

Translation of various types of texts from Croatian into English with commentary

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UNIVERSITY OF RIJEKA
FACULTY OF HUMANITIES AND SOCIAL SCIENCES
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**TRANSLATION OF VARIOUS TYPES OF TEXTS
FROM CROATIAN INTO ENGLISH
WITH COMMENTARY**

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

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ABSTRACT

This B.A. thesis consists of translations of four texts (excerpts) from various fields: literature, journalism, linguistics and agriculture. The texts are translated from Croatian into English, and the translations are accompanied by commentary. The goal of the thesis is to produce competent translations of the texts in question and to discuss the problems encountered while translating them. The thesis is comprised of an introduction, four chapters devoted to each of the translations and their commentary, a general discussion comparing and summarizing all four texts and a conclusion. The original texts are in the appendices.

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1. INTRODUCTION

This thesis deals with translating four texts of different types and topics from Croatian into English: an excerpt from a contemporary Croatian novel, a biographical newspaper column, an excerpt from a linguistic paper discussing pleonasms and an excerpt from a scientific paper discussing the issue of post-harvest mandarin rot. The thesis aims to produce competent translations and discuss the specific issues occurring within each text and translations in general. The texts are quite diverse, both in their genres and subjects, each providing a distinct set of translating challenges.

This work will be based on Ivir's communicative approach to translating (Ivir 1985: 38-48), which focuses on communication as the primary way humans use language, consequently making translation not just a linguistic act but a sender-translator-receiver interaction. The translator's priority is to keep the information content constant between the source language (SL) and the target language (TL). The translator's job is to understand the content beyond the basic form of the source language and to transfer that content using the most appropriate form in the target language, making the end product appear as natural as the source text. To do this effectively, the translator needs to have not only a high level of proficiency in both languages but also a solid knowledge and understanding of both cultures.

The first text is an excerpt from the novel *Slučaj vlastite pogibelji* ('The case of one's own demise') by Kristian Novak, a leading contemporary Croatian author. The excerpt is written in the form of an inner monologue of the novel's protagonist, a young female Croatian language teacher. It is the beginning of the novel and introduces the reader to the setting and some of the characters of the story. The style of writing is close to an idiom of the Croatian language spoken by young and educated speakers.

The second text is a newspaper column by Boris Dežulović, published in the *Jutarnji list* newspaper. Although it is a newspaper column dealing with a current event, the style is quite literary and free-flowing. It is also an example of high-level contemporary Croatian language prose.

The third text is a scientific paper in the field of linguistics published in a Croatian academic journal. The topic is pleonasms in the Croatian language. It is written in a formal style required for that type of text but still accessible to informed and interested lay readers.

The fourth text is a scientific paper in the field of agriculture published in another Croatian academic journal. It is written in a formal and technical style, and it is mostly intended for readers who are professionals in that field or at least well acquainted with the subject matter.

For the purposes of translating these texts, I used *Glosbe* (a bilingual online dictionary), *Hrvatski jezični portal* (a Croatian online dictionary), *Struna* (a database of Croatian technical terminology), Merriam-Webster online dictionary and Oxford English Dictionary (online).

2. TRANSLATION OF AN EXCERPT FROM A NOVEL

2.1. Translation

Creont from AliExpress

I was a cool teacher, exchanging conspiratorial glances outside with my high school students while half-drunk. Some of them were scrounging cigarettes off me. And my smoking is a generationally exclusive scene. I didn't smoke in front of my husband, relatives and my parents. I won't do it in front of my possible future children. One day.

One day.

One day, when I lose it, I will give it straight to everyone. I imagined this moment differently. There should be some conclusion to it. There must be some lesson, because I guess no normal person goes through a breakdown of this magnitude without looking for some meaning. After going through it all, you are stronger, or smarter, let's say. What is the lesson, what is the lesson? Maybe, possibly this: there are things that happen to you without meaning, so don't lie to yourself that you're smarter or stronger, because you're not, because maybe you're weaker and dumber, that's how it is and take it as it is.

Cool young teacher. Cool enough to say "cool" or "backstage" during class, teacher enough to only do it once every 45 minutes. Because the cool young teacher has to be on her guard. I was literally her, a role tailored for an actress. I made all my decisions, all the important ones, for the sole reason of not accidentally complicating my life. Forget about risk or vision, just stick to what you have, like a good serf. That's how I was brought up: we weak, we from a small village, you have to be good to everyone, don't make waves, don't protest, everyone has to like you. For me, life was a continuous struggle with the fear of possibly being hated and the effort to keep a carefree, cheerful face.

All the while, the ebb and flow alternate within me. First, I really want to be liked by everyone. So, I literally have a hard time accepting that some bearded desert idiots over there hate me because I don't cover up and I'm not Muslim, I would literally want even them to like me at

least a little. And as soon as I feel things are going my way and that everyone likes me, I start ebbing. I get a longing to escape because the crowd I wanted to like me so much makes me want to throw up. And I have no idea which of these is the real me. I have no idea where the real me ends and the one I built so that people love me begins. I just know that when the tide is high, I exhaust myself on my own cuteness. When it begins to ebb, my thoughts start with the wording “well, but when one day”.

But there is nothing definitive, nothing triumphant about this now.

Because I loved my job. I bottled up and put up with everything and was a fucking bundle of diplomacy because they let me do it, especially the drama club. Everyone in the staffroom will like me, so they will leave me alone. But here’s a lesson though, well, it was right in front of my nose: those two things don’t go together for some reason – being liked by everyone and doing what you love.

So, before everyone hated me, almost everyone loved me because I got into their heads. My spirit animal is a love-hungry pug. Maybe only religion teacher Božena hated me. Yeah, that can happen when you push a woman out of the drama club she founded. At the time, I, a cool young teacher, thought that the fact that the religion teacher hated me made me such a badass.

Božena and I got along well at first. She got the job a few years before me, then got pregnant. When she came back, she needed someone to fill in for her ‘cause her baby was cwaing when mummy was at dwama. We did a very good Christmas show, but she was always steering in her own direction. You can keep assuring me that you are not exclusive about material with a religious subtext, but don’t try to sell me those new-cool-Catholics tricks and those so-called Catholic literary hits that no one would have ever heard of if they weren’t specifically identified as religious. It’s like saying Laudato (a Croatian Catholic TV channel) is like RTL (a Croatian commercial TV channel), but deeper and healthier. One semi-argument was enough to split us apart, and I don’t think I’m exaggerating when I say that I played it masterfully. I went to the Principal, and told her that I didn’t want to be a nuisance. The club is the most important thing. I was the last one in, I should be the first one out. She said “OK”, a bit reserved, but hey, it is what it is. A week later, the Principal shows up with her husband and a merry company of the city’s middle-aged crème de la crème at a tasting at my Darling’s place. She was slightly tipsy, and her tongue loosened up. She asked me once again about the club. I was wrenching like a

furious beast, *I will not tell, I will never tell, I am not a snitch.* She kept on pressing, louder and louder, I finally sighed and said, *well... OK... but keep it between us.*

I poured her a drink and told her how I got into a discussion with Božena: *look, our school has never had a play at the national competition, never! And the kids are doing a good job, you, Božena, are doing a good job. I hope I'm contributing as well, but the texts we're working aren't getting through there, you know. Maybe the jury is made up of, I don't know, hardcore atheists, leftists, but it's not working, and we're getting nowhere. A culture of cancellation. Let's try something else for these kids just for once. Super Sara Zamuda and the Divine Danko Varga are about to graduate, this is our last chance. And that's where Božena and I parted ways. I have no idea, it was very awkward...*

I dropped my head in front of the Principal, kept silent as if to keep my voice from trembling, gathered strength, and then said that I would be angry if anyone found out, I just wanted it to be known that I'm not lazy, that I still love and appreciate Božena... Huh? Am I the Queen or what?

Two days later, religion teacher Božena got the position of scheduler with an additional fee, and I took over the drama club. I have no idea what the principal said to her, but I haven't heard a hello from Božena since then.

I still needed to get the staffroom on my side. A few days later, an opportunity arose when only the Principal, me, and let's say, the most talkative of all, History, were in the room. I told the Principal, as if no one was supposed to hear it, that I would rather disband the club than have my colleague be angry with me. And the Principal replied to me: *Božena herself said she was leaving the drama club. We will rotate through these positions little bit – and winks.* The wink solemnly informs me: *And then you take us to the national competition and that will be the end of the rotation.*

At that moment, I had everyone at school on my side except Božena, but I thought to myself: do you want to make an omelette? Break that one egg.

And also, let's be real, who was the Croatian teacher? Yes, Božena knew the job, she even won an award in Poland with her college troupe. She knew how to mold the kids. But I spent two

years in the drama studio with Sutara at KNAP (an avant-garde theatre in Zagreb and its director). Hellooo. That's something quite different, my dear Božena, the things we did there were really top-notch and cutting edge.

Now this... it all comes off as if I'm bad-mouthing myself. But, it could also be told differently. Let's say, a dedicated young teacher had the guts to push the kids beyond their limits. It just went wrong, which maybe isn't really her fault, is it? Why then do I prefer to talk exclusively about selfish motives? Because I often criticize myself to get ahead of others, of course, it's easier for me that way. But, more importantly and crazier, because it makes me freer. Because I might be able to grab control of the narrative, when it's already dithering between "how this system grinds down a good person" and "the system sucks because scoundrels like me are running amok out there".

Speaking of which, it seems to me that was the case with Neno.

Everyone was in a hurry to talk about his death, lest someone else take control of the story.

Let's be completely honest: yes, I wanted it for myself. And for the honorable calling and for these children, that no one has any idea what kind of burden they carry, and because I think that art can change, yes. But firstly, for myself. I was green, I was hurt by the gossip that I was a nepo hire... I wanted to be talked about as a damn good professional, to be respected because I was good at my job, because I left a mark on the children and on the school. To maybe steer someone talented to the academy, imagine that. Ten years from now, I'm still working at the school, directing cool off-stream plays around Zagreb. It's clear to you that this cynicism stems from deep regret. My problem in life is that I don't regret, alas, the things that would suit others. But whatever people thought of me, I really wanted the best for those kids.

The grand project was supposed to be: Antigone 2.0. A classic text in modern times. I saw how a genius from Montenegro did it, then Spain and a bunch of other countries took over the model, and that's... ugh. Teenagers act out truly genuine emotion on stage, they don't recite as if they were on national radio, they don't imitate movie stars. We'll have the whole teaching staff blown away, while I shyly praise Božena's contribution, and keep silent about how she contributes even more now that she is doing the schedule.

Antigone, yes, I know, is that typical story that aspiring young Croatian teachers come to, but it really is ideal. The lonely and powerless individual, freedom and the right to citizenship, civil disobedience driving conflict. Law and morality, public and private, male and female. Suffering for righteous beliefs. And the question: can you ever take control of your own destiny? The more I thought about it, the clearer it became to me that Antigone is a teenager now in the 21st century, and Sophocles himself did not understand the reach of his prophecy. And no, I'm not Antigone in this story, I start slaughtering if anyone ever says that. If anyone, I am... The one from the choir who dances out of sync and sings out of tune using some lyrics he made up because he didn't really learn what he needed to do, so he got kicked out. Or possibly Ismena, a spineless chick, only becoming a tragic character when there is no other way out.

But before the kids even found out about the plan, the cool young teacher completely screwed up, already in preparing the ground. I wanted to first free them from everything they thought they knew about acting, and then lock them into a single possibility, to act out their vulnerability. If I succeeded, I thought, we would not see children-adults on stage who look and speak as their teachers would like to look and speak, we will not listen to passive reciters, but authors of their own words. I have to force them to draw from their own images, from their own pain, to expose themselves, I thought, that was the only way to really win space for free speech. I wanted them to perform for each other, not for the audience, especially not for the jury. Kids are not stupid, let's be real. During my downfall, I met some who will always be superior to me. And they have something to say to us, a group of conceited adults who judge them by the standards we have accepted by giving up on ourselves.

2.2. Commentary

The first text is an excerpt from the novel *Slučaj vlastite pogibelji* ('The case of one's own demise') by Kristian Novak. Novak is a leading contemporary Croatian novelist, whose books are mostly set in his native region of Međimurje and are written mainly in his native dialect. The translated excerpt is written in standard Croatian, with some use of slang and dialectal expressions, and it is narrated by the character of a high school Croatian teacher.

The use of slang, particularly anglicisms, presented a significant challenge in translation. These linguistic choices, which portray the narrating character as a youthful and

fashionable figure in Croatian society, lose much of their cultural nuance when rendered in English. For instance, the word ‘cool’ could not fully capture the contemporary and trendy essence of the original anglicism. It could possibly be translated by a more recent word for ‘cool’ in the youth language, but there is no one that is as widespread and as accepted as ‘cool’ has been. Similarly, there was nothing to be done with ‘or what’, but to retain it. Also, in the expression *kul offstream predstave*, I could only translate the noun and write the first adjective correctly, while adding a hyphen in the second one (‘cool off-stream plays’).

Translating idiomatic expressions also posed a significant challenge. The idiom *sasuti sve u facu* is a prime example of this complexity, as it carries a unique cultural and linguistic nuance that is difficult to capture in English. While the phrase ‘giving it to someone straight’ is a valid approximation, it does not fully convey the colourful essence of the original. The author also employs suggestive metaphors of *plima i oseka* (‘ebb and flow’), which I translated rather directly, as this is a metaphor that has a universal meaning and is not culture-specific.

The narrator’s thoughts are presented in a somewhat disjointed way, probably to bring the reader closer to her state of mind. This also means the translation cannot be completely fluid and natural in appearance. The teacher’s inner monologue is sometimes written ungrammatically, or at least elliptically, as in the sentences *Ništa rizik, ništa vizija, samo drž’ se onoga što imaš, kmetski. Tako sam odgojena: mi slabi, mi iz malog sela, moraš si biti dobra sa svima, ne talasaj, ne buni se, moraju te svi voljeti*. To achieve a similar effect of spontaneity in the translation, I had to make the translation also ungrammatical. However, I translated the first sentence conventionally to clarify the meaning: ‘Forget about risk or vision, just stick to what you have, like a good serf. That’s how I was brought up: we weak, we from a small village, you have to be good to everyone, don’t make waves, don’t protest, everyone has to like you’.

Another problematic issue was the translation (and/or explanation) of some of the specifically Croatian cultural references. One of the specifically Croatian cultural elements was the term *vjeroučiteljica*. I translated it as ‘religion teacher’, but depending on the school program in Croatia, it is not necessarily a religiously neutral position, and it will usually be performed by a person educated at a Catholic university. The other Croatian-specific elements were references to the TV channels *Laudato* and *RTL*, as well as the *KNAP* theatre and its director, which I briefly explained in brackets. Another possibility would be to find an equivalent in an English-speaking cultural context, but I wanted my translation to be neutral with respect to geographical location, given the global spread of English and endless possibilities that are available. Another at least somewhat culturally-specific concept is contained in the Croatian phrase *zaposliti se preko veze*. Although it is not nearly as common

and culturally important in the English-speaking world, it does exist in the term ‘nepo hire’, with ‘nepo’ being short for nepotism.

Confronted with the task of translating Croatian dialectal expressions, typical of Novak’s native dialect, such as *delati*, *tam*, *jel tak*, I decide to neutralise them, and translate them with standard English expressions (‘knew the job’, ‘there’, ‘is it?’) in order not to have to choose and use a specific local variety of English, which could possibly limit the global comprehensibility my translation.

Overall, this was an interesting and challenging text to translate. Novak writes quite engagingly and fluidly, and it can be difficult to bring over his narrating quality when translating into English. Translating literature is largely about transferring the mood and atmosphere of the prose and not as much about being completely precise with words, although the meaning needs to be preserved.

3. TRANSLATION OF A NEWSPAPER COLUMN

3.1. Translation

DEŽULović ON THE HANDBALL MOZART

A Split punk trapped in the body of the best player of all time

Until Ivano Balić appeared, the world had not seen anything like it, until then handball was something like the dodgeball championship of the Lepoglava penitentiary, a cruel men's game in which the team that makes it to the end of the game with more vital functions wins.

The talented citizens of Split have won as many as three hundred and twenty medals from the Olympic Games and various world and European championships up to now. There is no respectable house here without an Olympic medal, some kind of handsome silver cup or at least a Wimbledon trophy on the shelf, and the poor guy who returns from the Olympics with a fourth-place finish becomes the butt of jokes: he doesn't have what takes to get married or to get a job with the City Council, so his strict father – a gold medal winner from Tokyo 1964 – usually kicks him out, so as not to embarrass the family and their high-rise.

There is no sport that hasn't taken in Split, and after the looney Ivan Šola assembled a four-seater bobsled on the Riva and qualified for the Winter Olympic Games in Vancouver, there was only show jumping left. Because of all this, the people of Split like to arrogantly brag that their city is "the sportiest in the world", but don't believe them too much: yeah, Split has European champions in water polo, world champions in the high jump and gold-winning Olympic rowers – after all, Splitians have won their 82 Olympic medals in ten different sports – but in the city of Split, there is really only one sport: football. Actually, there is only Hajduk. When **Milorad Bibić Mosor** died a few years ago, the other Split first division team, FC Split, lost a third of its fans. For some obscure reason, though, every kid in the sportiest city in the world dreams only of plowing the Poljud stadium turf.

A club with no success

It's a strange thing, because Hajduk is one of the two city clubs that have never won any global or at least European trophy. The already legendary Jugoplastika, whose late eighties team was

crowned European champion three times in a row and the best white basketball team of the century, has fewer fans than Dinamo Zagreb. Basketball is about as popular in Split as jazz, and it is practiced only by unfortunate kids whose dads didn't have enough cash to make it through Hajduk's strict selection.

Or those young boys, like one kid – everyone in town knows him, you'll like the story – who was taken in by the hype surrounding Kukoč and Radja in the nineties, started playing basketball at Gripe and memorized all the NBA league lineups, with a vague idea of a global career under the hoops. Good height for a point guard, with fantastic court vision and a Kukoč-like flair, the kid was destined for great things, but at the age of sixteen he realised that he would not make it playing basketball in Split, so he decided to correct his mistake and started playing – handball.

It was important to tell the myth about the sportiest city in the world to understand Ivano Balić. When a still developing and unfulfilled young basketball player in a city completely obsessed with football and Hajduk decides to switch to handball, probably the only team sport in Split more unpopular than basketball, and goes to the Brodomerkur Handball Club – alongside Hajduk, the only club in the city that has never been European champion, moreover, the only Split club that has never been champion of anything in its history – there are only two possible explanations: either his mother and father were competitive handball players themselves, so they steered the kid towards the family craft, or he is just a stubborn guy who, to spite whole of Split, decided he would, through brutal daily training and maniacal effort, become the greatest in the history of a sport that no one in the city is interested in.

Both mother and father of Ivano Balić were, of course, competitive handball players.

Balić, in fact, was not a part of that other popular urban myth, the one about the Splitian spite. If it had been about that, he would have chosen some other sport to begin with, say show jumping, or even football, any other than the one that his parents played. If it he had been about spite, he would have trained brutally every day in the hall of the Brodomerkur handball club and worked maniacally to one day bring the unfortunate Brodomerkur the title of vice-champion of Croatia – which would be, for handball ruled by **Zoran Gobac** and the country in which Zagreb Handball Club has been from the beginning of the world until today champion for twenty-three years in a row, the highest possible ambition – so he would shove it in the face

of both his father and the city, “fuck handball”, and take out a loan to buy a show jumping horse.

Listless look

In place of spite and ambition, Ivano Balić only had – talent. Huge talent, the biggest this game has ever seen. He didn't know how he ended up with it himself – it must be that both his father and mother were handball players, there is no other explanation – just that the rest of his career he looked like a typical Split punk from the Riva trapped in the body of the world's greatest handball player. Like a guy who doesn't really want to spend his evenings in handball halls, but as he's already there, he might as well be the best in the world.

You've seen it countless times, in his listless look, in what they call *štufajica* in Split, which is a sort of blissful indifference, in the way he magnificently ignored journalists, publicity and fame, in his slow, lazy gait, as if he were on the Riva at plus forty, and not in the final of the Olympic Games at minus one, and that sudden explosion at the end, a moment of God's or who knows whose inspiration – evolution has nothing to do with it, the talented would lead humanity if it did – when the ball flies behind the French player and ends up with Vori on the line in a fraction of a second, or over the shoulder to the wing, to **Džomba**, or in a Zeppelin move over the seven meter area, or from below, from the floor, straight into the upper corner of the opposing goalkeeper, poor guy who at the moment I am writing these lines is still in goal of the Helliniko Olympic Hall in Athens, waiting to see what Balić will do with the ball.

Genetic mutation

It was a rare genetic mutation, a cross between a talent for handball and a talent for basketball. Until Ivano Balić appeared, the world had not seen anything like it, until then handball was something like the dodgeball championship of the Lepoglava penitentiary, a cruel men's game in which the team that makes it to the end of the game with more vital functions wins: that's why, as you noticed as well, there is no American handball, as there is American football. Goals were scored from distance, using heavy artillery, or by breaking through, in such a way that the toughest dude in the team ran into the opponent's defensive wall with all his strength, and if he survived, he tried to shoot at the goal, and assists was more a sign of a lack of ideas than it was an idea by itself. Yeah, there were also some fantasistas with a built-in idea, but they ended up getting killed multiple times on the nine-meter line: it wasn't a sport for artists.

Then, at the 2003 World Championship in Portugal, a generation appeared that would change everything, and the world got to know the new **Maradona**. This Diego Armando, however, chose a sport in which hand goals were legal: the “Hand of God” from Split would be awarded as the most valuable player of the tournament already next year at the European Championship in Slovenia, and a reign unprecedented in the history of team sports would begin: starting with that championship, through the mythical Olympic gold medal in Athens, and up to the World Championship in Germany in 2007, Ivano Balić was named MVP of the tournament five times in a row at major competitions, and in that period twice named as the best handball player in the world, up to now the only player with two such awards alongside Nikola Karabatić.

Whose father, a small digression, is from Vrsine near Trogir, close to Split, so the fact that the two best handball players in the history of the game originate from a Split suburban bus line only recklessly and rather irresponsibly feeds the already outsized Splitian myth.

In the end, although his generation, after the World Championship in Portugal and the Olympic gold in Athens, never again won a major title, and even with the clubs he played in, he never took the Champions Cup, in 2010 Ivano Balić was, in a poll conducted by the World Handball Federation, overwhelmingly – with more votes than all the other candidates combined, including Karabatić and the gigantic **Talant Dušabaev** – chosen as the best handball player in history.

This is actually a topic for a bar discussion. The greatest in sports are chosen in cafés and during school recess because there are no exact parameters for the greatest of all time. If they existed, Nikola Karabatić would be greater: the man has two Olympic golds, three world and three European titles, and three club Champions Cups on top of that. And he’s still playing. One day, when he retires from handball, he will most certainly be declared the greatest, but only idle voters in the polls of the world handball federation and professional myth-creators are concerned with that anyway. Ivano Balić is not the greatest – well, one of the three greatest – because his house would look like Real’s trophy room, but because he is one of those athletes, rare in every sport, who changed the game.

Paradoxically – and paradox, as we have learned so far, is pretty much the concept of Split sport – Ivano Balić, as he is, with more individual than team trophies, never played for himself: from basketball to handball, he brought Kukoč-like assists – the one that counts as a goal, because

it's not half a goal, but Vori's goal is a fifth of Balić's assist – and the joy of a good move, the joy of playing, introducing that *joga bonito* from Brazilian school playgrounds, parking lots and stadiums into a brutal bar fight between goals. That's why it was possible for him to be the MVP in Germany, even though Croatia finished fifth, that's why it was possible that the following year, when he handed the MVP crown to Karabatić at the Euro in Norway, and the Championship title to the Danes, the entire hall in Lillehammer chanted his name after the final.

3.2. Commentary

This is a newspaper column by Boris Dežulović, published in the wake of Ivano Balić's retirement from handball. Dežulović is a well-known writer and commentator, who deals with a range of social and political topics, but is perhaps at his best when writing about sports. His style is quite flowery and poetic, but also humorous and distinctly local, which are all attributes that can make a text challenging to translate.

The first issue to deal with in this text is the name of the sport. There is a different sport in the United States that is referred to as 'handball', and European handball is then called 'team handball', but I have decided to go with the internationally recognized name of the sport.

Some examples of difficult-to-translate localisms are *zgubidan* and *lola*. *Zgubidan* could also be translated as 'good-for-nothing' or 'wastrel', but I went with 'punk' as I thought it best captured the rebellious character of Balić. *Lola* is basically a 'guy', but a very *guyish* guy, a 'lad' in British slang or a 'dude' in American.

One example of local humor is the sentence *nije taj ni za ženidbu ni za posao u općini, pa ga strogi otac – zlatni iz Tokija 1964. – obično izbací na ulicu, da ne sramoti obitelj i neboder* ('he doesn't have what takes to get married or to get a job with the City Council, so his strict father – a gold medal winner from Tokyo 1964 – usually kicks him out, so as not to embarrass the family and their high-rise'). It is hard to know how the joke would go over in an English-speaking world, where a job with the city council does not hold nearly the same prestige and where young people look to leave their family home as soon as possible. It could provide them with an insight into Croatian culture if understood correctly, though.

Another example of difficult-to-translate humour is the sentence *Košarka je u Splitu popularna po prilici kao jazz, i treniraju je samo mali nesretnici kojima ćaća nije imao dovoljno gotovine za strogu Hajdukovu selekciju* ('Basketball is about as popular in Split as jazz, and it

is practiced only by unfortunate kids whose dads didn't have enough cash to make it through Hajduk's strict selection.'). Someone not familiar with local circumstances might think, on the basis of this sentence, that Hajduk is some sort of a transparently exclusive club that costs a lot to become a member of; in fact, it is a reference to the widely rumoured practice of paying bribes to youth coaches in Hajduk's junior teams.

Ivano Balić's parents are called 'professional' handball players in the original text, but that is not realistic; there was almost no money in handball in the 1970s, so it is more realistic to call them competitive players.

Fantasia is an Italian term usually applied to football to describe skilful and creative players. I left it in the original form as there is no equivalent English term, and it is also used in the original form in English football writing.

The tone of the article is humble-brag: Dežulović is from Split and likes to deconstruct its myths, in this article specifically, the one about being the sportiest city in the world, but he does this in a joking manner that actually reinforces it, even though he points out some of its absurdities, as with the least successful club and sport being also by far the most popular. Humour is always difficult to translate because it is usually linked to local circumstances and references, but even readers unfamiliar with the culture dealt with in the article should be able to enjoy some, if not all, of its aspects.

4. TRANSLATION OF A LINGUISTIC TEXT (EXCERPT)

4.1. Translation

Pleonasms in the standard Croatian language

In this paper, different formal, syntactic and semantic criteria for the division of pleonasms are given, and pleonasms are divided into unnecessary and necessary, based on the collected corpus of pleonasms. Pleonasms are analyzed from a descriptive and normative point of view.

1. Introduction

The Greek word *pleonasmós* means ‘surplus, superabundance’. The term pleonasm originated in classical rhetoric, in which it included a number of stylistic devices. Pleonasm is defined as redundancy of means of expression which are used for the transmission of lexical or grammatical meaning of a statement. It can be realized as a part of a sentence or in a wider context and can also be realized as isosemy (closeness of meaning) of whole sentences that double a certain general meaning (Yartseva 1990: 379). In Simeon’s dictionary, various definitions of pleonasms are given, and they are defined as an addition to a word that is superfluous in that place; use of redundant words; grouping of words with the same meaning; unnecessary accumulation of phrases that are similar in meaning, or are identical; overabundance of words in a sentence that are redundant from the point of view of expressing thoughts; verbiage, redundant words in speech that do not enrich its meaning and content (Simeon 1969 /II/: 62).

Pleonasm is created by developing and expanding utterances so that synonyms or near-synonyms are added to existing words and phrases. The syntactic connection between the components of the pleonastic phrase is completely regular, problems can arise on the semantic level. In order to more accurately determine the meaning of the term *pleonasm*, it is necessary to distinguish it from hypernymous and near-synonymous terms and other terms belonging to the same semantic field. The most general term associated with pleonasm is that of redundancy. Redundancy is defined as an excess of information in communication that decreases the possibility of misunderstandings. A message is redundant if, and only if, it contains elements that contribute nothing to the information already contained in the rest of the message (Lehmann

2005: 3). A certain amount of redundancy in language is necessary because it ensures the correct transmission of information even if there is noise in the communication channel. Pleonasm and tautology are types of redundancy because they repeat information. Both pleonasm and tautology are seen as linguistic problems as well as stylistic devices. Both pleonasm and tautology are terms with multiple meanings because they denote a linguistic phenomenon and, through the process of metonymization, an utterance that arose from that linguistic phenomenon. Tautology is a relationship based on synonymy, i.e. synonyms appear in the same utterance, for example, ‘beautiful and gorgeous’, ‘hideous and disgusting’, ‘dumb and stupid’. A special case is when the same expression is repeated twice (e.g. ‘beautiful and beautiful’, ‘going and going’). Pleonasm is sometimes defined as a term hypernymous to tautology, and sometimes only as a phenomenon in which the meaning of one component element is included in the meaning of another component element (e.g. ‘free gift’). Pleonasm is therefore, according to some authors, superordinate (hyperonym) to tautology¹, while others consider pleonasm and tautology to be coordinated and non-synonymous i.e. co-hyponyms². This is the so-called vertical polysemy because the same name has both a broader and a narrower meaning, i.e. one meaning is a subset of another (Hudeček – Mihaljević 2010: 71).

The expression $E_1 + E_2 + E_3 \dots E_n$ is pleonastic if and only if it contains a meaning component F that is contained in the meaning of more than one E_i (Lehmann 2005:4). The difference between tautology and pleonasm in the narrower sense³ is that in pleonasm, one element is synonymous with the entire expression. In contrast, in tautology, each element is synonymous with the entire expression. In tautology, all elements are equally omissible, so the relationship between elements is symmetrical. If we say ‘beautiful and gorgeous’, we can say only ‘beautiful’ or only ‘gorgeous’ without losing the meaning. In pleonasm, in the narrower sense, only one element can be omitted (the one that is a constituent element of another element). The relationship between the elements of a pleonasm in the narrower sense is asymmetrical; one element can be omitted, but the other element cannot be omitted.

If we analyze this omissible element, it can be:

¹ Closely related to the term pleonasm is the term tautology, which is sometimes considered a subtype of pleonasm (Yartseva 1990: 379).

² R. Simeon describes the differences and similarities between tautology and pleonasm as follows: “Unlike tautology, which describes the same concept with another expression (e.g. ‘I’m afraid and I’m very scared’), pleonasm adds a redundant word, the meaning of which is contained in another word: But they sit next to two elderly old men. Ban looked at the lady with his eyes. Both pleonasm and tautology, therefore, repeat the same meaning in different words.” (Simeon 1969 /II/: 62).

³ In this paper, pleonasm in the narrower sense means pleonasm which, together with tautology, is subordinated to pleonasm in the broader sense.

- a sign (–30% discount)
- a grammatical morpheme (Cro. *Bad Blue Boysi*, *optimalniji*, *keksi*) (Croatian morphemes denoting plurality of nouns or superlative of adjectives added to loan words that already carry that meaning)
- a derivational element (Cro. *skuhan*, *nadograditi*) (Croatian prefixes denoting meaning that is already contained in the stem word)
- a word (Cro. *sići dolje*) (an adverb denoting direction of the movement, when the verb already contains that meaning)
- a phrase (‘mobbing **in the workplace**’)

The problem of pleonasms can be approached normatively and descriptively. In this paper, we will combine both approaches. There is a difference between unintentional and stylistic pleonasms. Unconscious pleonasm is a stylistic error and problematic in a standard language context, while stylistic pleonasm is conscious, intentional and classified as a stylistic device. Pleonasms are found in names and idioms. Therefore, stylistic (intentional), onomastic and phraseological pleonasms belong to the category of pleonasms that are not problematic from a normative point of view. These pleonasms are not subject to normative judgment. The category of normatively unproblematic pleonasms also includes pleonasms that are specifically required by the norm, for example, *s obzirom na to da*, *bez obzira na to što*, *upozoriti na to da*, instead of *obzirom da*, *bez obzira što*, *upozoriti da*.⁴ These are complex Croatian conjunctions that contain redundant elements which have been accepted as grammatical and necessary.

According to types, pleonasms can be: 1) obligatory - required by the language system or norm, 2) optional, stylistic - required by the expressive goals of an utterance. Obligatory pleonasm is common in the grammar of natural languages, e.g. in agreement systems (doubling of grammatical meanings of nouns in words dependent on it, e.g. in the Croatian expression *plava haljina* (‘blue dress’) there is a double marking of feminine gender, nominative and singular), in some constructions of verb conjugation (doubling of spatial meaning of verb prefixes in prepositions, e.g. *spustiti se s drveta* (‘to get down from the tree’) in Croatian or double negation, e.g. *nikad nije bio* (‘never was’) in Croatian, etc. (Yartseva 1990: 379)

Pleonasms can be used to reinforce the underlying meaning, to emphasize meaning (emphatic pleonasms), or to ensure that the meaning is understood correctly. Optional pleonasms are, therefore, sometimes needed in standard language in order to reduce noise in

⁴ “Therefore, it is sometimes considered that a grammatical category is pleonastic if it is realized with multiple affixes, words, etc.” (Matthews 2007: 306)

the communication channel, considering that they contribute to redundancy or to emphasize an element, for example, *ja pjevam* ('I sing') instead of *pjevam* in Croatian.

For the purposes of this paper, we collected a corpus of pleonasms, systematized it, and developed the criteria for dividing pleonasms. Pleonasms were collected from language guidebooks, as well as from journalistic texts, student assignments, texts we received for proofreading, dictionary treatments, etc.

1.1. Pleonasm as a stylistic device

In his book *Foundations of Contemporary Speaking*, Ivo Škarić mentions pleonasms as one of the figures of speech: "Excessive use of a word whose meaning is already contained in another is called a pleonasm and is usually a stylistic error (e.g. *u vremenskom razdoblju* ('in the time period'), *najoptimalniji* ('most optimal') *nužno potrebno* (necessarily needed), etc.). But when it is done deliberately to enhance the expression, then it is a figure of speech. Examples: 'I saw it with my own eyes. He killed him dead. Stand up on your feet!'" (Škarić 2003: 138). Bernardina Petrović includes pleonasms among figures of speech based on repetition and defines them as the redundant use of a word whose meaning is contained in another word (Petrović 2005: 50).

Krešimir Bagić regards the stylistic pleonasm as pleonasm in the narrower sense (Bagić 2010: 7). It is a pleonasm created by a conscious speaking subject. It is expressive, marks the statement functionally, and sometimes subtly complements it. In its elementary form, we find it in oral poetry, in which its aesthetic role is reducible to emphasizing what has been said, use of formulaic poeticisms, or metric harmonizing of verses. We also find it in conversational idioms that express closeness in Croatian, for example, *Sjedni si malo, popij si nešto* ('sit down, have a drink').

Milivoj Solar writes about pleonasm as a stylistic device and says that this term, which originally denoted a mistake in rhetoric consisting of the accumulation of words of the same meaning (tautology), began to be "used in the sense of a poetic device, because in poetry the accumulation of words that are in ordinary speech synonyms can produce a special effect because they acquire additional meanings and do not act redundantly. For example: *I biti slab i nemoćan, i sam, bez igdje ikoga, // I umoran i očajan...* ('And being weak and powerless, and alone, without anyone anywhere, // And tired and desperate...') Tin Ujević: Daily lament" (Solar 2006: 218).

1.2. Idiomatic pleonasm

Idiomatic pleonasm is close to the stylistic pleonasm. It is sometimes considered a subtype of stylistic pleonasm, in which similar words are added up to emphasize their meaning more strongly. However, it is not an error in language. Certain pleonastic collocations are so established that they are not even perceived as two words. Examples can be found in Croatian: *na sliku i priliku* ('image and likeness'); *tuga i žalost* ('sadness and grief'); *jad i čemer* ('misery and sorrow'); *čast i poštenje* ('honor and honesty'); *strah i trepet* ('fear and trepidation'); *bez kraja i konca*; ('without an end and a finish'), cited according to Simeon (1969 /II/:62).

Semantic agreement between the members of an idiomatic pair of words is often realized with the help of synonyms, and thus pleonastic constructions are obtained in which "the members of an idiomatic pair... have exactly the same denotative meaning, and can differ from each other only by expressive and/or stylistic connotation: *povuci-potegni* ('pull-yank')... *nema (nije) ni kraja ni konca* ('there is no end and no finish')... *huka i buka* ('hum and noise')... *kao što je (kako je) red i običaj* ('as is order and custom')... *bruka i sramota* ('disgrace and shame')... *vratiti milo za drago* ('return a favor for a favor')" (Melvinger 1983/1984: 31).

Idiomatic pleonasms are also *znati znanje* ('to know knowledge'), *ne časiti ni časa* ('not to wait for another second'), *čudom se čuditi* ('to be amazed'), i.e. pleonasms in which the verb has a complement semantically contained within itself (in a sentence, an internal object or an adverbial; cf. Marković, 2009: 235).

1.3. Onomastic pleonasm

In toponymy, pleonasms emerge "as a consequence of bilingualism in certain environments by translating a foreign element into a native element? (Brozović Rončević 1998: 13). Dunja Brozović Rončević cites the examples of *Punta Ertec* ('cape cape') and *Luka vala* ('bay bay'), and Petar Šimunović notes *Vala od Luka* ('port of port') and *Ponta od Arca* ('cape of cape') (Šimunović 2005: 149). Brozović Rončević calls such examples onomastic pleonasms or onomastic tautology, and Šimunović calls them hybrid pleonasms. Domagoj Vidović (2010: 355) notes the two-word family nickname *Sorić Gluho*, states that *Sorić Gluho* means 'deaf deaf man' and explains that the bearer of the nickname apparently did not know that the nickname Sorić was motivated by the Italian appellative *sordo* 'deaf'. The author calls such pleonasm anthroponymic pleonasm.

Onomastic pleonasms are pleonasms from a general language point of view. However, it is questionable whether they can be considered pleonasms from the onomastic point of view because they serve to mark a specific geographic referent or person unambiguously. Thus, on

Brač, there were both the one-word family nickname Sorić and the two-word family nickname Sorić Gluho, which were borne by members of the same clan (Eterović).

1.4. Pleonasms and language norm

In the standard language, especially in its higher registers⁵, the use of unintended pleonasms should be avoided. Therefore, pleonasms are often discussed in language guidebooks. In the guidebook *Let's Speak Croatian* (1997: 433), there is a chapter on pleonasms, in which they are discussed as a lexical-semantic and stylistic feature that often appears in both written and spoken language and which purists generally evaluate negatively. Croatian examples mentioned in that chapter are: *vremensko razdoblje* ('time period'), *sići dolje* ('go down'), *kućica* ('little housey'), *vratiti se natrag* ('return back'), *popeti se gore* ('climb up'), *vremenski period* ('time period'), *potencijalna mogućnost* ('potential possibility'), *uslužni servis* ('obliging service'), *najminimalniji* ('most minimal'), *najmaksimalniji* ('most maximal'). In the same guidebook, there is advice dedicated to pleonastic phrases: *mrtvački lijes* ('coffin for bodies'), *administrativna kancelarija* ('administrative office'), *no međutim* ('but however'), *čak štoviše* ('even furthermore'), *cirka, oko, približno, jedno* ('circa, about, around, approximately') + numeral adverb.

The language advice website of the Institute for Croatian Language and Linguistics (savjetnik.ihjj.hr) also features a general article on pleonasms and a treatment of prototypical multi-word pleonasms, providing the following Croatian examples: *oko desetak, cirka desetak, cirka oko desetak, približno desetak* ('about a dozen'), *često puta* ('often times'), *popeti se gore* ('climb up'), *sići dolje* ('to go down'), *no međutim* ('but however'), *kako i na koji način* ('how and in what way'), *čak štoviše* ('even moreover'), *čak dapače* ('even by all means') as well as one-word pleonasms: *najoptimalniji* ('the most optimal'), *najminimalniji* ('the most minimal'), *najmaksimalniji* ('the most maximal').

Josip Silić and Ivo Pranjković (2005: 379–380), writing about the administrative-business register, call pleonasms “one of the biggest diseases of the administrative-business register” and note that they are quite typical of that register and give the following Croatian examples: *kako i na koji način* ('how and in what way'), *no međutim* ('but however'), *na vrijeme od dvije godine* ('for a period of two years'), *u sastavu od pet članova* ('composed of five members'), *oko desetak* ('around a dozen'), *zajednički suživot* ('common coexistence'),

⁵ Registers in which the norm is more strictly respected are considered to be higher registers of the Croatian standard language. These are the scientific and administrative-functional register and the informative sub-register of the journalistic functional register.

djelokrug rada ('scope of work'), *neophodno potreban* ('necessarily required'), *pod najoptimalnijim uvjetima* ('under the most optimal conditions'), *dječji kinderbet* ('child's children's bet'), *hemendeks s jajima* ('ham and eggs with eggs'), *biti nazočan/prisutan na* ('to be present at'), *tijekom prošle godine* ('during the last year'). They state that the following pleonasms are typical for the administrative style, providing the following Croatian examples: *in the field of science* (science is a field), *in the field of health* (health is a field), *in the domain of agriculture* (agriculture is a domain), *in the sphere of economy* (economy is a sphere), *in the process of gaining independence* (gaining is a process), and *in a state of resignation* (resignation is a state). The following Croatian expressions also fall in that category: *pomoću, posredstvom, preko i putem* ('by means of'), in expressing the instrumental of means, for example, in Croatian: *To možete riješiti pomoću računala* (instead of: *To možete riješiti računalom*) ('You can solve this with a computer'), *Ljudi će biti obaviješteni putem javnih medija* (instead of: *Ljudi će biti obaviješteni javnim medijima*) ('People will be informed through public media'), etc.

In his paper "Functional registers and syntax", I. Pranjković presents a different point of view and, speaking about different types of nominalization (noting that it is characteristic of abstract functional registers, especially administrative ones), warns of the spread of "certain nominal phrases through new nominal (pleonastic) elements, whose function is to specify or highlight the content of the message" (Pranjković 1996: 521) and cites the following Croatian examples: *u oblasti politike* ('in the field of politics'), *na području Dalmacije* ('in the area of Dalmatia'), *u domeni zakonodavstva* ('in the domain of legislation'), *u sektoru turističke privrede* ('in the tourism economy sector'), *u sferi informiranja* ('in the sphere of informing'), *na polju međunarodne suradnje* ('in the field of international cooperation'). Regarding such phrases, Pranjković says that "they are not something to be avoided and/or considered wrong in all functional registers. On the contrary, they are a completely ordinary and very common occurrence in the more abstract functional registers, and only exaggeration in their use or use in a functional register to which they are not suited should be considered wrong" (Pranjković 1996: 522).

4.2. Commentary

This is a scholarly article published in a Croatian linguistic journal. It deals with the concept of pleonasms in general and in the Croatian language specifically.

As a scientific text, it has to be objective and factual, so there is no room for figures of speech, dialectisms or slang, but there are some other translation challenges.

Although a lot of the technical terminology in English and Croatian corresponds and has the same Latin or Greek roots, there are some differences in how some terms are used. For example, frazeologija in Croatian cannot be translated as phraseology in English. In Croatian, *fraza* is a group of words with a defined meaning that is different from the sum of its parts. In English, a phrase is a group of words or a singular word acting as a grammatical unit. The meaning of Croatian *fraza* is better covered by 'idiom' in English.

Another problem was conveying the meaning of examples of Croatian pleonasm. These are very language-specific and cannot be smoothly translated into English. In cases of pleonastic grammatical or derivational morphemes, these can only be described and explained. The same goes for pleonastic phrases where there is a redundant word, which would not be so in the English translation, like in the example of *sići dolje*.

In some cases of idiomatic pleonasm, I used literal translations so that a reader could get a sense why an idiom is considered pleonastic in Croatian, even if they don't make sense as phrases in English, like in the following example: *na sliku i priliku* ('image and likeness'); *tuga i žalost* ('sadness and grief'); *jad i čemer* ('misery and sorrow'); *čast i poštenje* ('honor and honesty'); *strah i trepet* ('fear and trepidation'); *bez kraja i konca*; ('without an end and a finish')

Overall, this was a moderately difficult text to translate, with the most emphasis being on understanding the theoretical concepts being discussed and finding their correct English equivalents.

5. TRANSLATION OF A SCIENTIFIC PAPER FROM THE FIELD OF AGRICULTURE (EXCERPT)

5.1. Translation

A record of postharvest black rot, anthracnose and gray mold on mandarin fruits

Introduction

Considering the number of trees and the annual fruit production, citrus fruits represent one of the most important groups of fruits in Croatian agriculture. The majority of citrus fruit production in Croatia is related to the Satsuma mandarin (*Citrus unshiu* (Swingle) Markow.), a varietal group of Japanese mandarins that are relatively resistant to low temperatures (Bakarić, 1983). According to the Agency for Payments in Agriculture, Fisheries and Rural Development, 1,734,863 mandarin trees were registered in Croatia. The production of this fruit in the past five years ranges between 40 and 50,000 tons (Statistički ljetopis, 2013), with a large part of the production being exported.

Despite the importance of mandarins, the protection of this fruit crop from plant diseases is very poorly researched in Croatia. The trend of growing production has not been accompanied by the development of storage technology, which significantly impacts the preservation and availability of fruits on the market (Skenderović Babojelić et al., 2010). It is not known whether many globally significant fungal, bacterial, and viral diseases of citrus fruits occur in Croatia or how widespread, harmful, and problematic they are. Despite this, several fungicides intended to control various mandarin diseases have been registered in Croatia in recent years. Several agents are registered for the control of diseases caused by *Phytophthora* species, bacteriosis caused by species from the genera *Pseudomonas* and *Xanthomonas*, *Citrus melanose* (*Diaporthe citri*), black rot (*Alternaria citri*), anthracnose (*Colletotrichum gloeosporioides*), and even quarantine consumption of citrus fruits, caused by *Phoma tracheiphila*. According to the purpose of the mentioned plant protection products, it could be concluded that these diseases are present in Croatia, even to the extent that they require control with fungicides. However, most of these diseases have not been identified in our country at all. According to available data from scientific, professional and other literature, *D. citri*, *A. citri*, *P. tracheiphila* or any bacteriosis caused by *Pseudomonas* or *Xanthomonas* species have never been registered on citrus fruits in Croatia.

Identifying the disease's causative agent is the first, basic, and necessary step in considering possible protection measures. In 2013, in the Neretva Valley, the main mandarin-growing area in Croatia, widespread fruit decay after harvest was recorded. Although blue mold (*Penicillium italicum*) was recorded as the most widespread and significant cause of decay, other diseases on fruits were also observed. This paper aims to determine their causes.

Materials and methods

In December 2013, sorting plants collected samples of Satsuma mandarin fruits grown in the lower course of the Neretva River near Opuzen. During collection, fruits with symptoms of necrotic changes on the skin, spots or rot were selected. Fruits with obvious symptoms of green mold (*Penicillium digitatum*) or blue mold (*P. italicum*) were not collected. A total of 48 fruits were collected and analyzed in the laboratory.

Fruits affected by sooty mold were rejected from further analysis in the laboratory. The remaining 37 fruits were washed under a stream of running water for ten minutes, after which fragments of the skin with symptoms indicating infection with parasitic fungi were cut from them. In cases of clearly limited symptoms in the form of necrosis or spots, parts of the skin are cut in such a way that the transition from symptomatic to visually healthy tissue is included. Fragments of the skin were surface sterilized by immersion in a solution of 1% sodium hypochlorite for three minutes, rinsing in sterile water and immersion in 70% ethanol for thirty seconds, after which they were dried in a stream of air.

Some of the fragments measuring approximately 5 x 5 mm were inoculated onto potato dextrose agar (PDA), and the rest was incubated in a humid chamber. After the appearance of fungal colonies on PDA, colonies from the same fragments on agar and in a humid chamber were compared visually, under a binocular magnifying glass and under a microscope. In cases where morphologically the same fungus emerged from the fragments from the same parts of the symptomatic skin, the colonies obtained from the PDA are isolates. The isolates were grown on KDA at 22 °C in the dark for 10 days, after which the fungal species were identified.

Macroscopic and microscopic examination of isolates revealed that 16 isolates belong to the genus *Alternaria*, 15 to the genus *Colletotrichum*, and 6 to the genus *Botrytis*. Isolates of *Alternaria* spp. were identified on the basis of morphology according to Simmons (2007) and by molecular polymerase chain reaction (PCR) using the pair of primers AA-F2/AA-R3 (Konstantinova et al., 2002), specific for the *Alternaria alternata* species. DNA extraction was performed with the OmniPrep® kit (G-Biosciences, St. Louis, USA) according to the manufacturer's instructions, after which the reaction mixture was prepared, and the PCR

reaction was performed according to the protocol of Konstantinova et al. (2002). *Colletotrichum* isolates were identified based on morphology according to Cannon et al. (2008) and Agostini et al. (1992), and isolates of the genus *Botrytis* according to Ellis and Waller (1974).

After species identification, three isolates of each determined species (*Alternaria alternata*, *Colletotrichum gloeosporioides* and *Botrytis cinerea*) were selected for pathogenicity tests. The pathogenicity check was carried out on visually healthy clementine fruits (*Citrus clementina* Hort.) originating from the Neretva Valley. Each isolate was inoculated in two replicates in three ways. The first inoculation method was to inject 2 µl of conidia suspension with an approximate concentration of 10⁵ spores/ml into the fruit's pericarp. The second type of inoculation was carried out by gluing circular sections of colonies with PDA with a diameter of 10 mm to the styler of the fruit. The third was by applying a drop of conidia suspension with a volume of 1 ml and an approximate concentration of 10⁵ spores/ml to the top of the fruit from which the calyx was removed. The inoculated fruits were kept in a biological chamber at a temperature of 20 °C for two to three weeks, depending on the appearance of symptoms. From fruits where symptoms developed and from places where sporulation was visible, fungi were isolated in pure culture and analyzed based on morphology.

Results

Out of a total of 15 fungal isolates from tangerine fruits that were found to belong to the genus *Colletotrichum*, all corresponded to the description of the species *Colletotrichum gloeosporioides* (Penz.) Penz. & Sacc., the causative agent of citrus anthracnose.

Colonies of all isolates on PDA were very similar, with gray aerial mycelium, dark-gray color of the reverse side and mostly a large number of randomly distributed dark conidia without setae, in which conidia were formed in a dense orange mass. Conidia of all isolates were colorless, cylindrical with rounded ends, with average dimensions of 12.4 x 3.7 µm. The growth of isolates at 22°C in the dark was an average of 8.1 mm/day, without major deviations between the 15 isolates.

All 16 isolates that belonged to the genus *Alternaria* morphologically corresponded to the description of the species *Alternaria alternata* (Fr.) Keissl., the causative agent of citrus black rot. All isolates sporulated profusely, with conidia forming in long chains. Morphological identification was confirmed by PCR, where a fragment of 340 base pairs was amplified in all 15 isolates (Figure 1).

Of the isolates of the genus *Botrytis*, all six corresponded to the description of the species *Botrytis cinerea* Pers., the causative agent of citrus gray mold. Four out of six isolates did not

form sclerotia on PDA after 14 days, while two isolates formed abundant sclerotia measuring 2-3 mm.

All isolates sporulated, with significantly more sporulating isolates that did not form sclerotia. The average dimensions of the conidia of *B. cinerea* isolates were 8.6 x 6.1 µm.

Three weeks after inoculation on the calyx, isolates of *A. alternata* did not show external symptoms on the inoculated fruits. However, after cutting the fruit, rot developed in the interior of all inoculated fruits was visible, the flesh was destroyed, and clusters of gray mycelium were visible along the central axis (Figure 2). The upper part of the inside of the fruit took on a dark, almost black color in places. The appearance of symptoms on fruits inoculated with *A. alternata* isolates by injecting a conidia suspension into the peel was not recorded (Table 1). In contrast to *A. alternata*, the appearance of symptoms was recorded in all cases after the inoculation of *C. gloeosporioides* isolates in the peel of the fruits. Already after a few days, a dark indentation was visible at the point of injection of conidia, which gradually expanded, covering an increasingly larger part of the fruit (Figure 3). After ten days, acervuli of the fungus became visible on the recess with orange clusters of spores in the form of drops. None of the isolates of *C. gloeosporioides* caused symptoms after inoculation on the fruit calyx. All isolates of *B. cinerea* caused the appearance of rot after inoculations on the calyx and under the peel of the fruits. Fruits inoculated with *B. cinerea* isolates under the skin completely failed nine days after inoculation. The appearance of symptoms was not recorded in any isolate or any type of fungus after placing a colony clip on the fruit styler.

5.2. Commentary

This is a scientific article from the field of agriculture dealing with a disease that affects mandarines after they are harvested. It is a technical text from a Croatian agricultural journal. Just like the previous article, the style is strictly formal and technical, but also in a field that I'm a lot less familiar with and that is generally more difficult to access for non-experts. Luckily, many of the names of plants, fungi, bacteria and viruses mentioned in the text are in their Latin taxonomical form, and if they are not, their Latin name can be attained through a simple web search, which can then also be used to find an English name of a species in question, if there is one. Other problematic issues were the names of testing protocols and techniques used in the testing procedures. Most of these tools have a standard abbreviation that usually refers to a full

name in English or Latin, but there are also combined names like *krumpir – dekstrozni agar* (*KDA*), where a common Croatian name of a plant is inserted, which also has an equivalent translation in English, where also the common English name of potato is used, without going for a Latin name.

Overall it is a difficult text to understand and translate, but following through on some basic searches and procedures and comparing results in both languages results can lead to a fairly solid and understandable translation, even for non-experts. There is little stylistic nuance and cultural specificity to deal with but a lot of technical details to watch out for.

6. GENERAL DISCUSSION

Each of the four translated texts had its own specific challenges and difficulties. The first text is a suggestive introduction to the inner world of the protagonist of a novel, a young woman starting her career as a high school teacher. The language the author uses serves to characterize her and her surroundings in a small town Croatian high school. As a young and educated person, she is obviously immersed in the global, American-dominated culture, and she will use the language of that culture, either in direct loan words or in loan translations (calque). These are very difficult to then translate back into English while keeping the sense of cultural significance that they have for a Croatian text. She is obviously also familiar and involved with contemporary Croatian culture, and some of those references, like those to Croatian TV channels, had to be briefly explained to make sense to a reader not familiar with them. The translation of colloquial Croatian idioms, in particular, posed a significant challenge and could only be approximated in English. These are situations where the process of translation reaches its limits, and something of the original has to be lost in it, especially when it comes to translating literature.

The second text is nominally a newspaper column, but it is also quite literary in its style and intent. The author uses the topic of the retirement of a famous athlete to weave a story not only about his career but also about their home town. The topic and article are distinctly local, but the language of the article is a well written standard Croatian. The language itself can be translated quite faithfully, but it is the content of the article that can lead to misunderstandings or just a partial understanding of what was intended in the original. Much of it is written in a light and humorous tone, which is always challenging to capture. On the other hand, it is the translator's job to bridge the divide between cultural contexts. I believe that an interested reader could gain a better understanding of some of the aspects of Croatian culture and, specifically, the local culture of Split after reading the translation. Translating a text like this, which is full of stylistic devices, witticism, and local references, is more about language intuition than about strictly technical translating of sentences.

The third text is an academic paper in the field of linguistics, dealing with the topic of pleonasm in the Croatian language. The style is the opposite of the style used in the first two articles; it is highly formal and objective. This removes a lot of issues that were important in translating the first two texts and moves the emphasis to technical terminology. In this case, that is not overly problematic, as in both English and Croatian linguistic writing,

internationalisms with roots in Greek and Latin are widely used. However, that can also sometimes lead to mistakes in translations, as not all internationalisms are used with the same meaning in the languages; in this text that was the case with the distinction in the use of *idiom* and *phrase* between English and Croatian. The other major sticking point was the representation of the examples of pleonasms in Croatian. Croatian is obviously quite different from English in terms of grammatical morphology and idiomatic expressions, so the examples used in the text usually don't translate into English pleonasms. I dealt with that by explaining the morphological pleonasms and translating literally the examples of idiomatic pleonasms so that the reader can get a rough sense of what those examples represent.

The fourth text was perhaps the most difficult to translate. It is a scientific text from the field of agriculture, and it was quite difficult to understand for someone who has no expertise in this area. The first task was, therefore, to understand the text in Croatian, for which using *Struna* was quite helpful. After that, the task was straightforward. Just like in the third text, the language is formal and technical, with little room for interpretation. The main task is to correctly translate the technical terminology used in the article. Most of the time, these are also internationalisms which are used in the same way in scientific literature in both languages, but that has to be controlled by checking the definitions in both languages.

7. CONCLUSION

Translating to a language that is not one's native is a very demanding task. Although English is widely present, used and consumed through mass media in many societies in which it is not the native language, including Croatia, achieving proficiency in English to the level that is close to a native speaker is still very difficult to achieve, especially if one hasn't lived in an English speaking country. When doing written translations, that can be somewhat mitigated through the lack of pronunciation to mark oneself as a non-native speaker and the extra time one has to formulate thoughts and sentences. Translating academic and scientific texts can be harder at the beginning when the task is to understand the terminology, but if one is able to achieve that, the end result can be very close to a text written by a native speaker, as there is usually no stylistically marked use of language or culturally specific references. This is also a type of translation that can be more readily done by machine translators, at least to a larger extent than translations of literary or journalistic text, where the human translator is still indispensable and probably will be for some time still, even if their role is also changing and they will also have to adapt to the reality of ever-improving machine translating.

APPENDIX 1

Kreont s AliExpresa⁶

Bila sam kul profa, vani polupijana razmjenjivala zavjereničke poglede sa svojim srednjoškolcima. Neki su od mene žicali cigarete. A moje je pušenje generacijski isključiv prizor. Nisam pušila pred suprugom, svojtom i svojim roditeljima. Neću ni pred svojom eventualno budućom djecom. Jednog dana.

Jednog dana.

Jednog dana kad mi pukne film, pa saspem svima sve u facu. Drukčije sam zamišljala ovaj tren. U njemu bi trebalo biti nekog zaključka. Mora biti neke pouke, jer valjda nitko normalan ne prođe kroz slom ovog kalibra, a da ne potraži neki smisao. Nakon svega si jača, ili pametnija, recimo. Koja je pouka, koja je pouka. Možda eventualno ovo: ima stvari koje ti se dogode bez smisla, zato si nemoj lagati da si pametnija ili jača, jer nisi, jer si možda i slabija i gluplja, to je tako i tako to uzmi.

Mlada kul profa. Dovoljno kul da kažem cool ili backstage na nastavi, dovoljno profa da to učinim samo jednom u 45 minuta. Jer kul mlada profa mora biti na oprezu. Tad sam bila tačno ta, uloga po mjeri glumice. Sve svoje odluke, sve bitne, donijela sam iz jedinog razloga da si slučajno ne zakompliciram život. Ništa rizik, ništa vizija, samo drž' se onoga što imaš, kmetski. Tako sam odgojena: mi slabi, mi iz malog sela, moraš si biti dobra sa svima, ne talasaj, ne buni se, moraju te svi voljeti. Meni je život bio neprekidna borba sa strahom od mogućnosti tuđe mržnje i trud da se pritom zadrži bezbrižna vesela faca.

A u meni se smjenjuju plima i oseka. Prvo se silno želim svidjeti svima. Znači, doslovno teško prihvaćam da me tamo neki bradati pustinjski idioti mrze jer se ne pokrивam i nisam muslimanka, ja bih se doslovno i takvima barem malo dopadala. A čim osjetim da je po mom i da sam svima dobra, momentalno krene oseka. Krene čežnja za bijegom jer mi se sere od ekipe kojoj sam se toliko željela svidjeti. I nemam pojma što je od toga moje pravo lice. Nemam pojma gdje završava prava ja, a počinje ona koju sam izgradila da me ljudi vole. Samo znam

⁶ Retrieved from <https://strane.ba/kristian-novak-slucaj-vlastite-pogibelji-odlomak/> 12 April 2024

da se, kad je plima, trošim na vlastitu ljupkost. Kad krene oseka, misli mi počinju formulacijom „e, al kad jednog dana“.

Ali u ovome sada nema ničeg konačnog, ničeg trijumfalnog.

Jer, obožavala sam svoj posao. Zato što su mi dali da ga radim, prije svega dramsku, gutala sam i trpjela sve i bila jebeno klupko diplomacije. Ja ću se svima u zbornici dopadati, pa će me pustiti na miru. A, evo ipak pouke, pa bila mi je pred nosom: te dvije stvari iz nekog razloga ne idu skupa – dopadati se svima i raditi ono što voliš.

Znači, prije nego su me svi zamrzili, skoro svi su me voljeli jer sam im se unijela u glave. Moja je duhovna životinja mops željan ljubavi. Mrzila me možda samo vjeroučiteljica Božena. Oće to, kad ženu izguraš iz dramske koju je ona osnovala. Ja sam tada, kul mlada profa, mislila da me to što me mrzi baš vjeroučiteljica čini neznamkavom frajericom.

Bile smo si Božena i ja u početku dobre, ona se zaposlila par godina prije mene, pa zatrudnjela. Kad se vratila, trebala je nekog da joj uskoči jev doma beba pvace kad je mama na dvamskoj. Napravile smo jednu baš jako dobru Božićnu predstavu, ali ona je pilila uvijek na svoju stranu. Možeš me uvjeravati da nisi isključiva glede predložaka s religijskim podtekstom, ali nemoj mi prodavat te novi-kul-katolici fore i neznamkakvi katolički literarni hitovi za koje nitko živ ne bi čuo da se ne identificiraju upravo kao vjerski. Kao ono, Laudato je RTL, ali dublje i zdravije. Jedna polusvađa bila je dovoljna za razlaz i mislim da ne pretjerujem kad velim da sam kraljevski to odigrala. Otišla Ravnateljici, rekla da ne želim biti smetalo, dramska je u svemu najvažnija, ja sam zadnja došla, red je da prva odem. Ona veli „dobro“, malo suzdržano, ali eto, tako je kako je. Tjedan poslije, eto Ravnateljice s mužem i veselim društvom gradske sredovječne kreme na degustaciji kod mog dragog. Cvrcnula se i rascvrkutala, pita ona mene još jednom za dramsku. Ja se trgam ko bijesna zvijer, *neću reć, neću nikad reći, nisam izdajica*. Ona stišće sve glasnije, ja konačno uzdahnem i velim, *ma... ajde... al' nek ostane među nama*.

Natačem joj i pričam kako sam s Boženom ušla u diskusiju: *gle, na državnoj smotri naša škola nikad nije bila s igrokazom, nikad! A klinici rade dobro, ti, Božena, radiš dobro, ja, nadam se, isto pridonosim, ali tekstovi koje radimo ne prolaze tam, kužiš. Možda u žiriju sjede, kajaznam, zadrti ateisti, leftardi, nemam pojma, ali ne prolazi i možemo se frigmat. Kultura otkazivanja. Ajmo za ove klince samo jednom probati nešto drugo. Super Sara Zamuda i Divni Danko Varga*

su skoro maturanti, to nam je zadnja šansa. I tu smo se razišle Božena i ja. Nemam pojma, bilo je jako neugodno...

Spustim pogled pred Ravnateljicom, zašutim, kao, da mi ne zadrhti glas, smognem snage, pa još kažem da ću se naljutiti ako to itko sazna, samo sam htjela da se zna da nisam lijena, da Boženu i dalje volim i cijenim... Ha? Jesam kraljica or what?

Dva dana poslije, vjeroučiteljica Božena dobiva poziciju satničara uz dodatni honorar, a ja preuzimam dramsku. Što je njoj Ravnateljica rekla, pojma nemam, ali Božena meni od tad ni bok-bok.

Još sam trebala zbornicu pridobiti na svoju stranu. Par dana poslije ukazala se prilika kad smo u prostoriji bile samo Ravnateljica, ja i, ajmo reć, najkomunikativnija od svih, Povijest. Velim Ravnateljici, šatro da nitko ne čuje, da ću radije raspustiti grupu nego da se kolegica ljuti na mene. A Ravnateljica meni: *Božena je sama rekla da odlazi s dramske. Malo budemo se rotirali po tim funkcijama* – i migne. Mig mi svečano obznanjuje: *A onda nas ti lansiraš na državnu smotru i tu je kraj rotacije.*

U tom trenutku imam sve u školi na svojoj strani osim Božene, ali mislim si: hoćeš ispeći omlet? Slomi to jedno jaje.

Osim toga, realno, pa tko je tu profa hrvatskog? Da, Božena je znala delati, s trupom sa svog faksa je čak uzela neku nagradu u Poljskoj. Znala je klince oblikovati. Ali ja sam dvije godine bila u dramskom studiju kod Sutare u KNAP-u. Halo. To je ipak nekaj drugo, Božena moja draga, stvari koje smo mi tam radili su bile zbilja vrh i sami rub.

Ovo sad... sve ispada kao da pljujem sama po sebi. Jer, dade se to i drukčije ispričati. Recimo, predana mlada profa imala je petlje tjerati klince preko granice. Samo je pošlo po zlu, što možda baš i nije njezina krivnja, jel tak. Zašto onda radije pričam isključivo o sebičnim motivima? Naravno, jer često kritiziram sebe da preduhitrim druge, tako mi je lakše. Ali, važnije i luđe, jer me čini slobodnijom. Jer možda zgrabim kontrolu nad narativom, kad se već koleba između „kako ovaj sustav melje dobrog čovjeka“ i „sustav je sranje jer ništarije poput mene divljaju tamo“.

Kad smo već kod toga, čini mi se da je tak bilo s Nenom.

Svi su se žurili pričati o njegovoj smrti, samo da netko drugi ne preuzme kontrolu nad pričom.

Ajmo sasvim iskreno: jesam, htjela sam to zbog sebe. I zbog časnog poziva i zbog te djece, za koju nitko nema pojma kakav teret nose, i zbog toga što mislim da umjetnost može mijenjati, da. Ali u prvom redu zbog sebe. Bila sam zelena, bolio me trač da me se zaposlilo prek veze... Htjela sam da se o meni govori kao o prokleta dobroj stručnjakinji, da me se cijeni jer znam raditi, jer sam ostavila traga na djeci i na školi. Da možda nekog talentiranog usmjerim na akademiju, zamisli to. Za deset godina i dalje radim u školi, a režiram kul offstream predstave po Zagrebu. Jasno ti je da ovaj cinizam proizlazi iz dubokog kajanja. Moj je životni problem što se ne kajem, avaj, zbog stvari koje bi drugima pasale. Ali, što god ljudi mislili o meni, ja sam stvarno htjela dobro tim klincima.

Velebni projekt trebao je biti: Antigona 2.0. Klasični tekst u suvremeno doba. Vidjela sam kako to radi jedan genijalac iz Crne Gore, model su onda preuzele i Španjolska i još hrpa zemalja, i to je... uh. Tinejdžeri odglume baš pravu emociju na sceni, ne recitiraju kao da su na državnom radiju, ne imitiraju filmske zvijezde. Ima da svi u zbornici redom padaju na dupe dok ja stidljivo hvalim Boženin doprinos, a šutim o tome kako ona još više pridonosi sada kad radi raspored.

Antigona je, da, znam, ta tipična priča na koju svršavaju nadobudne mlade profe hrvatskog, ali je stvarno idealna. Usamljen i nemoćan pojedinac, sloboda i pravo na državljanstvo, građanski neposluš koji pokreće sukob. Zakon i moral, javno i privatno, muško i žensko. Stradanje zbog pravednih uvjerenja. I the pitanje: možeš li ikada preuzeti kontrolu nad svojom sudbinom. Što sam više razmišljala o tome, bivalo mi je bistrije da je Antigona tinejdžerka sada u 21. stoljeću, a Sofoklo ni sam nije razumio doseg svog proročanstva. I ne, nisam ja Antigona u ovoj priči, zakoljem ako netko to ikad izgovori. Ako itko, ja sam... Onaj iz kora što pleše van ritma i pjeva falš svoj neki tekst jer nije baš naučio što treba, pa ga izbace. Ili eventualno Ismena, pipica bez kičme, postaje tragičan lik tek kad nema drugog izlaza.

Ali prije nego su klinci uopće saznali za plan, kul mlada profa generalno je zasrala, već na pripremi terena. Htjela sam ih najprije osloboditi od svega što misle da znaju o glumi, pa ih potom zaključati u jednu jedinu mogućnost, da odigraju svoju ranjivost. Ako to uspijem, mislila sam, nećemo na sceni vidjeti djecu-odrasle koji izgledaju i govore kako bi njihove profe htjele

izgledati i govoriti, nećemo slušati pasivne recitatore, nego autore svojih riječi. Moram ih prisiliti da vuku iz svojih slika, iz svoje boli, da se razotkriju, mislila sam, tek tako se stvarno može dobiti prostor za slobodno govorenje. Htjela sam da odigravaju jedni prema drugima, ne za publiku, posebno ne za komisiju. Nisu klinci glupi, ajmo realno. Upoznala sam tijekom svog pada neke koji će mi uvijek biti superiorni. I imaju što za reći, nama, umišljenoj ekipi odraslih koja ih procjenjuje mjerilima koje smo prihvatili odustavši od sebe.

APPENDIX 2

DEŽULOVIĆ O RUKOMETNOM MOZARTU

Splitski zgubidan zarobljen u tijelu najboljeg igrača svih vremena⁷

Do pojave Ivana Balića, svijet ništa slično nije vidio, do tada je rukomet bio nešto poput prvenstva kaznionice Lepoglava u graničarima, surova muška igra u kojoj pobjeđuje momčad koja kraj utakmice dočeka s više vitalnih funkcija

Talentirani su građani Splita do sada osvojili čak tri stotine dvadeset medalja s Olimpijskih igara i raznih svjetskih i europskih prvenstava. Nema ovdje ozbiljnije kuće bez olimpijske medalje, nekakvog zgodnog srebrnog pehara ili barem wimbledonskog pokala u regalu, a nesretnika koji se s Olimpijade vrati četvrti cijeli grad zajebava: nije taj ni za ženidbu ni za posao u općini, pa ga strogi otac - zlatni iz Tokija 1964. - obično izbaci na ulicu, da ne sramoti obitelj i neboder.

Nema sporta koji se u Splitu nije primio, a nakon što je mahniti Ivan Šola onomad okupio na Rivi bob četverosjed i plasirao se na zimske Olimpijske igre u Vancouveru, ostalo je još samo preponsko jahanje. Zbog svega toga Splićani se vole prepotentno hvaliti kako je njihov grad “najsportskiji na svitu”, ali ne vjerujte im previše: ima Split europske prvake u vaterpolu, prvakinje svijeta u skoku u vis i zlatne olimpijske veslače - svoje osamdeset dvije olimpijske medalje, uostalom, Splićani su osvojili u deset različitih sportova - ali u gradu Splitu ozbiljno postoji samo jedan: nogomet. Zapravo, samo Hajduk. Kad je prije par godina umro **Milorad Bibić Mosor**, drugi je splitski prvoligaš, RNK Split, ostao bez trećine navijača. Iz nekog nejasnog razloga, naime, svaki klinac u najsportskijem gradu na svijetu sanja samo da ore poljudsku ledinu.

Klub bez uspjeha

Zanimljiva je to stvar, jer Hajduk je jedan od ukupno dva gradska kluba koja nikad nisu osvojila nijedan svjetski ili barem europski trofej. Već čuvena Jugoplastika, čija je generacija s kraja osamdesetih tri puta zaredom okrunjena titulom prvaka Europe i najboljeg bijelog košarkaškog

⁷ Retrieved from <https://www.jutarnji.hr/vijesti/dezulovic-o-rukometnom-mozartu-splitski-zgubidan-zarobljen-u-tijelu-najboljeg-igraca-svih-vremena-393001> on 12 April 2024

tima stoljeća, ima manje navijača od zagrebačkog Dinama. Košarka je u Splitu popularna po prilici kao jazz, i treniraju je samo mali nesretnici kojima ćaća nije imao dovoljno gotovine za strogu Hajdukovu selekciju.

Ili oni mališani, poput jednog klinca - znaju ga svi u gradu, svidjet će vam se priča - što je zaveden euforijom oko Kukoča i Rađe devedesetih započeo trenirati na Gripama i naučio napamet sve sastave NBA lige, s nejasnom idejom o svjetskoj karijeri pod koševima. Dobre visine za playmakera, fantastičnog pregleda igre i kukočevskog vica u igri, mali je bio predodređen za velike stvari, ali sa šesnaest godina uvidio je da se od košarke u Splitu neće kruha najesti, pa je odlučio ispraviti grešku i otišao trenirati - rukomet.

Važno je bilo ispričati mit o najsportskijem gradu na svitu da bi se shvatio Ivano Balić. Kad se nedovršeni i nerealizirani mladi košarkaš u gradu potpuno infišanom u nogomet i Hajduk odluči prebaciti na rukomet, u Splitu valjda jedini timski sport nepopularniji od košarke, pa ode pri tom u rukometni klub Brodomerkur - uz Hajduk jedini u gradu koji nikad nije bio europski prvak, pače jedini splitski klub koji nikad u povijesti nije bio prvak ničega - moguća su samo dva objašnjenja: ili su mu i mater i otac bili profesionalni rukometaši, pa su maloga dali u obiteljski biznis, ili je riječ o svojeglavom tipu koji je, u inat cijelom Splitu, krvavim svakodnevnim treninzima i upravo manijakalnim radom odlučio postati najbolji na svijetu u povijesti sporta koji nikoga u gradu ne zanima.

Ivanu Baliću, jasno, i mater i otac su bili profesionalni rukometaši.

Balić, naime, nije bio iz tog, drugog popularnog urbanog mita, onoga o splitskom dišpetu. Da je bilo to, on bi za početak izabrao neki drugi sport, recimo preponsko jahanje, ili čak nogomet, bilo koji zapravo osim onoga kojim su mu se bavili i otac i mater. Da je bio dišpet, u dvorani rukometnog kluba Brodomerkur krvavo bi svakodnevno trenirao i upravo manijakalno radio da jednog dana nesretnom Brodomerkuru donese titulu viceprvaka Hrvatske - što je, za rukomet kojim vlada **Zoran Gobac** i državu u kojoj je RK Zagreb od početka svijeta do danas dvadeset tri godine zaredom prvak, najdalja mjerljiva ambicija - pa bi je bacio pod nos i ocu i gradu, “jebo vas rukomet”, i na kredit kupio konja za preponsko jahanje.

Bezvoljni pogled

Umjesto dišpeta i ambicije Ivano Balić je imao samo - talent. Ogroman, najveći što ga je ova igra ikad vidjela. Ni sam nije znao kako se našao kod njega - bit će da su mu i otac i mater bili rukometaši, nema drugog objašnjenja - tek ostatak karijere izgledao je kao tipični splitski zgubidan s Rive zarobljen u tijelu najvećeg svjetskog rukometaša. Kao tip kojemu se jebeno ne da provoditi večeri u rukometnim dvoranama, ali kad je već tu, bit će najbolji na svijetu.

Vidjeli ste to bezbroj puta, u njegovom bezvoljnom pogledu, onome što u Splitu zovu “štufajica”, u načinu na koji je veličanstveno ignorirao novinare, publicitet i slavu, u fjakastom, lijenom koraku, kao da je na Rivi na plus četrdeset, a ne u finalu Olimpijskih igara na minus jedan, i onoj iznenadnoj eksploziji na kraju, trenutku Božjeg ili Čijeg već nadahnuća - nema evolucija ništa s tim, talentirani bi vodili čovječanstvo da ima - kad lopta u sljedećem djeliću sekunde iza leđa francuskog igrača završi kod Vorijsa na crti, ili preko ramena tamo na krilu, kod **Džombe**, ili u zepelinu nad sedmercem, ili odozdo, s parketa, u rašlje protivničkog vratara, koji u trenutku dok pišem ove retke još siromah na голу olimpijske dvorane Helliniko u Ateni čeka da vidi što će Balić s loptom.

Genetska mutacija

Stvar je bila u rijetkoj genetskoj mutaciji, križanju talenta za rukomet s talentom za košarku. Do pojave Ivana Balića, svijet ništa slično nije vidio, do tada je rukomet bio nešto poput prvenstva kaznionice Lepoglava u graničarima, surova muška igra u kojoj pobjeđuje momčad koja kraj utakmice dočeka s više vitalnih funkcija: zato, primijetili ste i sami, ne postoji američki rukomet, kao što postoji američki nogomet. Golovi su se davali s distance, teškom artiljerijom, ili probijanjem, na način da se najveći lola u momčadi svom snagom zaleti u protivnički obrambeni zid, pa ako preživi pokuša pucati na gol, a asistencija je prije bila znak nedostatka ideje, nego što je bila idejom samom. Bilo je, ne kažem, i fantasista s ugrađenom idejom, ali ti su završavali višestruko ubijeni u sačekuši na devetercu: nije to bio sport za umjetnike.

Onda se na svjetskom prvenstvu 2003. u Portugalu ukazala generacija koja će promijeniti sve, a svijet je upoznao novog **Maradonu**. Ovaj Diego Armando, međutim, izabrao je sport u kojemu su golovi rukom bili legalni: “Božja ruka” iz Splita već će sljedeće godine na Europskom prvenstvu u Sloveniji biti proglašena najkorisnijim igračem turnira i započet će vladavina nezabilježena u povijesti momčadskog sporta: od tog prvenstva, preko mitske zlatne

olimpijske medalje u Ateni, pa do Svjetskog prvenstva u Njemačkoj 2007., Ivano Balić pet je puta zaredom na velikim natjecanjima proglašavan MVP-om turnira, dva puta u međuvremenu izabran za najboljeg rukometaša svijeta, kao do danas jedini s dva takva trofeja uz Nikolu Karabatića.

Čiji je otac, mala digresija, iz Vrsina kraj Trogira, nadomak Splita, pa činjenica da su dva najbolja rukometaša u povijesti igre rodom sa splitske prigradske autobusne linije samo nesmotreno i prilično neodgovorno pothranjuje ionako debeli splitski mit.

Na koncu, iako se njegova generacija nakon svjetskog prvenstva u Portugalu i olimpijskog zlata u Ateni više nikad nije popela na pobjedničko postolje, a čak ni s klubovima u kojima je igrao nikad nije uzeo Kup prvaka, Ivano Balić je 2010. u anketi na službenoj stranici svjetske rukometne federacije premoćno - s više glasova nego svi ostali kandidati zajedno, uključujući Karabatića i gigantskog **Talanta Dušebajeva** - izabran najboljim rukometašem u povijesti.

Tema je zapravo birtijska, najveći se u sportu biraju u kafićima i na školskim odmorima, jer ne postoje egzaktni parametri za najveće svih vremena. Da postoje, Nikola Karabatić bio bi veći: čovjek ima dva olimpijska zlata, tri svjetske i tri europske titule, i tri klupska Kupa prvaka pride. I još igra. Jednog dana, kad napusti rukomet, bit će sasvim sigurno i on proglašen najvećim, ali time se ionako bave samo dokoni glasači u anketama svjetske rukometne federacije i profesionalni hranitelji mitova. Ivano Balić nije najveći - dobro, jedan od trojice najvećih - zato što bi mu kuća izgledala kao Realova trofejna sala, već zato što je jedan od onih, rijetkih u svakom sportu, nakon kojih igra više nije ista.

Paradoksalno - a paradoks je, naučili smo dosad, otprilike koncept splitskog sporta - takav Ivano Balić, s više pojedinačnih trofeja nego momčadskih, nikad nije igrao za sebe: iz košarke je u rukomet donio kukočevsku asistenciju - onu koja se računa u gol, jer nije ona pola gola, već je Vorijev gol petina Balićeve asistencije - i radost dobrog poteza, radost igre, uvevši u brutalnu kafansku tučnjavu među golovima onu "joga bonito" s brazilskih školskih igrališta, parkirališta i stadiona. Zato je bilo moguće da u Njemačkoj bude MVP, iako je Hrvatska bila peta, zato je bilo moguće da sljedeće godine, kad na Euru u Norveškoj MVP-krunu preda Karabatiću, a titulu prvaka Dancima, cijela dvorana u Lillehammeru nakon finala skandira njegovo ime.

APPENDIX 3

RASPRAVE INSTITUTA ZA HRVATSKI JEZIK I JEZIKOSLOVLJE 37/1 (2011.)

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Izvorni znanstveni članak

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PLEONAZMI U HRVATSKOME STANDARDNOM JEZIKU

U radu se na temelju prikupljenoga korpusa pleonazama daju različiti formalni, sintaktički i semantički kriteriji podjele pleonazama te se pleonazmi dijele na nepotrebne i potrebne. Pleonazmi se analiziraju s deskriptivnoga i normativnoga stajališta.

1. Uvod

Grčka riječ *pleonasmós* znači 'suvišak, preobilje'. Pojam pleonazma nastao je u antičkoj retorici u kojoj je obuhvaćao niz stilskih figura. Pleonazam se određuje kao zalihost izražajnih sredstava koja se upotrebljavaju za prijenos leksičkoga ili gramatičkoga značenja iskaza. On se ostvaruje i u dijelu rečenice i u širem kontekstu te se može ostvarivati i kao izosemija (bliskost značenja) cijelih rečenica koje udvajaju određeno opće značenje (Яцева 1990: 379). U Simeonovu se rječniku navode različite definicije pleonazama te se oni određuju kao dodatak riječi koja je na tome mjestu suvišna; uporaba suvišnih riječi; skupljanje riječi s istim značenjem; nepotrebno gomilanje izraza koji su međusobno slični po smislu, ili su identični; preobilje riječi u rečenici koje su suviše s gledišta iskazivanja misli; mnogorječje, suvišne riječi u govoru koje ne obogaćuju njegov smisao i sadržaj (Simeon 1969 /II/: 62).

Pleonazam nastaje razvijanjem i širenjem iskaza tako da se postojećim riječima i izrazima dodaju istoznačnice ili bliskoznačnice. Sintaktička veza među sastavnicama pleonastičnoga izričaja posve je pravilna, problemi se mogu pojaviti na semantičkoj razini. Da bismo točnije odredili značenje naziva *pleonazam*,

potrebno ga je razgraničiti od nadređenih i bliskoznačnih naziva te drugih naziva koji pripadaju istomu semantičkom polju. Najopćenitiji pojam povezan s pleonazmom pojam je zalihosti ili redundancije. Zalihost se određuje kao višak obavijesti u komunikaciji koji omogućuje izbjegavanje nesporazuma. Poruka je zalihosna ako i samo ako sadržava elemente koji ništa ne pridonose obavijesti koja je već sadržana u ostatku poruke (Lehmann 2005: 3). Određena je količina zalihosti u jeziku potrebna jer osigurava pravilno prenošenje obavijesti i u slučaju buke u komunikacijskome kanalu. Pleonazam i tautologija vrste su zalihosti jer u njima dolazi do ponavljanja obavijesti. I pleonazam i tautologija promatraju se i kao jezični problem i kao stilske figure. I pleonazam i tautologija višeznačni su nazivi jer označuju jezičnu pojavu i, procesom metonimizacije, izričaj koji je nastao tom jezičnom pojavom. Tautologija je odnos koji se temelji na sinonimiji, tj. u istome se izričaju pojavljuju sinonimi, npr. *lijep i krasan*, *gnusan i odvratn*, *glup i ble-sav*. Poseban je slučaj kad se dvaput ponovi isti izraz (npr. *lijep i lijep*, *ide i ide*). Pleonazam se katkad određuje kao pojam nadređen tautologiji, a katkad samo kao pojava u kojoj je značenje jednoga sastavnog elementa uključeno u značenje drugoga sastavnog elementa (npr. *izići van*). Dakle, prema nekim je autorima pleonazam nadređen (hiperonim) tautologiji¹, dok drugi pleonazam i tautologiju smatraju istorednima i neistoznačnima, tj. supodređenicama ili kohiponimima². Tu je riječ o tzv. ljestvičnoj višeznačnosti jer isti naziv ima i šire i uže značenje, tj. jedno je značenje podskup drugoga značenja (Hudeček – Mihaljević 2010: 71).

Izraz $E_1 + E_2 + E_3 \dots E_n$ pleonastičan je ako i samo ako sadržava značenjsku sastavnicu F koja je sadržana u značenju više od jednoga E_i (Lehmann 2005: 4). Razlika je između tautologije i pleonazma u užemu smislu³ to što je u pleonazmu jedan član sinoniman s čitavim izrazom, dok je u tautologiji svaki član sinoniman s čitavim izrazom. U tautologiji su svi elementi jednako izostavljivi, pa je odnos među članovima simetričan. Ako kažemo *lijep i krasan*, možemo bez gubitka značenja reći samo *lijep* ili samo *krasan*. U pleonazmu u užemu smislu samo je jedan element izostavljiv (onaj koji je sastavni element drugoga elementa). Odnos je među članovima pleonazma u užemu smislu asimetričan, može se izostaviti jedan element, ali se ne može izostaviti drugi element.

¹ S pojmom pleonazma blisko je povezan pojam tautologije koja se katkad smatra podvrstom pleonazma (Яцева 1990: 379).

² R. Simeon razlike i sličnosti između tautologije i pleonazma opisuje ovako: »Za razliku od tautologije koja opisuje isti pojam drugim izrazom (npr. Ja se bojim i strah me je ljuto), pleonazam dodaje suvišnu riječ kojoj je pojam sadržan u drugoj riječi: Ali sjede do dva starca stara. Ban gospođu očima pogleda. Dakle, i pleonazam i tautologija različitim riječima ponavljaju isti pojam.« (Simeon 1969 /II/: 62)

³ U ovome radu pleonazam u užemu smislu označuje pleonazam koji je zajedno s tautologijom podređen pleonazmu u širemu smislu.

Analiziramo li taj izostavljivi element, on može biti:

- znak (*sniženje –30 %*)
- gramatički morfem (*Bad Blue Boysi, optimalniji, keksi*)
- tvorbeni element (*skuhan, nadograditi*)
- riječ (*sići dolje*)
- sintagma (*mobing na radnome mjestu*).

Problemu pleonazama može se pristupiti normativno i deskriptivno. U ovo-
me radu nastojat ćemo kombinirati oba pristupa. Razlikuju se neosvijesteni i stil-
ski pleonazam. Neosvijesteni je pleonazam stilska pogrješka i standardnojezični
problem, a stilski je pleonazam osviješten, namjeran i svrstava se u stilske figu-
re. Pleonazmi se nalaze u imenima i u frazemima. Stoga u kategoriju pleonazama
koji nisu sporni s normativnoga stajališta pripadaju stilski (namjerni pleonazmi),
onomastički pleonazmi i frazeološki pleonazmi. Ti pleonazmi ne podliježu nor-
mativnoj prosudbi. U kategoriju normativno neupitnih pleonazama ulaze i pleo-
nazmi koje norma upravo zahtijeva, npr. *s obzirom na to da, bez obzira na to što, upozoriti na to da, a ne obzirom da, bez obzira što, upozoriti da*.⁴

Po svojoj prirodi pleonazam može biti: 1) obvezatan – uvjetovan jezičnim
sustavom ili normom, 2) fakultativan, stilski – uvjetovan ekspresivnim ciljevi-
ma iskazivanja. Obvezatni pleonazam čest je u gramatici prirodnih jezika, npr.
u sustavima sročnosti (udvajanje gramatičkih značenja imenice u riječima ovis-
nima o njoj, npr. u *plava haljina* dvostruka je obavijest o ženskome rodu, nomi-
nativu i jednini), u nekim konstrukcijama glagolskoga upravljanja (udvajanje
prostornih značenja glagolskih prefikasa u prijedlozima, npr. *spustiti se s drve-
ta*) ili dvostrukoga nijekanja, npr. *nikada nije bio* i sl. (Ярцева 1990: 379).

Pleonazmi mogu nastati kako bi se pojačalo temeljno značenje, kako bi se
značenje posebno naglasilo (emfatički pleonazmi) ili kako bi se osiguralo da je
značenje pravilno shvaćeno. Stoga su i neobvezatni pleonazmi katkad potreb-
ni u standardnome jeziku kako bi se smanjila buka u komunikacijskome kanalu
s obzirom na to da pridonose zalihosti ili kako bi se posebno naglasio koji ele-
ment, npr. *ja pjevam* umjesto *pjevam*.

Za potrebe ovoga rada prikupili smo korpus pleonazama, usustavili ga i ra-
zradili kriterije podjele pleonazama. Pleonazmi su prikupljeni iz svih jezičnih
savjetnika, ali i iz publicističkih tekstova, studentskih zadaća, tekstova koje
smo dobivali za lekturu, rječničkih obradba itd.

⁴ »Stoga se katkad smatra da je gramatička kategorija pleonastična ako je ostvarena s više
afikasa, riječi i sl.« (Matthews 2007: 306)

1.1. Pleonazam kao stilski figura

Ivo Škarić u knjizi *Temeljci suvremenoga govorništva* spominje pleonazme kao jednu od figura riječi: »Suvišna uporaba riječi kojoj je značenje već sadržano u drugoj zove se pleonazam i obično je stilski pogreška (npr. *u vremenskom razdoblju, najoptimalniji, nužno potrebno* i sl.). Ali kad se to hotimično učini da bi se pojačao izraz, onda je figura. Primjeri: *Vidio sam to svojim vlastitim očima. Ubio ga je namrtvo. Ustani na noge!*« (Škarić 2003: 138). Bernardina Petrović pleonazme uvrštava među figure riječi koje se temelje na ponavljanju i definira ih kao suvišnu uporabu riječi kojoj je značenje sadržano u drugoj riječi (Petrović 2005: 50).

Stilski pleonazam Krešimir Bagić naziva i pleonazmom u užemu smislu (Bagić 2010: 7). To je pleonazam koji stvara osviješteni govoreći subjekt. Ekspresivan je, funkcionalno obilježava iskaz, kadšto ga i suptilno dopunjuje. U elementarnome obliku nalazimo ga u usmenoj poeziji u kojoj je njegova estetska uloga svediva na naglašavanje rečenoga, uporabu formulaičnih poetizama ili na versifikacijsko usklađivanje stihova. Nalazimo ga i u razgovornim formulama kojima se izriče bliskost, npr. *Sjedni si malo, popij si nešto*.

O pleonazmu kao o stilskoj figuri piše Milivoj Solar te kaže da se taj naziv koji je prvotno označivao naziv pogriješke u retorici koja se sastojala od gomilanja riječi istoga značenja (tautologiju) počeo »rabiti u smislu pjesničke figure jer u pjesništvu gomilanje riječi koje su u običnome govoru istoznačne može izazvati poseban dojam zato što dobivaju dodatna značenja i ne djeluju suvišno. Npr.: *I biti slab i nemoćan, i sam, bez igdje ikoga, // I umoran i očajan...* Tin Ujević: *Svakidašnja jadicovka*« (Solar 2006: 218).

1.2. Frazeološki pleonazam

Stilskomu je pleonazmu blizak frazeološki pleonazam. Taj se pleonazam katkad smatra i podvrstom stilskoga pleonazma. U njemu se gomilaju istovrsne riječi kako bi se jače istaknulo njihovo značenje. On također nije jezična pogriješka. Pojedine pleonastične sveze toliko su ustaljene da se ni ne doživljavaju kao dvije riječi (npr. *na sliku i priliku; tuga i žalost; jad i čemer; čast i poštenje; strah i trepet; bez kraja i konca*; navedeno prema Simeon 1969 /II/: 62). Semantička podudarnost među članovima frazeološkoga para riječi često se ostvaruje s pomoću sinonima te se tako dobivaju pleonastične konstrukcije u kojima »članovi frazeološkoga para ... imaju posve isto denotatsko značenje, a međusobno se mogu razlikovati samo po ekspresivnoj i/ili stilskoj kono-

taciji: *povuci-potegni ... nema (nije) ni kraja ni konca... huka i buka... kao što je (kako je) red i običaj... bruka i sramota... vratiti milo za drago...»* (Melvin-ger 1983/1984: 31).

Frazeološki su pleonazmi i *znati znanje, ne časiti ni časa, čudom se čuditi*, tj. pleonazmi u kojima glagol ima dopunu semantički sadržanu u sebi (u rečenici unutrašnji objekt ili priložnu oznaku; usp. Marković 2009: 235).

1.3. Onomastički pleonazam

U toponimiji dolazi do pleonazama koji nastaju »kao posljedica dvojezičnosti u pojedinim sredinama prevođenjem stranoga (aloglotskoga) elementa domaćim (idioglotskim)« (Brozović Rončević 1998: 13). Dunja Brozović Rončević navodi primjere *Punta Ertec* (rt rt) i *Luka vala* (uvala uvala), a Petar Šimunović bilježi *Vala od Luke* (luka od luke) i *Ponta od Arca* (rt od rta) (Šimunović 2005: 149). Takve primjere Brozović Rončević naziva onomastičkim pleonazmom ili onomastičkom tautologijom, a Šimunović hibridnim pleonazmima. Domagoj Vidović (2010: 355) bilježi dvorječni obiteljski nadimak *Sorić Gluho*, navodi da *Sorić Gluho* znači 'gluhi glušac' i objašnjava da nositelj nadimka očito nije znao da je nadimak *Sorić* motiviran apelativom *sordo* 'glušac'. Takav pleonazam autor naziva antroponimijskim pleonazmom.

Onomastički pleonazmi su sa stajališta općega jezika. Pitanje je mogu li se smatrati pleonazmima s onomastičkoga stajališta jer služe jednoznačnomu označivanju pojedinoga zemljopisnog referenta ili osobe. Tako su na Braču postojali i jednorječni obiteljski nadimak *Sorić* i dvorječni obiteljski nadimak *Sorić Gluho* koje su nosili pripadnici istoga roda (Eterović).

1.4. Pleonazmi i jezična norma

U standardnome jeziku, osobito u njegovim višim stilovima⁵, uporabu nenamjernih pleonazama treba izbjegavati. Stoga se o pleonazmima često govori u jezičnim savjetnicima. U savjetniku *Govorimo hrvatski* (1997: 433) nalazi se poglavlje o pleonazmima u kojemu se o njima govori kao o leksičko-semantičkoj i stilskoj značajki koja se često pojavljuje i u pisanome i u govorenome jeziku i koju puristi uglavnom negativno ocjenjuju. U tome se članku spominju primjeri: *vremensko razdoblje, sići dolje, mala kućica, vratiti se natrag, pope-*

⁵ Višim se stilovima hrvatskoga standardnog jezika smatraju stilovi u kojima se norma strože poštuje. To su znanstveni i administrativni funkcionalni stil te obavijesni podstil publicističkoga funkcionalnog stila.

APPENDIX 4

AGRONOMSKI GLASNIK 1-2/2014.
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Izvorni znanstveni članak
Original scientific paper

NALAZ CRNE TRULEŽI, ANTRAKNOZE I SIVE PLIJESNI NA PLODOVIMA MANDARINE NAKON BERBE

A RECORD OF POSTHARVEST BLACK ROT, ANTHRACNOSE AND GRAY MOULD ON MANDARIN FRUITS

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SAŽETAK

Osim plave i zelene plijesni, uzrokovane gljivama iz roda *Penicillium*, tijekom 2013. i 2014. na plodovima mandarina (*Citrus unshiu*) nakon berbe u dolini Neretve uočena je pojava drugih gljivičnih bolesti. Odabrano je 37 plodova iz sortirница i skladišta, s kojih je sakupljeno 37 izolata gljiva iz rodova *Alternaria*, *Colletotrichum* i *Botrytis*. Na temelju morfologije, za svih 15 *Colletotrichum* izolata utvrđeno je da pripadaju vrsti *Colletotrichum gloeosporioides*. Svih 16 *Alternaria* izolata, na temelju morfologije i lančane reakcije polimerazom uz korištenje para početnica AA-F2/AA-R3, identificirano je kao *Alternaria alternata*. Preostalih šest izolata pripadalo je vrsti *Botrytis cinerea*. Tri izolata svake vrste odabrana su za testove patogenosti, koji su provedeni inokulacijom neoštećenih plodova na čašku, inokulacijom na stilar te injeziciranjem suspenzije konidija u koru plodova. Izolati *C. gloeosporioides* uzrokovali su tipične simptome antraknoze nakon ubrizgavanja inokula u koru, no nisu uzrokovali simptome pri inokulaciji na čašku ili stilar. Izolati *B. cinerea* uzrokovali su simptome sive plijesni plodova nakon inokulacije pod koru i na čašku. Izolati *A. alternata* nisu uzrokovali simptome nakon ubrizgavanja u koru, no uzrokovali su tipične simptome crne truleži nakon inokulacije na čašku.

Ključne riječi: *Citrus unshiu*, skladišne bolesti, *Alternaria*, *Colletotrichum*, *Botrytis*

ABSTRACT

Besides the dominant blue mould and green mould, caused by *Penicillium* species, the occurrence of other postharvest diseases of mandarins (*Citrus unshiu*) from Neretva Valley was noted during 2013. Thirty-seven fruits were sampled in packinghouses, and 37 isolates of *Alternaria*, *Colletotrichum* and *Botrytis* were collected. All 15 *Colletotrichum* isolates were identified as *Colletotrichum gloeosporioides* according to morphological features. All 16 *Alternaria* isolates were determined as *Alternaria alternata*, on the basis of morphology and polymerase chain reaction with AA-F2/AA-R3 primer pair. Remaining six isolates were identified as *Botrytis cinerea*. Three isolates of each fungal species were selected for pathogenicity test, performed by inoculation on the button end of unwounded fruits, inoculation on stylar end of the fruits and conidial suspension injection into the peel. *C. gloeosporioides* isolates caused typical anthracnose symptoms after injection of conidia, but did not cause symptoms after button inoculation. *B. cinerea* isolates caused grey mould symptoms both after injection and button end inoculation. *A. alternata* isolates did not cause symptoms after injection into the peel, but all isolates lead to development of typical black rot after button inoculation.

Key words: *Citrus unshiu*, postharvest diseases, *Alternaria*, *Colletotrichum*, *Botrytis*

UVOD

Uzevši u obzir broj stabala i godišnju proizvodnju plodova, agrumi predstavljaju jednu od najznačajnijih skupina voća u hrvatskoj poljoprivredi. Većina proizvodnje agruma u Hrvatskoj odnosi se na Satsuma mandarinu (*Citrus unshiu* (Swingle) Markow.), sortnu skupinu japanskih mandarina koje su relativno otporne na niske temperature (Bakarić, 1983). Prema podacima Agencije za plaćanja u poljoprivredi, ribarstvu i ruralnom razvoju, u Hrvatskoj su evidentirana 1 734 863 stabla mandarine. Proizvodnja ovog voća u proteklih pet godina kreće se između 40 i 50 000 tona (Statistički ljetopis, 2013), pri čemu se veliki dio proizvodnje izvozi.

Usprkos važnosti mandarine, zaštita ove voćne kulture od biljnih bolesti vrlo je slabo istražena u Hrvatskoj, a trend porasta proizvodnje nije pratio i razvoj tehnologije skladištenja, što ima značajan utjecaj na čuvanje i

raspoloživost plodova na tržištu (Skenderović Babojelić i sur., 2010). Za mnoge u svijetu značajne gljivične, bakterijske i virusne bolesti agruma nije poznato da li se u Hrvatskoj javljaju, ili nije poznato koliko su raširene, štetne i problematične. Usprkos tome, u Hrvatskoj je tijekom proteklih nekoliko godina registrirano nekoliko fungicida za suzbijanje raznih bolesti na mandarini. Nekoliko sredstava registrirano je za suzbijanje bolesti koje uzrokuju *Phytophthora* vrste, bakterioza uzrokovanih vrstama iz rodova *Pseudomonas* i *Xanthomonas*, ospičavosti ili melanoze (*Diaporthe citri*), vršne truleži plodova (*Alternaria citri*), antraknoze (*Colletotrichum gloeosporioides*), pa čak i karantenske sušice agruma, koju uzrokuje *Phoma tracheiphila*. Iako bi se prema namjeni spomenutih sredstava za zaštitu bilja moglo zaključiti kako su ove bolesti u Hrvatskoj prisutne čak u toj mjeri da zahtijevaju suzbijanje fungicidima, većina tih bolesti u našoj zemlji uopće nije utvrđena. Prema dostupnim podacima iz znanstvene, stručne i ostale literature, na agrumima u Hrvatskoj nikada nisu utvrđeni, primjerice, *D. citri*, *A. citri*, *P. tracheiphila* niti bilo koja bakterioza koju bi uzrokovale *Pseudomonas* ili *Xanthomonas* vrste.

Identifikacija uzročnika bolesti prvi je, osnovni i neophodni korak u razmatranju mogućih mjera zaštite. Tijekom 2013. godine u dolini Neretve, glavnom području uzgoja mandarine u Hrvatskoj, zabilježeno je masovno propadanje plodova nakon berbe. Iako je kao najrašireniji i najznačajniji uzrok propadanja zabilježena plava plijesan (*Penicillium italicum*), uočena je pojava još nekih bolesti na plodovima. Cilj ovog rada bio je determinirati njihove uzročnike.

MATERIJALI I METODE

Uzorci plodova Sastsuma mandarine uzgojenih u donjem toku rijeke Neretve, u široj okolici Opuzena, sakupljeni su u sortirnicama tijekom prosinca 2013. godine. Prilikom sakupljanja odabirani su plodovi sa simptomima nekrotičnih promjena na kori, pjega ili truleži. Plodovi s očiglednim simptomima zelene plijesni (*Penicillium digitatum*) ili plave plijesni (*P. italicum*) nisu sakupljeni. Prikupljeno je ukupno 48 plodova koji su laboratorijski analizirani.

U laboratoriju su za daljnju analizu odbačeni plodovi za koje je utvrđeno da su zahvaćeni gljivama čađavicama. Preostalih 37 plodova isprano je pod

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mlazom tekuće vode kroz desetak minuta, nakon čega su s njih odrezani fragmenti kore sa simptomima koji su upućivali na zarazu parazitskim gljivama. U slučajevima oštro ograničenih simptoma u vidu nekroza ili pjega, dijelovi kore odrezani su na način da je zahvaćen prijelaz iz simptomatičnog u vizualno zdravo tkivo. Fragmenti kore površinski su sterilizirani potapanjem u otopinu 1 % natrij-hipoklorita kroz tri minute, ispiranjem u sterilnoj vodi i potapanjem u 70 % etanolu kroz tridesetak sekundi, nakon čega su osušeni u struji zraka.

Dio fragmenata dimenzija približno 5 x 5 mm inokuliran je na krumpir – dekstrozni agar (KDA), a ostatak je stavljen na inkubaciju u vlažnu komoru. Nakon pojave kolonija gljiva na KDA, vizualno, pod binokularnom lupom i mikroskopskim pregledom uspoređene su kolonije s istih fragmenata na agaru i u vlažnoj komori. U slučajevima kada je iz fragmenata s istih dijelova simptomatične kore izašla morfološki ista gljiva, iz kolonija na KDA dobiveni su izolati. Izolati su uzgajani na KDA pri 22 °C u tami tijekom 10 dana, nakon čega su identificirane vrste gljiva.

Makroskopskim i mikroskopskim pregledom izolata utvrđeno je da 16 izolata pripada rodu *Alternaria*, 15 rodu *Colletotrichum*, a 6 rodu *Botrytis*. Izolati *Alternaria* spp. identificirani su na temelju morfologije prema Simmonsu (2007) te molekularno lančanom reakcijom polimerazom (PCR) uz uporabu para početnica AA-F2/AA-R3 (Konstantinova i sur., 2002), specifičnih za vrstu *Alternaria alternata*. Ekstrakcija DNA provedena je OmniPrep® kompletom (G-Biosciences, St. Louis, SAD) prema uputama proizvođača, nakon čega je pripremljena reakcijska smjesa i provedena PCR reakcija prema protokolu Konstantinove i sur. (2002). Izolati roda *Colletotrichum* identificirani su na temelju morfologije prema Cannonu i sur. (2008) i Agostiniju i sur. (1992), a izolati roda *Botrytis* prema Ellisu i Walleru (1974).

Nakon identifikacije vrsta, odabrana su tri izolata svake determinirane vrste (*Alternaria alternata*, *Colletotrichum gloeosporioides* i *Botrytis cinerea*) za testove patogenosti. Provjera patogenosti provedena je na vizualno zdravim plodovima klementine (*Citrus clementina* Hort.) porijeklom iz doline Neretve. Svaki izolat inokuliran je u dva ponavljanja na tri načina. Prva metoda inokulacije bila je ubrizgavanje 2 µl suspenzije konidija približne koncentracije 10⁵ spora/ml u perikarp ploda. Druga vrsta inokulacije provedena je na način da su kružni isječki kolonija s KDA promjera 10 mm priliječeni uz stilar ploda, a treća tako da je kapljica suspenzije konidija volumena 1 ml i približne

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koncentracije 10^5 spora/ml nanijeta na vrh ploda kojem je uklonjena čaška. Inokulirani plodovi držani su u biološkoj komori na temperaturi od 20 °C, dva do tri tjedna, ovisno o pojavi simptoma. S plodova na kojima su se razvili simptomi, s mjesta na kojima je bila vidljiva sporulacija, gljive su izolirane u čistu kulturu i analizirane na temelju morfologije.

REZULTATI

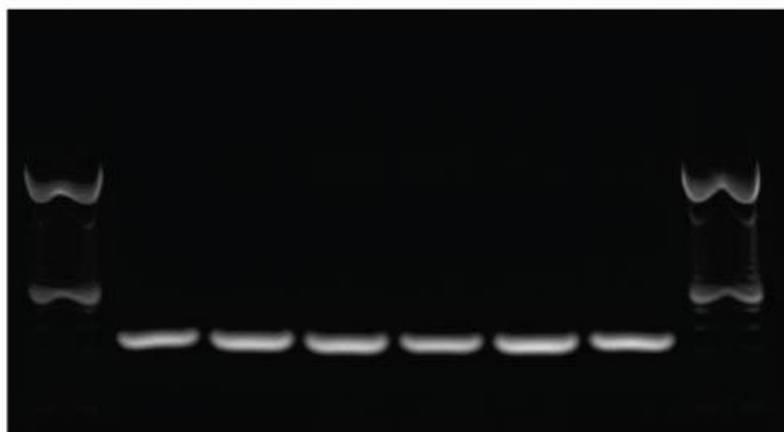
Od ukupno 15 izolata gljiva s plodova mandarina za koje je utvrđeno da pripadaju rodu *Colletotrichum*, svi su odgovarali opisu vrste *Colletotrichum gloeosporioides* (Penz.) Penz. & Sacc., uzročniku antraknoze agruma.

Kolonije svih izolata na KDA bile su vrlo slične, sa sivim zračnim micelijem, tamno-sivom bojom naličja te uglavnom većim brojem nasumično raspoređenih tamnih konidioma bez seta, u kojima su se konidije stvarale u gustoj narančastoj masi. Konidije svih izolata bile su bezbojne, cilindrične sa zaobljenim krajevima, prosječnih dimenzija $12,4 \times 3,7 \mu\text{m}$. Rast izolata na 22 °C u tami iznosio je prosječno 8,1 mm/dan, bez većih odstupanja između 15 izolata.

Svih 16 izolata koji su pripadali rodu *Alternaria* morfološki je odgovaralo opisu vrste *Alternaria alternata* (Fr.) Keissl., uzročniku crne truleži agruma. Svi izolati obilato su sporulirali, pri čemu su se konidije stvarale u dugim lancima. Morfološka identifikacija potvrđena je PCR-om, gdje je kod svih 15 izolata umnožen fragment veličine 340 parova baza (Slika 1.).

Od izolata roda *Botrytis*, svih šest odgovaralo je opisu vrste *Botrytis cinerea* Pers., uzročniku sive plijesni agruma. Četiri od šest izolata nije stvaralo sklerocije na KDA nakon 14 dana, dok su dva izolata stvarala obilje sklerocija dimenzija 2-3 mm.

Svi izolati su sporulirali, pri čemu su znatno više sporulirali izolati koji nisu stvarali sklerocije. Prosječne dimenzije konidija izolata *B. cinerea* iznosile su $8,6 \times 6,1 \mu\text{m}$.



Slika 1. Produkti PCR reakcije na agaroznom gelu nakon umnožavanja parom početnica AA-F2/AA-R3 (Konstantinova i sur., 2002), specifičnih za vrstu *A. alternata*. Prvi i posljednji red – 100 pb ljestvica; redovi 2 do 7 – izolati *A. alternata* MB-ALT11, MB-ALT12, MB-ALT13, MB-ALT14, MB-ALT15 i MB-ALT16.

Figure 1. PCR products on agarose gel after amplification with AA-F2/AA-R3 primer pair (Konstantinova et al., 2002), species-specific for *A. alternata*. Lines 1 and 8: 100 bp ladder; lines 2 to 7: *A. alternata* MB-ALT11, MB-ALT12, MB-ALT13, MB-ALT14, MB-ALT15 and MB-ALT16 isolates.

Tri tjedna nakon inokulacije na čašku, na plodovima inokuliranim izolatima *A. alternata* simptomi izvana nisu bili vidljivi. Međutim, nakon prereza, u unutrašnjosti svih inokuliranih plodova razvila se trulež, meso je bilo uništeno, a duž središnje osi bile su vidljive nakupine sivog micelija (Slika 2.). Gornji dio unutrašnjosti plodova mjestimice je poprimio tamnu, gotovo crnu boju. Pojava simptoma na plodovima inokuliranim izolatima *A. alternata* ubrizgavanjem suspenzije konidija u koru nije zabilježena (Tablica 1.). Za razliku od *A. alternata*, pojava simptoma zabilježena je u svim slučajevima nakon inokulacije izolata *C. gloeosporioides* u koru plodova. Već nakon

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nekoliko dana na mjestu ubrizgavanja konidija bilo je vidljivo tamno udubljenje, koje se postupno širilo zahvaćajući sve veći dio ploda (Slika 3.) Nakon desetak dana, na udubljenju postajali su vidljivi acervuli gljive s narančastim nakupinama spora u obliku kapljica. Niti jedan izolat *C. gloeosporioides* nije uzrokovao pojavu simptoma nakon inokulacije na čašku plodova. Svi izolati *B. cinerea* uzrokovali su pojavu truleži nakon inokulacije na čašku i pod koru plodova. Plodovi inokulirani izolatima *B. cinerea* pod koru potpuno su propali devet dana nakon inokulacije. Pojava simptoma nije zabilježena niti u jednog izolata niti jedne vrste gljive nakon stavljanja isječka kolonije na stilar plodova.

Tablica 1. Pojava simptoma na plodovima klementine nakon inokulacije izolata *A. alternata*, *C. gloeosporioides* i *B. cinerea* na tri načina („+“ - pojava simptoma; „-“ - bez pojave simptoma).

Table 1. The appearance of symptoms on clementine fruits after inoculation with *A. alternata*, *C. gloeosporioides* and *B. cinerea* isolates using three methods ((+) - symptoms appeared; (-) - no symptoms).

Izolat Isolate	Inokulacija na čašku Button inoculation	Inokulacija u koru Peel injection	Inokulacija na stilar Stylar inoculation
<i>A. alternata</i> MB-ALT7	+	-	-
<i>A. alternata</i> MB-ALT9	+	-	-
<i>A. alternata</i> MB-ALT13	+	-	-
<i>C. gloeosporioides</i> MB-COLL1	-	+	-
<i>C. gloeosporioides</i> MB-COLL4	-	+	-
<i>C. gloeosporioides</i> MB-COLL5	-	+	-
<i>B. cinerea</i> MB-BOT1	+	+	-
<i>B. cinerea</i> MB-BOT2	+	+	-
<i>B. cinerea</i> MB-BOT3	+	+	-

RASPRAVA

Ovim istraživanjem dokazano je da su gljive *C. gloeosporioides*, *A. alternata* i *B. cinerea* uzročnici bolesti mandarina nakon berbe u Hrvatskoj. Sva tri parazita raširena su u većini područja u svijetu gdje se agrumi uzgajaju te na njima uzrokuju manje ili više značajne gospodarske štete (Cvjetković, 2010; Akimitsu i sur., 2003; Timmer i sur., 2003; Snowdon, 1990). Kao značajniji navode se *C. gloeosporioides* i *A. alternata*, dok se *B. cinerea* obično smatra

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