and the development and implementation of multimodal maritime solutions from an economic point of view is reflected in the challenges posed by lower cost efficiency of maritime transport than road transport for the development of multimodal transport.

The social context of the development of multimodality poses a challenge due to negative demographic trends caused by negative natural and spatial migration, especially in islands. However, better connectivity of islands can contribute to reducing negative demographic trends, especially in the context of reducing spatial migration from islands and rural settlements to larger cities.

Furthermore, multimodal transport solutions, due to the increasing development of technology, have good preconditions for future development. The development of technology has the potential to enable the rationalization of the transport organization process, more efficient and cost-optimal means of transport, a better system of pre-travel, travel and post-travel information for passengers, etc. In doing so, it is important to take into account environmental factors, i.e. the necessary upgrading of conventional technologies in maritime transport in order to reduce negative environmental impacts. This is also supported by strategic documents at European and national level which underline the importance of developing multimodality and an integrated transport system, in particular in terms of reducing traffic congestion and environmental pollution.

In addition to the PESTLE analysis, this activity defines performance indicators of current multimodal transport solutions for the purpose of assessing the effectiveness of existing multimodal transport solutions. The performance indicators included in the calculation of the efficiency assessment of current multimodal transport solutions are:

- number of bus lines per island,
- the number of maritime ports with which the island is connected by maritime transport (direct lines),
- international maritime routes to Italy,
- demographic coverage,
- the number of inhabitants on the maritime routes with which the island is connected,

- ▶ the ratio of the number of maritime lines to the population density of the island,
- average number of maritime departures per week per island,
- average number of departures/arrivals of bus lines on the island,
- availability of bus and coach service for passengers on the island,
- availability of taxi service for passengers on the island,
- > availability of a boat taxi service for transporting passengers on the island,
- ▶ the existence of a bicycle/scooter rental system on the island,
- the level of compliance of maritime and bus routes on the island,
- the existence of a ferry port on the island,
- the existence of a bicycle/scooter rental system in the port.

Scoring the indicators determined that the average rating of the current state of multimodality is 3.4 points out of the maximum 10 points, which is quantitatively proven by the unsatisfactory state of the existing multimodal transport solutions. The best rated island is Pag with a score of 6.96, and the worst rated island is Vela Srakane with a score of 1.6.

## Activity 4 Proposal and methodology for the development of efficiency indicators for the implementation of multimodal transport solutions

Within this activity, a structured database was created that shows the data collected through Activities 1, 2 and 3 in such a way as to enable regular annual data updates.

In addition to the database, a list of potential indicators of the effectiveness of the implementation of multimodal transport solutions has been developed and a methodology for monitoring the development of multimodal transport solutions in the area of coverage has been proposed. The methodology of evaluating, calculating and monitoring the indicators of multimodal transport solutions is also presented in the database developed within this activity, and the proposed indicators of the effectiveness of the implementation of multimodal transport solutions are:

- the existence of a ferry port on the island,
- development of cycling infrastructure on the island [km/<sup>km2</sup>],
- average number of sea lines departures per week per island,
- number of international maritime routes to Italy,
- number of departures on international maritime lines according to the line around

the island,

- establishment of a *car sharing* system in the port on alternative fuels,
- establishment of an integrated passenger ticket on the island,
- establishment of a bicycle/scooter rental system in the port area,
- average number of daily bus lines departing on the island,
- the level of compliance of maritime and bus routes on the island,
- implementation of promotion of the multimodality system on the island,
- the number of lines operated by alternatively powered ships,
- cost-effectiveness of multimodal transport.

# Activity 5 Proposals to improve the application of new models of multimodal transport solutions

In order to provide a wider insight into the development possibilities of the multimodal transport system in order to idea potential solutions that can be implemented in the area of coverage, within this activity, an analysis was carried out and a catalogue of examples of good practice of multimodal transport solutions from Europe and the world, including maritime transport, was developed. Based on the analysed examples, it can be seen that the use of the integrated tariff system with the harmonization of timetables is the most important element of the establishment of a quality multimodal transport system. In tourist-active areas, the use of subscription cards for tourists is frequent, enabling users to have unlimited public transport services with additional benefits in the context of tourist offers.

Based on the catalogue of good practice and local development potentials, proposals were made to improve passenger transport in the area of the scope of the Analysis using multimodal transport solutions for the short, medium and long term. The improvement proposals relate to:

## Short term

- Development of a modern system of real-time passenger information,
- Development of a modern *ticketing system in public passenger transport* (*e-ticketing*),
- > Promotion and visibility of multimodal transport solutions,
- Development of a system for monitoring and evaluating the effectiveness of the implementation of multimodal transport solutions,
- Update of strategies and spatial planning documents at the levels of local

self-government units,

Implementation of a system of convenience for the use of maritime transport on the route Croatia - Italy.

## Medium term

- Implementation and development of public micromobility systems (public bicycles, scooters, etc.),
- Organization and harmonization of existing maritime and bus routes of public transport,
- Implementation of new utility lines of bus transport at the levels of the local self-government unit or islands with alternative fuel vehicles,
- Implementation of new maritime lines for connecting islands and land and islands with each other,
- Establishment of on-demand *transport*,
- Establishment of new international maritime routes with Italy,
- > Development of cycling infrastructure on the islands,
- Development of *car sharing* systems on the islands with emphasis on alternative fuel vehicles.

## **Long-term:**

- Establishment of integrated passenger transport formation of tariff union and transport administration,
- Construction of intermodal passenger terminals,
- > Development of existing and construction of new maritime ports,
- Modernisation of the maritime transport fleet with alternative ships
  autonomous vehicles.

Consequently, four pilot projects to improve multimodal transport were proposed using new models/solutions for three groups of islands depending on the population:

## Pilot project for the 1st group of islands (up to 500 inhabitants):

- Establishment of a public bicycle system in the area of maritime ports and other main points of interest in the area of the island of Zlarin.
  - Pilot project for the II. group of islands (from 500 to 5,000 inhabitants):
- > Establishment of a public bus transport system with alternatively

powered vehicles on the island of Cres.

- Pilot projects for the III group of islands (more than 5,000 inhabitants):
- Construction of a Park&Ride terminal in the maritime ports area that allows users to park their vehicles for a long time and use maritime transport in the price of a parking ticket on the island of Brac.
- Establishment of an international maritime line between the islands of Group III and Italy, i.e. introduction of the international line Korčula – Pescara.

The emphasis of the proposed pilot projects is on the implementation of transport solutions, including means of transport with lowerCO2 emissions. Pilot projects can also be implemented on other Croatian islands, depending on the groups or population.

With a view to the successful further development of a sustainable and multimodal transport system within the MIMOSA project, it is proposed to systematically approach the promotion of the implementation of multimodal transport solutions, communication with relevant stakeholders, revision of spatial planning documentation, development of sustainable mobility plans at local levels, and to continuously implement planning and monitoring activities for development and implementation.

## 5) ANALYSIS OF TRANSLATED TEXTS

In this final part of the paper, after getting acquainted with the text in the previous section, we will compare the machine translated texts with the human translated texts and comment on the differences between the two so that we can see whether or not MT technology has developed far enough for it to deal with common semantic issues such as idiomatic meaning, polysemy, co(n)textual factors and deictic expressions for the language pair English-Croatian. We will not be discussing every single distinction between MT and HT but rather give examples that are connected with our research on semantic distinctions. Just because there is a single or two examples does not mean that there are not more in the text, just that for this research it is more important to give an example of each rather than all of a single one and forgetting a particular type of error.

Let us begin with the text Anticipation and uncertainty about the future after the Coronavirus which is an internet article from the page Kreni Zdravo that is intended for all types of audiences

regardless of their age. The purpose of this article is to inform the readers regarding the future of human life post-Coronavirus and how to deal with the stress and anxiety that the virus has provoked as well as coping methods to help in dealing with said issues. The article is written in a semi-formal style by using mostly short and simple sentence structure to appeal to the general audience and is divided into paragraphs to focus on one thing at a time regarding the main point of the article. The terminology of the article is easily understood with no complex or technical terms.

The original text states "susret s nepoznatim" and MT software translated it as "meeting the unknown" whereas the human translator decided to use the term "confront the unknown". It would appear that MT software decided on taking the literal sense of the original phrase without regard for the distinction between meeting and confronting, first giving a positive and willing impression whereas the word confront has a much stronger and negative connotation when combined with the word "the unknown" giving the idea that the subject did not want to face the unknown on its own accord but rather that it was forced upon him.

The second major distinction comes in a form of an idiom. In the original the phrase is: "a na ovom brodu bez kormila zajedno tražimo tračak svjetla u daljini." MT software decided to translate it in a litteral way once again: "and on this rudderless ship together we seek a glimmer of light in the distance." The issue with this is that as we have mentioned at the beginning of the paper, idioms are fixed phrases whose meaning is not distinguishable from the individual meanings of the words it contains but it only arises from that exact combination of words in unison. A better version of the idiom is: "we are all just along for the ride, searching for a light at the end of the tunnel." The point is that this translation is more in the spirit of the English language and even though "light at the end of the tunnel" and "seek a glimmer of light in the distance" appear to be the same it is not. The point of a translation is not only to give an accurate meaning of the words but also to try and localize the idiomatic sayings and other aspects of the text in order for the TL audience to be able to understand it in the same manner as the SL audience would be able to and that means modifying idioms to suit the TL audience. Another instance of this occurrence in the translation is in the MT where "something positive about the whole story" is used as a translation of "nešto pozitivno u cijeloj priči" which would be completely fine if there was not a saying that is in the spirit of English even more then this and that is: "every cloud has a silver lining", thus pointing out the necessity to mold the text wherever possible to suit the TL audience without compromising the meaning of the original text and staying true to the style in which a text is written.

The third type of difference is when MT software fails to select the correct meaning of the word that it translates based on the context in which it is used. In the later part of the text a phrase "1945. Nova prilika je upravo prošla...". MT software decided to take that number and translate it as if it represents a year "in 1945" instead of "a chance no. 1945" showing that there is an issue that MT software cannot, based on the context, resolve this ambiguity. Another instance of this occurs in the last sentence of the text where the phrase "Krenite već danas" is translated as "Leave today" instead of the correct "Start today". MT software decided to take the meaning "leave" instead of "start" given that both meanings can be expressed by the word "krenuti" but given the context only one of them is correct and that is "start".

The last element that we will focus on is the usage of deictic expressions in MT. The main issue in dealing with these expressions is that MT software fails to understand what pronouns or determiners should be used thus creating sentences that are either completely impossible or at best difficult to distinguish which expressions refer to which part of the sentence. For example, in the sentence "Strahovi se potiču i masovnim medijima koji koriste sve vrste informacija kako bi manipulirali populacijom i držali ih u neizvjesnosti." the crucial word to understanding the relationship between the elements of the sentence is "ih" which in this case refers to the population and not the mass media. MT software made a mistake of translating this word as "it" which would indicate that it refers to the mass media and not the public thus missing the point of the sentence and making a mistake in analyzing the relations between its elements. Had it translated "ih" as "them" it would be much clearer that it refers to the population or rather each individual that creates the population as a single entity rather than mass media. Another instance of this occurring is in the sentence:" Drugim riječima, kada nam osoba kojoj vjerujemo otvoreno prizna da je stanje neizvjesno i da nema konkretnih informacija, ljudi će mu i dalje vjerovati unatoč tome što im nije dao sigurnost koju traže." Where the MT software decided to translate it as: "In other words, when a person that we trust openly admits that the situation is uncertain and that there is no concrete information, people will still believe them even though they failed to provide them with the comfort that they seek." We can see that in the translation there are multiple "them" and "they" that only bring confusion making it hard to understand which "them" is connected with which they and above all what do these two words refer to; is it a single element or do some of them refer to one thing while others refer to another. Which refers to the person we trust and which to the people is difficult to distinguish from this context and then a much better solution to this problem is to refer to the person we trust as he/she (making sure that we use both pronouns since it is not specified whether it is a male or a female) and then leaving the rest of they and them so that they refer to the single element in the sentence, the people thus avoiding the possible confusion and misinterpretation.

The second text that we will analyze is a theatre review from the newspaper *Novi List* titled: *Has Kerempuh had a more shallow, less ambitious, and altogether worse play that was such an artistic let down than this one? Unfortunately, no.* It is intended both for all that go to theatres or are thinking about seeing the play and for the theatre itself and the production of the play. The purpose of this text is, as the author herself tells us, "To make sure that these kinds of repertoire plays do not repeat in the future" which also gives us an idea that the text is written in a semi-formal style leaning closely to informal based on the openness of the author to express not only the facts regarding the play but also her own opinion that might directly influence the reader. The text is straightforward with several rhetorical questions and a couple of terms that belong strictly to theatre and theatric jargon, but otherwise, the point and how the text is written are simple, easy to follow and the point of the text, harsh critique of this play, is easily distinguishable .

The first issue that we come across in the text is that MT software fails to recognize the meaning of the word and in the process of translating changes the meaning. The word in question here is "bezidejnost" which the computer translated as "idealism" instead of the proper "idealessness". The situation that we have here corresponds to the linguistic issue of false pairs, meaning that we have two words "bezidejnost" and "idealism" and here idealism corresponds to bezidejnost in its formal shape, in the linguistic label which covers it, in some aspects of its meaning, or use, or in a combination of two these three things but not in all of them (Ivir 1980: 117). In this case, the root word "idea" appears to be the correct way, but the meaning and the form of the word are wrong thus changing the meaning of the sentence.

The next issue that we will address is the inability of MT software to recreate idiomatic meanings and transfer them correctly from SL into TL. In this case, the phrase "lijevom nogom odigranih glumačkih izvedbi" is translated literally into "left-legged acting" which would not mean much to the native speaker of English since left-legged is a Croatian idiom of doing something without energy, effort, or passion. The correct idiom in English would be "half-assed" indicating that someone is doing it just to do it without putting any energy, effort, or passion. The same can be said in the case where "lovac na romansu" is translated as "a romantic hunter" instead of "looking for her prince charming". The original was just translated word for word to try and portray the original meaning but in English, there is an equivalent that would

mean that someone is looking for the perfect guy/girl and that is that someone is your "prince charming".

The third issue that we have to analyze is the failure to localize some words or phrases that would make sense to the English-speaking reader. In this case "cajke, krek, speed i burek« mentalitet", that MT software translated as ""taiki, crack, speed and burek" mentality". After consulting a couple of renowned English dictionaries (Oxford, Merriam-Webster, Cambridge) we have failed to find a word "taiki" thus failing to translate the meaning of the sentence, the next two terms crack and speed being types of drugs are well translated and finally, we have "burek" which to those who do not know the cultural and civilizational facts about Croatia will mean absolutely nothing. This makes the knowledge of context, not just the linguistic one- cotext but the real world one as well, absolutely crucial for the semantic analysis, as professor Brala Vukanović mentioned in her book, which in turn makes it pivotal in the translation process. In order for an English-speaking reader to understand the meaning of that phrase and to fully grasp the meaning behind it, the text must first be localized, which means: "adapting a product to the linguistic and cultural expectations of the target locale (region plus language, hence France and Quebec are different locales). (Hartley 2009: 107) With this in mind, it would be much better to translate that original part of the sentence as "country music, crack, speed and kebab" or even replace kebab with some other word depending on the region in which the translated text will be available.

The last issue we will be looking at are the inconsistencies with deictic expressions between the two translations. The sentence "Za nju umjetnost nije važna, jer je »prekomplicirana«." has the word "nju" meaning "her" which refers to the play which is a noun viewed as a noun of female gender in Croatian since this language designates a masculine, feminine or neutral gender to all of its nouns. MT software mistakenly assumed that "nju" refers to a female person thus translating it as "her" whereas the correct translation should be "it" since it refers to the play. Another instance of this occurs later on in the text where when talking about the theatre Kerempuh in the translation, software used a personal pronoun "he" to refer to a theatre instead of using "it".

The last thing to point out is that MT software had issues in entity recognition of Croatian names, namely the protagonist of the play "Maša" which it translated on a couple of occasions into "Machine" instead of leaving the name as is, or if need be, finding an English equivalent of the word as would be if the name were "Ivan" thus making it "John" as its English variant.

The third text includes a preface and a part of the first chapter from Milivoj Solar's book *Teorija književnosti*. This book is intended for, as the author explains in the first sentence of the text, high school students, students of literature, and all those who wish to get acquainted with the basic concepts of literary theory. The purpose of the book is to explain to the reader the origin, usage, and purpose of its terms as well as to introduce the methods, tasks, and the purpose of the study of literature. The formal style of this text thus makes it different from the two previous ones. This text has a much more complex sentence structure which is less straightforward, since the book was written in 1977 it is also written in Serbo-Croatian thus making it that much harder to translate and analyze given the necessity to find contemporary equivalents in Croatian for some words before translating them into English. The subject at hand uses specific literary terms making it not as easily understandable to a wider audience, but those interested in the topic and knowledgeable in the subject at hand will have few issues in understanding the text.

The first issue we will be tackling is once again the notion of false pairs. Let us start with the part of the original sentence that says: "literature na kraju ove knjige" being translated as "literature at the end of this book". Even though literature was used within the list that is at the end of the book the individual works are called "references" and not literature as such. Even with a small "help" of the context being described in the latter part of the sentence, MT software failed to find the correct meaning of the word. In a second occurrence, this time chess being the topic, the original term "figura" is translated by MT software as "figures". Though they stem from the same root and figure is one of the possible translations of the word "figura" in chess terms they are not called in this way, but rather "pieces". If we analyze this issue from a different perspective this is not only an issue of false pairs but also the failure to have general knowledge outside the text itself to understand that the fixed phrase is a chess piece rather than a chess figure thus making it a contextual issue as well seeing that in this specific situation that can only be understood if the knowledge of chess that can be obtained by outside sources is applied.

Staying on the topic of chess, the second issue comes in the same paragraph where the "ona se odnosi prema teoriji književnosti kao što se prema teoriji šahovske igre odnosi početnica..." is translated by MT software as "it refers to the theory of literature, as in the theory of chess, it refers to a beginner...". The issue at hand is in not understanding the relations between the elements of the sentence thus making an error in translation which in turn entirely changes the meaning of the sentence. The point of the original sentence is to underline that the book (it) relates to the literary theory in the same way that a chess beginner relates to the chess theory and not the other way around as presented in the MT. The relation between these elements is

important because otherwise, it would appear as if the theory of chess is talking about a chess beginner and not that a chess beginner is the one studying the chess theory.

The third issue is the wrong usage of deictic expressions. "Njenom" in the original, referring to the book is translated as "her" instead of "its". The reason why this error occurs we have already explained while analyzing the previous text. Another occurrence of this is in the later part of the text when "njeno" and "njene" is translated as "her" instead of "its" referring to the word sentence that is of feminine gender in the Croatian language.

The fourth issue is the presence of idiomatic phrases that are mistranslated from the original. The phrase "od usta do usta" is translated literally by MT software as "from mouth to mouth" which is understandable to the audience because of its descriptive nature, but it would be much better if the descriptive aspect was dropped in favor of the idiom "word of mouth" with a much simpler and refined structure that is more suitable for this genre of text.

Before we start analyzing the final text, it is important to point out that it was already translated by a professional translator and taken as such for this paper thus making the HT a golden standard that will give us an even better and more precise insight into the distinctions between the MT and HT.

The final text that we will be comparing is an excerpt from an administrative text titled *Cost effectiveness analysis of the present intermodal maritime transport solutions within the MIMOSA project*, taken from the Ministry of Regional Development and European Union Funds website. The text is intended for professionals that are well versed in the formal terminology that is used. The excerpt discusses some issues regarding multimodal transport systems and possible short-term and long-term solutions to these issues. The excerpt covers the first few pages of the much bigger text, and those first few pages are divided into 5 sections that are further divided into paragraphs each on a specific topic. The text is professionally written with rigid structure and very professional and high-level sentence structure and technical terminology.

The main difference this text has from the previous three that we have analyzed so far is the number of errors that the MT software made. The reason for this is twofold. One is the obvious discrepancy between the skill and the experience of the two translators whereas the other is the structure and the wording of the final text which makes it much less open to interpretation both by the human translator and the MT software thus making it a "perfect" type of text for MT to show its true potential and usefulness. Nevertheless, there are some issues that we will

enumerate and analyze to show that even in this type of text there are possibilities of error for the MT software.

The first of them is the phrase original phrase "u pravilu" which MT software translated as "as a rule" but in the spirit of Croatian language the phrase "u pravilu" has in itself a sense that it is more often than not a rule, but implying that there are exceptions to the rule thus the better translation is to state "typically" which also implies that in most cases the fact is truthful, but that there are some exceptions to this. The phrase "as a rule" would strongly indicate that what is being said is in every case true.

The second and final issue is the misinterpretation of the sentence "broj polazaka na međunarodnim pomorskim linijama prema liniji po otoku" which MT software translated as "number of departures on international maritime lines according to the line around the island" missing the meaning of the original sentence in which no mention of lines around the island is found. The sentence is translated by HT as "number of departures on international maritime routes per island" showing that the original meaning was to increase the number of international maritime routes for each eligible island and not the translation that the MT software offered.

### 6) CONCLUSION

To give a clear statement on whether or not MT has reached a level of proficiency, efficiency, and speed necessary to make human translators obsolete the answer is still no. Some of these elements have proven undeniably useful such as the speed at which MT software creates the translation, but the issue remains, as mentioned at the beginning of the paper, that the process needed for the text to be translated by MT software requires human intervention in the post-translation phase, given the errors that occur in it. On the semantic level, which is the level of choice in this paper MT has many places in which it must improve if the original goal of making it better than HT is ever to be achieved. The notion of context as something that the machine is rarely cognizant of plays a vital part in that process since text as such is in no way just an isolated product from time and space, but rather tightly connected not only to the real world occurrences but the location and culture of the people that experience it which translated in the written form through the usage of idioms, terms which are synonymous with that area and not with some other and so on. The polysemic element of the semantic analysis is still an issue since the "vocabulary" of MT software is limited to that which its human creators have programmed it to use and search through thus some contexts and meanings of words are left out, or rather

not often used making them one of the pitfalls of MT since it depends on humans to create its knowledge database. Lastly, the deictic expressions which play a crucial role not only in the translation process but in the everyday communication and understanding of sentences have their issues in the MT software's process of translating. As we have seen it is more prone when translating from a language such as Croatian that has gender for each noun making it hard for the software to distinguish which word a particular pronoun relates to. In conclusion, we can state that those texts that use a more rigid, formal, and impersonal style of writing, such as the last two texts, are much better and more viable for MT than the ones that use informal language, phrases, idioms, and cultural and civilizational references as was the case in the first two texts. Regardless of the genre of text some issues remain consistent throughout, issues of polysemy, a vital part of the third text especially given that the "literature" is the topic of the text itself and its meanings are not distinguished in the MT, or in the first text where the difference in meaning between "meeting" and "confronting" when translating the word "susret". and false friends mostly apparent in the third text as well with the word "literature" as well as the word "figure" instead of the word "piece" due to the original being "figura".

In the process of translating the first three texts and carrying out the semantic analysis of all four texts I have learned a great deal not only regarding MT and its process, but also about translating in general. When comparing my translations to MTs I noticed that there are even better ways in which some things can be said, better words to be used in some cases, but also that there are elements of the translations which I have done better and in a more precisely thus staying true to the original text. I deepened my semantic knowledge which helped me in the final part of this paper, the semantic analysis. In the process of semantic analysis, I was able to analyze these texts in more detail and compare my translations to MTs which I will approach any single text as well as helped me in becoming more meticulous in regard to both the grammar and the vocabulary department. Not only was this paper a fulfilling task to accomplish, but it also serves as a reminder that there is always room for improvement in order to reach new levels of proficiency in translation, not only for MTs but for me as well.

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