

TRANSFORMATION STUDIES

2023

Vol. 11 No. 1

EUROPEAN JOURNAL OF TRANSFORMATION STUDIES

2023 Vol. 11, No. 1

© by Europe Our House, Tbilisi e-ISSN 2298-0997









Arkadiusz Modrzejewski

University of Gdansk, Poland modrzejewski@ug.edu.pl

Editors

Tamar Gamkrelidze

Europe Our House, Tbilisi, Georgia

Tatiana Tökölyová

University College of International and Public Affairs in Bratislava, Slovakia

Rafał Raczyński

Research Institute for European Policy, Poland

Jaroslav Mihálik - deputy editor

Ss. Cyril and Methodius University in Trnava, Slovakia

Edita Poórová - copy editor

Gdansk Medical University

Andrii Kutsyk- assistant editor

Lesya Ukrainka Eastern European National University, Lutsk, Ukraine

Editorial Advisory Board

Prof. Jakub Potulski, University of Gdansk, Poland - chairperson

Prof. Slavomír Gálik, University of Ss. Cyril and Methodius in Trnava, Slovakia

Prof. Wojciech Forysinski, Eastern Mediterranean University, Famangusta, Northern Cyprus

Prof. Danuta Plecka, University of Gdansk, Poland

Prof. Anatoliy Kruglashov, Chernivtsi National University, Ukraine

Prof. Malkhaz Matsaberidze, Ivane Javakashvili Tbilisi State University

Prof. Ruizan Mekvabidze, Gori State Teaching University, Georgia

Prof. Lucia Mokrá, Comenius University in Bratislava, Slovakia

Prof. Andras Bozoki, Central European University in Budapest, Hungary

Prof. Tereza - Brînduşa Palade, National University of Political and Public Administration in Bucharest, Romania

Prof. Elif Çolakoğlu, Atatürk University in Erzurum, Turkey Prof. Valeriu Mosneaga, Moldova State University in Chişinău, Republic of Moldova

Prof. Andrei Taranu, National University of Political Science and Public Administration in Bucharest, Romania

Prof. Tetyana Nagornyak, National University of Kyiv Mohyla Academy in Kiev, Ukraine

Prof. Alexandre Kukhianidze, Tbilisi State University, Georgia

Prof. Nana Akhalaia, Gori State Teaching University, Georgia

Prof. Jana Reschová, Charles University in Prague, Czech Republic

Prof. Jolanta Urbanovič, Mykolo Romerio University in Vilnius, Lithuania

Prof. Josef Dolista, CEVRO Institut College in Prague, Czech Republic

Prof. Teodora Kaleynska, Veliko Turnovo University, Bulgaria

Prof. Daniela La Foresta, University of Naples Federico II, Italy

Prof. Polina Golovátina-Mora, Universidad Pontificia Bolivariana, Columbia

Prof. Peter Horváth, University of Ss.Cyril and Methodius in Trnava, Slovakia

Prof. Marek Hrubec, Center of Global Studies, Academy of Science of the Czech Republic and Charles University in Prague

Prof. Ana Campina, Universidade Fernando Pessoa, Porto, Portugal

Prof. David J.Jackson, Bowling Green State University, USA

Prof. Tuan A. Hoang, USSH, Vietnam National University in Hanoi

Dr. Sanja Zlatanović, Serbian Academy of Sciences and Arts in Belgrade, Serbia

Dr. Justyna Schulz, University of Bremen, Germany

Dr. Małgorzata Patok, Sorbonne - Université Paris Descartes, France

Dr. René Cuperus, the Netherlands Institute of International Relations, the Netherlands

Dr. Jerzy Kaźmierczyk, University of Economy in Poznań, Poland

Dr. Agnes Horvath, Tokaj University, Hungary

ПТР

Patrycja Nieczuja-Ostrowska

Cover design

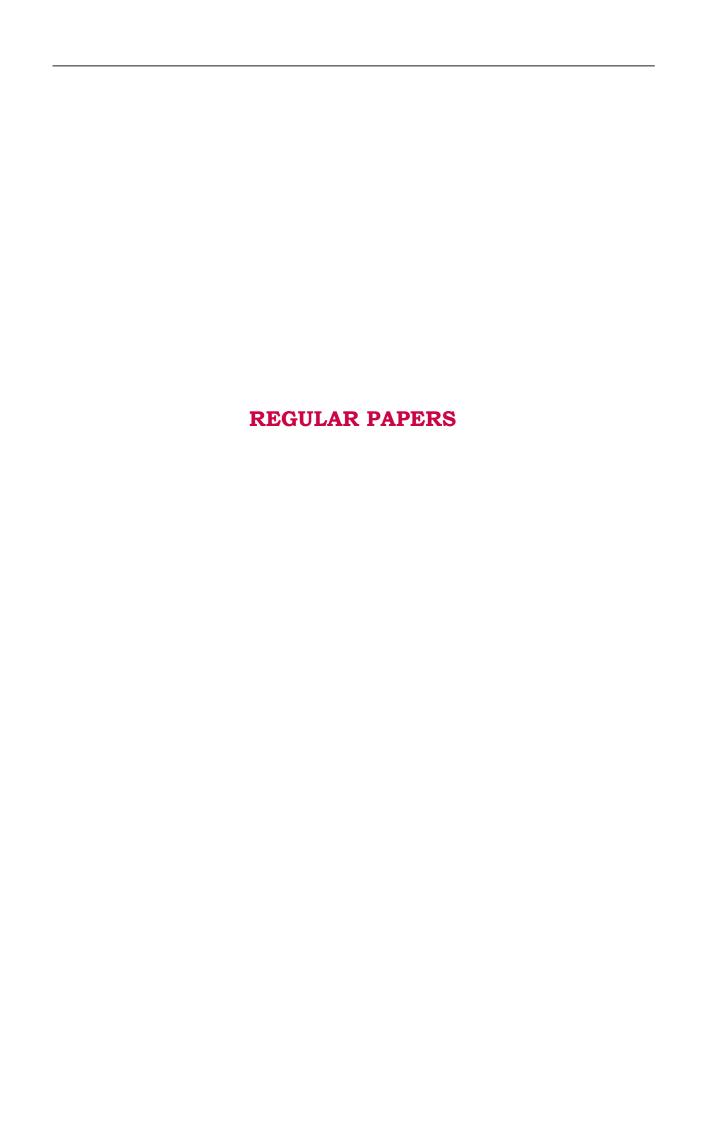
Paweł Nieczuja-Ostrowski

CONTENTS

Regular Papers

George Gogsadze	7
Populism in Georgia: Discourses and Narratives Against Sexual Minorities in Parliamentary Elections (2016-2020)	
Mykola Buchyn, Halyna Danchuk	26
Peculiarities of Observing the Principle of Gender Equality During Local Elections in Ukraine	20
Mária Kočnerová, Petra Grigelová, Michal Ďureje	48
Analysis of the Idiolect of Barack Obama	
Tetyana Nagornyak, Natalia Natalina, Ihor Ozadovsky, Maksym Studilko	60
Global Trends for the Formation of the New World Order	
Juraj Válek, Jana Kušnírová, Marcela Rabatinová	86
Related National-Economic Impacts and Particularities of the Consumption taxation (Case of the Slovak Republic)	
Eva Pongrácz, Simona Polonyová, Hana Poláčková, Kornélia Beličková, Jakub Girašek	107
Factors of Changes in the Demographic Profile of the Society	
Science and education for sustainable development	
Weronika Kaminska	129
Feminity, Consumptionism and Illness	127
Małgorzata Z. Wiśniewska, Tomasz Grybek Smeta Standard as a Tool to Support Sustainable Development Goalsand Food Safety.a Case Study	139
1000 Sujety.a Case Staay	
Irena Chawrilska, Elżbieta Czapka Egting Animals by Jonatan Safran Foor and Ita Pagantian by Polish	153
Eating Animals by Jonatan Safran Foer and Its Reception by Polish Readers	
Andrea Figulová, Ivana Gondášová	169
Energy Transition in Slovakia–Destiny in/and Change	

Igor Mitroczuk, Barbara Kijewska Regional Considerations in the National Energy-Mix Transformation	188
Agnieszka Szmelter-Jarosz, Beata Chmiel, Hamed Nozari The Mobility Choices in Poland is There a Chance to Transition From Owned Cars to a Shared Ones?	206
Delma Rodriguez Morales e-Culture for all: an Initiative to Broaden Horizons. Creating Convergences out of a Fragmented Global Scenario	229
Jan Wendt, Jakub Potulski Report of the Scientific Conference: Russian Invasion of Ukraine and the New International Order – the Perspective of Central Europe and the Countries of the Global South, May 31, 2023	248
International Conference 'Science and Education for Sustainable Development 2022'	252



POPULISM IN GEORGIA: DISCOURSES AND NARRATIVES AGAINST SEXUAL MINORITIES IN PARLIAMENTARY ELECTIONS (2016-2020)

George Gogsadze

Department of Political Science, Faculty of Social and Political Sciences,
Ivane Javakhishvili Tbilisi State University

1 Ilia Chavchavadze Avenue, 0179, Tbilisi, Georgia
Ilia State University, Institute of Political Sciences,
32 Ilia Chavchavadze Avenue, 0179, Tbilisi, Georgia
gogsadzegio@yahoo.com

Abstract

The article deals with populist discourses and narratives that are used during election campaigns by the political parties against sexual minorities and their rights. To identify populist narratives and discourses used by political parties, in-depth, semi-structured interviews were conducted with experts. Public speeches of the representatives of political parties were analyzed. The article focused on elements of Ideological discourse and topos strategy employed against LGBTQ+ community. According to findings political parties with antiwestern nationalist/nativist attitudes use populism as an instrument, according to which global liberal forces control Georgian government, oppose national forces, traditions and values.

Key words: Populism, Nationalism, Sexual Minorities, Discourses, Narratives.

INTRODUCTION

Populism plays an important role in Georgian politics. Various parties and political leaders use populist (and nationalist) messages to win the hearts of voters, and this strategy has proven to be successful in some cases. The parliamentary elections of 2012, resulted in peaceful transfer of power for the first time in the history of Georgia. Since 2013, the country has switched to parliamentary system, which makes parliamentary elections the most important political event in the country and the role of the political parties will increase. Also, as a result of the changes political field and media became more pluralistic and level of democracy increased in the following years¹, political actors began to voice their attitudes and positions in public. Previously marginal groups, ultra-right and anti-Western forces became more active. The strengthening of populist forces in Georgia can be seen as a natural reaction to the events that United National Movement (UNM) took when it was in power (2003-2012), as a result of which some groups and institutions found themselves neglected. Their empowerment can be considered as a sign of Europeanness [When Populism Meets Nationalism 2020]. These groups are also known for their homophobic and xenophobic stances; quite often they use religious motives against sexual minorities in order to appeal to their supporters. Vast majority of Georgian society is orthodox Christian and according to polls more than half of the population assesses steps taken by Georgian Orthodox Church positively [Civil.ge 2020a]. Above noted actors protested against the protection of the rights of sexual minorities; on May 17, 2013, the International Day Against Homophobia and Transphobia, members of the LGBTQ+ community gathered in center of Tbilisi, where they were verbally and physically abused by thousands of participants² accompanied by clergymen (RFE/RL 2021). To gain support or mobilize supporters some political parties resort to anti-LGBTQ+ messages/discourses, which often take the form of populism; their "ideology" may not be populist, however in some cases they may use populist rhetoric. This is most often seen before elections, as some parties believe that it will bring them dividends. Media diversity also contributed to the growth of populism. The number of social media users has grown rapidly in the second decade of the 21st century. Growing number of people have access to it, allowing them to be both consumers and distributors of information. This gives, fertile ground to parties with scarce resources (far-right and far-left) to relatively easily deliver their views and messages to voters.

The article focuses on populist messages and their (discourse) analysis. Studying Georgian elections became popular in academic field, however there is still lack of research and papers devoted to populism during electoral campaigns, regarding what populist narratives and discourses are used by political actors. The dissemi-

¹ Although it should be noted that in recent years' democracy index started to decline [see: Civil.ge 2022b]

² Similar incident occured on 5 July, 2021, when homophobic, aggressive groups gathered in the center of Tbilisi, protesting the "Tbilisi Pride" week. They physically abused journalists throughout the day and destroyed their equipment [See: Topuria 2021].

nation of populist discourses and its normalization might alter discourses of mainstream political parties, which can be detrimental for democracy building in Georgia. All of this underlines the relevance of the following research. Research of populism will contribute to proper understanding of political events in the country.

The research question of this article is to determine what populist discourses are used by political parties against sexual minorities? On certain occasions populist discourses that are used against sexual minorities are articulated with nationalist (or nativist) discourses. It is important to distinguish these discourses in order to better understand populism and its relation with nationalism. In our opinion, discourses/narratives against sexual minorities are used by political parties with antiwestern nationalist/nativist attitudes, they use populist discourses as an instrument, while its content is nationalist. For this purpose the article examines cases from electoral campaign of 2016 and 2020 parliamentary elections.

1. POPULISM: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Populism is a vague concept and discussions in academic circles are ongoing about its nature, therefore it is important to provide definition and the different approaches to how this phenomenon is studied and which approach will be used in this article. The article explores Benjamin De Cleen's theory related to the relationship between populism and nationalism.

In a broad sense, populism is "an action/idea that positions people at the center of political life"; in a narrow sense: "Populist politics is a political action or idea that responds to the people/elite cleavage" [Jakobson et al. 2012: 4-5].

The most widespread approach is the ideational approach. Mudde [2004: 543] considers populism a thin-centered ideology that divides society into two homogeneous and antagonistic groups, centered on the conflict between "the pure people" and "the corrupt elites," and that politics should reflect the general will. Thin-centered ideology implies that populism has a limited basis, tied to a narrower field of political conception. In other words, populism is not a perfect worldview that offers coherent answers to important political questions. It does not exist separately and is related to other ideologies (nationalism, socialism, environmentalism, etc.) [Bonikowski, Gidron 2016: 8].

According to Stanley [2008], populism is a thin ideology as it is a complementary ideology and mostly diffuses itself with other full ideologies, rather than overlaps with them. Due to its thinness it has more freedom to choose its ideological partners, but this freedom is still restricted as the main core element of populism is its anti-elite appeal. Content of Populism is vague and contested, therefore it does not possess consistent set of policies, but at the same time it has its features which differentiate it from equating with politics itself.

Populism like all ideologies contests discursively to control public political language. At the same time, it displays a slightly different feature than "thin-centered" ideology,

as it does not have sufficient comprehensiveness and falls "short of nuanced specific in what it does offer" [Freeden 2017: 10]. Populism is like a "phantom ideology" because it attracts support by its vagueness and indeterminacy, a spectre that can cover important and complicated socio-political issues in order to conceal them [Freeden 2017: 10].

Another approach understands populism as a discourse (or discursive style) between different political actors, where attention is paid to party manifestos, speeches of the leaders' and the populist narratives expressed in them (discourse analysis). Political parties or their leaders are not necessarily characterized by being only populist or non-populist [Gidron, Bonikowski, 2013: 7-8]. The most well-known proponent of this approach is Ernesto Laclau, according to whom populism is an anti-status quo discourse that simplifies the political space by dividing society in two opposing sides, "the people" (as the oppressed) against "others" (the oppressors) [Moffitt, Tormey, 2013].

For Laclau, the symbolic distinction between "us" and "others" that is part of the populist discourse is a case of specific relational "empty signifiers" that can take on multiple meanings depending on the social context. Populism in itself is not an indicator of ideological orientation, it is more a way of constructing politics. That is, populism is a political logic characterized by the consistent construction of popular subjectivity such as "we the people" against other "them, the elite"³. These categories acquire their own meaning in the process of "identification" (classification), insofar as certain social groups are understood as "the people" (us) and are opposed to oppressive "others" (them). Populism aims to construct antagonism, which is a means of identification as it is part of the struggle for hegemony and power [Gidron, Bonikowski, 2013: 10]. Populist identification tries to construct the people with a homogeneous identity. It is based on the politics of equivalence, with two opposing sides and dichotomous division. The logic of equivalence brings separate elements (such as demands, ideas, practices and agents) into a discourse and focuses on what they have in common [Panizza 2017: 520]. According to Kazin, populism is not an ideology that reflects the core beliefs of particular political actors, but rather a form of political expression that is selectively and strategically used by both the right and the left, and by people of various political views [Gidron, Bonikowski, 2013: 8].

There are similarities between the above mentioned approaches. Both emphasize the Manichean system of politics and the distinction between "us" and "others" as a fundamental component of populist rhetoric. Pappas and Hawkins attribute these definitions to one similar form [Gidron, Bonikowski 2013: 14-15]. In particular, Hawkins uses a mixture of two approaches, this allows the study of populism using several explanatory models. It should be noted that the author still prefers discursive approach, as he considers it more empirically practical [Poblete 2015]. In the article, populism

³ There are "two minimal" criteria for identifying populist discourse: 1) central reference to "the people" 2) separation and opposition of "the people" and "the elite". Populists are well aware that politics is about notions of forming collective identities ("us" versus "them") [Panayotu 2017].

is understood as a discursive style. Populism is understood as a peculiarity of political speech rather than the identity of political players. Even though discursive approach can be equated with all forms of dualistic rhetoric, populism tends to be used selectively and strategically and it is accessible to all actors and they can change their rhetoric more easily than their (thin) ideology; approach which is focused on party ideology and can be too restrictive. (In Georgia political parties are weak, this is characteristic for post-Soviet young democracies, almost all of the political parties lack consistent ideology).

Frequently populist discourses/narratives are used by nativists. Nativism can be defined as exclusionary ethnic-cultural nationalism [De Cleen 2017: 443]. Also described as "xenophobic nationalism", it defines belonging to a nation only by being born in its territory, and those who do not meet this criterion (including citizens) are considered immigrants. Mudde believes that, according to nativists, states should be populated only by members of the native group, and that non-indigenous peoples and ideas pose a fundamental threat to the homogenous nation-state. According to the author, for the populist radical right populism is secondary to nativism (European Center for Populism Studies).

For Taguieff [1995: 32] the populist discourse consists of two poles: protest (social) and identitarian (national) poles, which define the hard core of "national-populism" (in the strict sense). The former appeals to the people (defined as ordinary citizens) and implies the criticism of the elite. The latter appeals to the people as a whole, which is supposedly homogenous. The main difference from the former is that foreigners are the main target as they are denounced and criticized, while elite, are rejected because they are seen as "the party of foreigners". Subsequently anti-elitism is subordinated to xenophobia; populism is combined with nationalism and the enemy is reconfigured as the foreigner-invader. The identitarian dimension takes on an exclusionary character [Taguieff 1995: 34].

Several theories have been developed regarding the relationship between nationalism and populism. Determining the distinction between nationalism and populism as different but closely articulated discourses helps to understand these concepts better [De Cleen 2017: 455-456]. Nationalism as a discourse is constructed around the nodal point nation, it considers people as a nation, while for populism people are "outsiders". The relationship between the nodal point and the constitutive outside is horizontal (in/out) in the case of nationalism. It focuses on membership, identity and citizenship of the nation [When Populism Meets Nationalism 2020]. Spatially, populism is built on a vertical down/up axis that relates to hierarchical position, status, and power. This vertical structure allows to distinguish populism from other discourses that use the concept of "people". In this case, the "people" is constructed differently, as democracy (people as demos) and nationalism (people as nation) [De Cleen 2017: 440]. Populism is used by nationalists and serves to legitimize the

demands of exclusionary nationalism, which is presented as a will of the majority [De Cleen 2017: 444].

Brubaker [2020: 60] has a different approach. The definition of populism involves ambivalence. He does not favor the minimal, one-dimensional definition of De Cleen and Stavrakakis. For him, conceptually, populism and nationalism cannot be separated on the vertical and horizontal axis. This division fails to account for populism's heterogeneity, productivity, and appeal to "the people" (sometimes addressed to the plebs, the sovereign demos, and bounded community). The reference to populist discourse is assumed as a two-dimensional space, the space of inequality and the space of difference. Vertical and horizontal opposition are often intertwined, and elites are located both "outside" and "on top" [Brubaker 2020: 44]. The interweaving of vertical and horizontal opposition becomes clear when those "on the bottom" (such as Roma or immigrants) are seen "outside". Also, their unfavorable situation is explained by their "difference". There is nothing populist about such a view, it becomes populist when elites are accused of privileging these groups at the expense of ordinary people [Brubaker 2020: 55].

It should be noted that above mentioned identitarian dimension of populism by Taguieff is part of nationalistic/nativist discourse rather than populist, as it has horizontal dimension and speaks in the name of the people as a nation, while foreigners and members of other nations are its main target.

In this article, the relationship between populism and nationalism is understood in accordance with De Cleen's theory. In particular, populism is used as an instrument by (exclusionary) nationalists.

2. METHODS

Discourse is a mode of organizing knowledge, ideas, or experience that is rooted in language and its concrete contexts (such as history or institutions) (Merriam-Webster). Discourse Analysis studies the ways social power abuse, e.i racism, is (re)produced—and resisted by text and talk [Van Dijk 2013: 176]. Socio-political discourse analysis uses closed theoretical framework and provides its assumptions with several examples that best fit its statements [Wodak, Meyer 2016: 18-20]. The paper employs Teun van Dijk's method of discourse analysis to evaluate Ideological discourse and its elements. Ideologies "are belief systems that are only shared by specific (ideological) groups of people, and are typically not shared and taken for granted by the whole sociocultural community" [Van Dijk 2013: 177].

Ideological discourse focuses on the following elements: topics, propositions, modalities, local coherence, implications and presuppositions, actor descriptions, level and granularity of event and action descriptions, disclaimers, metaphors [Van Dijk 2013]. Pronouns have an important role in description of actors. When speaking, members of an ideological group (or parties) usually use the political pronoun "we" (our) to refer to themselves and the representatives of their member group, while talking

about dominated and distinct groups they use pronoun "others" (their) [Wodak, Meyer 2016: 73].

Ruth Wodak's topos strategy is also used to analyze the arguments and discourses of political parties. A topos (or topoi) can be defined as "search formulas which tell you how and where to look for arguments. At the same time, topoi are warrants which guarantee the transition from argument to conclusion". Kienpointer distinguishes between formal argumentation schemes that take place in argumentation, they include: the topos of danger, analogy, authority, definition and etc [Wodak 2015: 76]. Units of analysis are speeches (or interviews) of party leaders⁴ (or members) during the election campaign and party programs. The election period in Georgia starts 60 days before the elections [Election Code of Georgia 2011: article 45]. Interviews were gathered from Georgian TV channels and Radio broadcasters such as Georgian Public Broadcaster, Imedi TV, Rustavi 2, Radio Free Europe/Radio Liberty, Georgian Radio. Data was accessible on official websites of above noted channels and radios, also online platform YouTube. Uploaded content of political parties on their official Facebook pages proved useful for the purposes of this research.

In-depth (semi-structured) interviews were conducted with 10 experts⁵ in order to explore their perspectives on populism in Georgia. The aim of the interviews was to identify and analyze narratives and discourses used by the political parties during the election campaign. The interviewers were asked to provide their opinions as to which parties use narratives against sexual minorities, if it can be considered as populist and what are these narratives. Interviews were conducted from March to May of 2023 through online social platform Zoom, all of the interviews were recorded. Most of the interviewees were Doctors of Political Science (One of them was Doctor of cultural studies and another nationalism studies); two of them being PhD candidates who have published scientific publications about populism and far-right politics in Georgia.

In terms of selection of the respondents, we used a two-stage sample design. Initially, several respondents were chosen based on purposive sampling, choosing the specialists on the topic. Further was used snowball sample of selection: interviewed repondents helped us to contact other specialsts of the field.

3. POPULIST DISCOURSES AND NARRATIVES IN THE ELECTION CAMPAIGN – DISCUSSION AND RESULTS

National Democratic Institute (NDI) Poll conducted in 2022 indicated lack of trust in state institutions and politicians. Majority of the respondents did not believe that nor the government (59%) or opposition (67%) acted in the interests of the state. This showcases that in general population distrusts political elite and considers that they

⁴ In some cases, the programs do not reflect existing discourses in the society, and some small parties do not have an election program, therefore the article focuses on speeches as the units of analysis.

⁵ In this article are used seven in-depth interviews with experts.

do not represent their interests, which creates fertile ground for populism [NDI 2022: 32].⁶

In the parliamentary elections held in 2016 and 2020, issues related to sexual minorities were among the themes that included populist discourses. Political parties that actively resorted to narratives against sexual minorities were Georgian Idea, Georgian March, Free Georgia, Alliance of Patriots of Georgia, Free Georgia and Leftist Alliance. Emphasis was placed on the following categories: "Liberasts", "Soros-Masonic forces". It should be noted that many political parties that claim to be pro-Western avoid mentioning sexual minorities in their party programs or during their electoral campaign. In 2020, "Lelo" noted that the right of self expression of sexual minorities will be protected. Effective response mechanisms would be developed regarding sexual orientation and gender-based crimes and discrimination [What are your policy proposals... 2020]. However, earlier the leader of the party noted that he opposed same-sex marriage and rights of sexual minorities were "well defined" in the Constitution and if there were some deviations, then it meant that law was not observed accordingly, he added that "the minority should not abuse the rights of majority" [Khazaradze 2020]. UNM promised voters that freedom of expression will be fully protected, although, there were no specific mention of LGBTQ+ rights. According to political science expert [Interview 7], UNM who is the largest opposition party and considers itself liberal, is still afraid of losing conservative supporters and does not work to protect their rights; however, unlike ruling Georgian Dream party, they do not call on sexual minorities to stay at home. "Strategy Agmashenebeli" for 2020 noted that the response from the state should be strengthened against radical and far-right groups. But the word sexual minority or LGBTQ+ groups are not mentioned within their program either. United Democrats (not considered a pro-Western party) noted that the state should create decent living conditions for citizens regardless of their identity and should help them integrate into society [What are your policy proposals... 2020]. Most experts noted that pro-Western political parties claim that discrimination of LGBTQ+ society is unacceptable; however, they rarely touch upon the rights of sexual minorities because this topic is not considered electorally profitable in Georgia. One political science expert noted that "Defending them isn't considered benefitial, while attacking them is benefitial" [interview 3]. National Democratic Institute (NDI) conducted survey in 2018, which indicated that 23 percent of respondents thought that it is important to protect the rights of sexual minorities, while 44 percent thought it to be insignificant [Devadze 2018]. Political parties, including ones with pro-Western views, do not touch upon sexual minorities because "populism is ingrained in them" [Interview 4]. According to this expert, it is an example of pro-western populist

⁶ It should be noted that researches point to low level of intra-party democracy in Georgia; none of the mainstream parties were able to receive above the average results (based on three following criteria: selection of the candidates for the election, organizational structure, rights protection mechanisms for ordinary members of the party) [Kvashilava 2021: 10]. This indicates that political parties lack democratic accountability towards their members and almost all of the parties have dominant leader and weak organizational structure. This problem is characteristic for many post-soviet states.

rhetoric to point out that violence against sexual minorities is reprehensible (reffering to crackdown on sexual minorities by anti-LGBTQ+ groups on 5th of July 2021), but this claim is not followed by the next step on how to protect minority rights⁷.

In 2014, the adoption of "Law of Georgia on the Elimination of All Forms of Discrimination" (Anti-Discrimination Law) prohibited all forms of discrimination [Datishvili 2019]. The law became a target of nationalist-populist, conservative and nativist parties/groups, because according to them it legalizes the "propaganda of depravity". Regarding this bill, the main request is to change or to remove the terms "sexual orientation" and "gender identity" [Palavandishvili 2020a]; Leader of "Free Georgia" believed that rights should be applied similarily to orthodox Christians and homosexuals [Kukava 2020b]. Based on these terms, homosexuals were given the right to hold gay marches, teach in schools, and be invited on television; party representatives do not chase anyone in the bedroom and they started to protest only after "they decided to go out in the streets" [Palavandishvili 2020a]. Topos of danger is used to justify violence, as majority and their lifestyle was threatened by sexual minorities when they came out in public, as nobody was abusing them before and their actions are considered as proganda. Argumentation is based on reversal of victim-perpetrator strategy. The demand to change or repeal the Anti-discrimination law is a discourse of "the West imposes its own lifestyle over us". Pronouns as "we" and "they" are used to point out distincition between majority and sexual minorities.

As a result of the 2017 constitutional amendments, marriage was defined as a union between a man and a woman [Constitution of Georgia 2017: Article 30], which many conservative, nationalist, populist and ultra-right parties/groups actively demanded. The "Conservative Party of Georgia" noted that same-sex marriages are not normal and considered these constitutional changes (which they themselves supported in the parliament) as self-defense [Dzidziguri, 2020]. This step by the ruling Georgian Dream party is a positive framing of anti-LGBTQ+ activities "It's a continuum where the other side is making some positive promises at the expense of their rights" [Interview 6].

According to Kukava [2020a], if "Free Georgia" were to become the members of the parliament, when discussing the anti-discrimination law, they would have the position of the majority of the Georgian nation, and not the common position that all other parties share. This statement has a populist claim about the will of the majority being opposed by the interests of the elite. Although the demand to change or repeal the anti-discrimination law is part of the nationalist discourse/narrative of "the West imposes its own lifestyle over us". For "Free Georgia" Sexual minorities

⁷ It should be noted that there were exeptions, as in 2016 elections Republican Party believed that LG-BTQ+ are vulnerable social groups that experience discrimination and become the targets of hate crimes, therefore newly adopted antidiscrimination law shall be applied to them fairly [Usupashvili-Republicans 2016]. In 2020 European Georgia promised that rights of sexual minorities, together with ethnic and religious minorities will be defended. They recognized equality of all before the law and demanded access to state services for minorities and punishment for cases of discrimination, incitement and violence [What are your policy proposals... 2020].

are "other", previously their rights were not surpressed, but now they enjoy the support and privileges from the government. The self-expression of minorities is considered propaganda, because in reality, nobody oppresses them in Georgia. Limiting the rights of "other" groups is justified by "equality" for all; therefore, they should not have any "privileges" over (heterosexual) orthodox Christian majority. The statement is part of the discourse of "Georgia being country of Virgin Mary".

During the electoral campaign the Alliance of Patriots claimed that the conqueror is coming to Georgia today in the guise of the oppressed. In order to protect the rights, she asks not to be oppressed and asks for the adoption of various laws. Instead of protecting their rights, they try to force upon others their way of life. This means renouncing the homeland, culture, faith and Georgianness. They try to wipe out the way of thinking of Georgians, which is an attempt by a man to give up his manhood and woman to give up her "headcover" [saqarTvelos patrioti 2016: 8]. This statement includes a nationalist dimension, where Georgian customs are being harassed. It is a widespread discourse of and "the West imposes its own lifestyle over us". However, they are mostly part of nationalist (nativist) discourse, directed against the west, as it has horizontal "in/out" dimension. According to implications and pressupositons Georgian elite pursues the interests of sexual minorities and does not follow Georgian traditional customs of "ordinary people" who are oppressed. Pronoun "they" is used to refer to sexual minorities and they are refered as "conquerors" who try to try to destroy "our way of living". This discourse suggests that if they will be removed and resisted then the problem will be solved. It suggests that majority are victims, therefore topos of danger is employed, to reverse victim-perpetrator strategy.

Representative of the Leftist Alliance claimed that Georgia should return to its national roots and resist cultural and economic expansion of the West, "You may call it 'dictatorship of money' and we probably became a victim of aggressive, immoral, expansive, aggressive expansion today, the Georgian way of living, national culture, etc., everything, consciousness, morals have fallen" [Jibladze 2016]. To journalist's question whether western civilization was an expansion of amorality? Jibladze noted that unfortunately United National Movement (UNM) took everything (from the west). General claim is later followed by concrete accusations that the USA and European countries are forcing to impose same-sex marriages on Georgia, which had been legalized in several countries: "You know what, the starting point for us is our Orthodox Christianity, our traditions, our culture. For us, same-sex marriages, which are supported and protected by European countries, USA, are also unacceptable" [Jibladze 2016]. Use of pronoun "our" is an indicator that Georgians are religious, traditional and heterosexuals, while sexual minorities are "others" who have powerful supporters from the west. This is "the West is forcing its lifestyle on us" discourse. The populist dimension is apparent when the former regime (UNM) is blamed for adopting western values; however, the message against LGBTQ+ is used for nationalist purposes (and is part of nationalist/nativist discourse).

Politician declared that his party supported European integration and to become the member of European family, decision which was made by Georgian ancestors. He pointed out that we were always in Europe and Europe was with us [Jibladze 2016]. Member of the party does not shy away from showing that Western (implied to be liberal) values are incompatible with Georgian values, which are virtuous. He uses Topos of danger and constructs European values as threatening and inappropriate with Georgian values (He constructs positive and negative image of Europe/West). On the one hand, he claims that Europe is the space which Georgia has always has been part of, as narratives regarding Georgia being part of Europe is widespread in the country; while on the other hand, Europe which Georgia aspires to is without its main values such as human rights (protection of minority rights).

The leader of the Georgian March declared that they were fighting against the "Liberast" and dirty ideology, which is flowing like a downpour and bringing disaster to our country [Bregadze, 2020a]. Metaphor is used as an element of the discourse, when the leader mentions the word "downpour", which is associated with drowning.

According to De Cleen [2017: 446-447], populism is characterized by down/up antagonism between the people-as-underdog and the elite. For the author exclusion of LGBTQ+ community (because they represent specific socio-economic or other groups) is rather part of other discourses articulated with populist discourses. However, in Georgian case they are positioned not only at the bottom as "other", but at the same time at the top, as they are referred to as "Liberasts" (This term unifies two words, a liberal individual and "pederast" which is a pejorative term for gay people), therefore according to these statements sexual minorities (or their supporters) occupy the position of power and they oppress the pure people who are traditional and religious Georgians. The former also have support of the western powers (or organizations) who spread liberal ideology around the globe. At the same time, some some political parties claim (e.i Aliance of Patriots, Georgian March) that homosexuality is not characteristic of Georgians and Georgianhood; therefore, in certain cases sexual minorities are part of nationalist/nativist discourses.

Narratives against sexual minorities are used to demonize the west, which is characteristic for Russian conservative populism; proclaiming that West is in depravity is an old Slavophile (Rusophile) tradition, which spread in Georgia [Interview 1]. Political science expert [Interview 7] also noted that anti-LGBTQ+ actors claim that homosexual behavior is not Georgian and it is focused on the extinction of the Georgian nation. This was evident when Bregadze [2020c] declared that Georgian nation's existence, its identity and solving demographic problems are the most important issues. For Shikhiashvili [2020], a representative of the Georgian March, Soros' cunning plan is that homosexuality is encouraged. His propaganda is directed against the reproduction of the nation. It is obvious that the nation cannot reproduce, because this issue is cursed by God, it cannot give birth to life, love does not exist there. Drugs are also being legalized and people are encouraged to leave the country. Enemies fight

against nationality and religion and they don't need Georgian ethnicity but only its resources; "That's why we need to return ownership (with an ability to govern!) of the homeland" [Shikhiashvili 2020]. After Georgia regained its independence national populism focused on defending national culture and identity from dangers of Globalization. Its main causes being poverty, corruption of the elites and unequal redistribution of wealth. The government monopolized pro-Western discourse and the West became the cause of public (popular) discontent. For such groups, closer ties with Russia was preferred over the West [Sabanadze: 2010, 112-113]. As anti-Western (or pro-Russian) nationalism was marginalized, anti-LGBTQ+ narratives and discourses became the main issue for national-populists (and nativists). They are relatively new and are tied with Georgia's demographic problems. Anti-Western forces use them as a main instrument against the West and western values to distance themselves from elites, who are controlled by the West.

"Soros Foundation" is one of the main targets of national-populist forces that also control Georgian education system. Liberal NGOs who are financed from the West promote homosexuality and emigration is the biggest threat to Georgians. The populist dimension is evident, that the government cannot protect the country from this harmful influence; however, the discourse is mostly nationalist and anti-Western.

"We are building Georgian Georgia" Gigauri underlined that the prime minister of Serbia, a unique orthodox Christian country is a lesbian; we should have a Georgian Georgia in order to avoid this. Topos of danger is used, as something that has happened in other Orthodox country will happen in Georgia as well. The discourse "We should be lords of ourselves" (or "Georgia first") is evident, which also involves religious narratives that differ from western liberal values [Gigauri 2020].

"We must show the entire Christian world how to defeat impurity, depravity and treachery" [Bregadze 2020b]. Lider of Georgian March constructs liberal Europe as a main enemy, the claim has nationalist dimension. Nationalist discourses include religious messages. Among the ideological elements we find disclaimers. In particular, Europe has a positive (Christian) image, which the Georgian march respects, although today the West promotes homosexuality, which is directly related to the difficult demographic situation in the country. Negative descriptions are clearly visible towards sexual minorities, as they are evaluated as "impotent", "good for nothing", "filthy" and "depraved" [Bregadze 2020b].

According to one expert, some political parties claim that homosexual behavior is immoral or sinful and that this narrative can be seen in the west as well. He believed that this narrative is not populist, but conservative. The West does this indirectly through Georgian elites. Transnational elites slander the innocent and ordinary

⁸ These words were used by famous Georgian writer and public figure Ilia Chavchavadze (1837-1907) in his novel "Letters of the Traveler". Back then Georgia was part of Russian Empire and the phrase had antiRussian meaning. Nowadays when nationalists (or nativists) use it, they mean that Georgia should be free from any external influence including from the West. Therefore, the phrase has been recontextualized and usually has antiwestern meaning.

Georgian people, which is a classic populist trope. In this case, populism and anti-western attitudes are combined [interview 3].

Georgian March claimed that they differ from the swamp called the Georgian political spectrum. The party's goal is to fundamentally change the "Liberast Soros" system that started since Shevardnadze's presidency. Georgia is the only Christian country where no gay parades were held [Bregadze 2020b].

We are not fighting gay parades because those people have different sexual orientation, but we are fighting it as a concept, as an institution that wants to destroy our moral and ethical values, with which we come to this day [Bregadze 2020b].

Populist discourses imply that Georgian identity is heterosexual, orthodox Christian and exclude liberal elites ("Liberasts") who do not follow the will of "pure people", by supporting LGBTQ+ rights. "Othering" of sexual minorities happens by referring to them as "impotents", "impure", as this issue is "cursed by God" and therefore unacceptable. Topos of danger is employed. It is based on condition that LGBTQ+ community and their rights should be restricted as it threatens existence of Georgan nation, therefore if this problem will be solved Georgia and its way of living will be saved.

Bregadze [2020b] noted that Georgia is part of the Caucasus, where common Caucasian values exist. Therefore, with these shared values it will be more possible to talk with Abkhazians and Ossetians and find a common language. Abkhazians and Ossetians will not want to live in Georgia if men in pantyhose run in Tbilisi on Rustaveli Avenue. In terms of description of actors, sexual minorities are portrayed as unpatriotic, as Caucasian values demand for a man to behave "manly" and that is in contradiction with being gay, as such sexual minorities threaten restoration of territorial integrity. Therefore, topos of danger is used to justify limiting the rights of self-expression of LGBTQ+ community.

The leader of the "Georgian Idea", Chachua [2016] believed that the representatives of the aggressive liberal-international have taken over the education system in Georgia and the process of spiritual and moral degeneration of our future generations is underway. This party's discourses feature "masonic satanic forces" controlling the Ministry of Education, which, through LGBTQ+ NGOs, inculcates "tolerance" and civic awareness that are unacceptable. Palavandishvili [2020a] accused Swedish government of teaching neutral gender theory in kindergartens which is assessed as "Satanism"; he claimed that we are facing dictatorship and main parties in the parliament for being false forces.

Palavandishvili [2020b] noted that:

No to filthy sodomists, dirty feminists, a sold-out parliament, no to dictatorship of vile pederasty, no to legalization of marijuana, no to gambling, no to abuse and slander of the Church, no to LGBT occupation of the education system, no to vile gay marches, no to UNICEF ordered bill on the child abduction which was supported by Georgian Dream, United National Movement and Alliance of Patriots.

In Palavandishvili's statement LGBTQ+ groups are located on "top"; the discourse has populist dimension. At the same time, the Georgian liberal elite and government are controlled by external forces, (in this case UNICEF, which forces them to pass various laws that are against Georgian traditions) which has nationalist dimension and "in/out" relation. Party representatives exaggerate the threat, of the attempts of spiritual and moral degeneration of future generations, and use negative description of actions by referring to it as "LGBTQ+ propaganda". These statements are nationalist, discourse and content is anti-Western and the representation is populist. Populist messages are used as a tool by antiwestern nationalist forces.

Palavandishvili [2020a] noted that a fifth of Georgia is occupied by Russia, and the rest by the US (or "the West"), which is an empire, eventhough their troops are not stationed in Georgia. Along with this, "the Russian army should be expelled from Georgia, as well as the Soros financed non-governmental organizations, the US embassy, which supports LGBTQ+ pride, Lomjarias' (Refering to Ombudswoman of Georgia), agents, enemies, the fifth column and their influence" [Palavandishvili 2020a]. NGOs, embassies of other countries, agents and others are mentioned along with the Russian occupation. In terms of describing the action, the US is portrayed more negatively than Russia because it occupies more territory and supports gay marches, while Russia does not. In other words, it is worse than Russia. Subsequently, Russia's negatives are minimized, while the USA's negatives are pointed out.

As noted before, Georgian Orthodox Church enjoys large support, eventually Orthodox Christianity is used for political manipulation to promote positive image of Russia and that it shares the same faith and values. Political science expert [Interview 7] claimed that one of the narratives focuses on the perception of "western depravity"; although this issue is not directly linked to religion, the narrative of religion is introduced, that orthodox Russia can confront "western depravity ", which is a supporting factor for other narratives. Orthodox Christianity has an important role, it is used as tool for political manipulation and is a basis for legitimizing anti-Western sentiment; despite Russia being imperialist it still has more common with Georgia, than the more distant western religion and culture, which is used as a tool for political manipulation [Interview 3]. The main narratives used against sexual minorities are that it is supported by the west against Orthodox Christianity; those messages are synchronized with pro-Russian narratives "Russians as the protectors of Orthodox Christianity" [Interview 5].

Discourse of Georgian Idea and Georgian March is characterized not by dichotomy of pro-Western/pro-Russian (which is quite common in Georgian politics) positions, but Georgian traditions and lifestyle is presented as an alternative to Western values. Georgian March emphasized that common Caucasian values will help Georgia restore territorial integrity. Therefore, discourse has shifted towards pro-Western/neutrality dichotomy and Georgia should embrace the latter. These positions can be considered covertly pro-Russian, as Russian negative actions are minimized, while the West's

negatives are underlined. Cultural studies expert [Interview 2] noted that Russia is very unpopular in Georgia, politicians avoid saying positive things about it, but they refer negatively to the west; the main message is that the west is bad, perverted and will take away our Georgianhood⁹.

Above mentioned messages are nationalist (conservative) discourses about "Georgia being country of Virgin Mary". Also, another discourse/narrative, which is also nationalistic and antiwestern is "We should be lords of ourselves". While "Soros Liberasts" is a populist discourse/narrative, who are in the position of power. Antiliberal discourses are characteristic for Georgian populism. Sexual minorities are "others", but they are positioned on top of populist "bottom/up" axis, because they are privileged by government/elite (or are part of the government). Following elements of discourse are used: Description of events: the actions of sexual minorities are presented as "filth", "abomination". "Georgian Idea's" ideological discourse focuses on description of the action, and presuppositions - the west and Masonic Soros organizations are responsible for demographic hardships facing the country, due to their support of LGBTQ+ ideology and lifestyle, therefore they oppose success of Georgian nation, fight against its identity and pose a threat to country's sovereignty.

CONCLUSION

According to the research, the statements made against sexual minorities are part of the campaigns of several political parties. Amongst the political parties that resort to narratives and discourses against sexual minorities are, The Alliance of Patriots of Georgia, Free Georgia, The Leftist Alliance, Georgian March and Georgian Idea. The discourse of Georgian March and Georgian Idea implies choice between pro-Western and neutrality, which is tacitly pro-Russian. Free Georgia justifies limiting the rights of sexual minorities on grounds that anti-discrimination law granted them priveleges and they should have "equal" rights as orthodox Christians.

Lack of trust in state institutions and political elite, offers a good opportunity to nationalists (and nativists) to use populism and claim that political elite is ignoring the interests of the general population (by defending and privileging the rights of sexual minorities) and assert that they are the ones representing the interests of "ordinary people".

Populist discourses are traditionally articulated alongside nationalist (or conservative) discourses. They are often intertwined and hard to separate. They include populist messages that the government/elite which is liberal (usually refered to as "Liberasts") does not protect the interests of the Georgian majority (Liberal powers are in charge of government, media, NGO sector, education sphere and others). Most experts believe that narratives against sexual minorities are antiwestern and that the West promotes homosexuality in Georgia indirectly through Georgian elites. Nation-

⁹ Russia has occupied 20% of Georgian territory. According to recent public opinion polls, more than 80% of the population of Georgia favors integration into the EU, while support for NATO membership stands at 73% [GPB, NDI polls 2023).

alists (nativists) with antiwestern attitudes use populism as an instrument to appeal to supporters. Discourses focus on negatives of the West, claim to defend Georgian identity and traditions. For some experts these discourses are pro-Russian. As noted above appearing as pro-Russian is extremely damaging for any political party.

The most frequently used discourses and narratives are "Georgia being country of Virgin Mary", "the West imposes its own lifestyle over us", "We should be lords of ourselves" ("Georgia First"). Where Georgian values, customs and homeland must be protected from Western "depravity". These discourses feature religious narratives, whose purpose is to emphasize the Orthodox identity of Georgia, the need to protect the country and religion, which external (e.i "Soros-Masonic", USA, UNICEF) forces are fighting with different means.

Representatives of the political parties use following elements in their discourse: actor descriptions, propositions, implications and presuppositions, Level and granularity of event and action descriptions, disclaimers, metaphors.

Political Parties use Topos of danger, notably Georgian Alliance of Patriots, The Leftist Alliance, Georgian March and Georgian Idea. Alliance of Patriots employs topos of danger in order to reverse victim-perpetrator strategy, which threatens Georgian traditions. Discourses of Georgian Idea are more radical and Manichean, as they frequently note that the west is occupying Georgia and Masonic forces are fighting against God, Georgian religion and identity and we should rely only on ourselves. Georgian idea's Argumentation is also based on reversal of victim-perpetrator strategy in order to justify violence and their resistance to western liberal values as Georgian majority and their lifestyle was threatened by sexual minorities when they came out in public, because nobody was abusing sexual minorities before. The Leftist Alliance refers to Europe in their messages and how it is important to be part of Europe, but also employs topos of danger and constructs negative image of Europe which threatens Georgian way of life and traditions.

Georgian March also uses topos of danger, and indicates that western liberal values are a threat for Georgia and its way of living and if Georgian traditions will not be preserved then something that has happened in other Orthodox country will also occur in Georgia. They also use religion to legitimize their argument that this issue is "cursed by God" and therefore it is unacceptable for Georgia and its traditional majority.

It should be noted that political parties that were studied in this article did not receive any considerable support during 2016 and 2020 parliamentary elections. Only Alliance of Patriots was able to overcome electoral threshold and obtain seats in the legislative body. However, narratives that above mentioned political parties use against sexual minorities became more mainstream as the ruling Georgian Dream recently started including messages against sexual minorities in their rhetoric. After the so-called draft law on "Foreign Agents" was withdrawn due to the protests [Kirby 2023], the chairman of the ruling party Irakli Kobakhidze [2023] stated those NGOs

that opposed the bill were engaged in "LGBT propaganda" and activities that contradict the state interest. It was an attempt from Georgian Dream to gain support from the part of society that has anti-Western attitudes.

All of the above indicates that these narratives have greater influence in Georgian society and it is probable that mainstream discourses will become more intolerant towards minorities, which can be serious impediment for democracy-building in Georgia. That makes this topic even more significant for future research.

REFERENCES

Bonikowski, B., Gidron, N., (2016), Multiple Traditions in Populism Research: Toward a Synthetic Analysis, in APSA Comparative Politics Newsletter, Harvard University. http://dx.doi.org/10.2139/ssrn.2875372.

Bregadze, S., (2020a), Oct, 28. "qartuli marSi-erovnuli moZraoba" (Georgian March – National Movement). partiis prezentacia 300 aragvelis ZeglTan. Retrieved 25.03.2021 from https://bit.ly/42W3yqV.

Bregadze, S., (2020b), Oct, 16. "qartuli marSi-erovnuli moZraoba" (Georgian March – National Movement). MarSi TV. Retrieved 20.03.2021 from https://bit.ly/3IecobB.

Bregadze, S., (2020c), "qartuli marSi-erovnuli moZraoba" (Georgian March – National Movement). Georgian First Channel, 16.10.2020. https://bit.ly/3Mr9pzd.

Brubaker, R., (2020), Populism and Nationalism, in *Nations and Nationalism* 26(1), 44-66. https://doi.org/10.1111/nana.12522.

Chachua, L., (2016), "qarTuli idea" (Georgian Idea). Interview in Radio Broadcast. Radio Free Europe/Radio Liberty, 06.09.2016. https://www.radiotavisupleba.ge/a/saubari-levan-chachuastan/27969749.html.

Civil.ge, (2020a), Public Attitudes, Political Ratings in NDI-Commissioned Survey, 16.01.2020. https://civil.ge/archives/334775.

Civil.ge. (2022b), Georgia's Score Continues to Fall in Democracy Index, 11.02.2022. https://civil.ge/archives/472269.

Constitution of Georgia, (2017), The Parliament of Georgia, Tbilisi. https://matsne.gov.ge/en/document/view/30346?publication=36.

Datishvili, S. (2019), Antidiskriminaciuli kanoni – ras erCian mas homofobebi (Anti-discrimination law – why homophobes try reject it). Interview in Radio Free Europe/Radio Liberty, 10.07.2019. https://bit.ly/3VrijQ2.

De Cleen, B., (2017), Populism and Nationalism. In Kaltwasser, C. R., Taggart, P. A.,, Espejo, P. O., Ostiguy P. (eds), The Oxford Handbook of Populism, Oxford University Press, New York, 434-460. https://doi.org/10.1163/25888072-02021036.

Devadze, M., (2018), NDI - GamokiTxulTa 44 procents miaCnia, rom seqsualuri umciresobebis uflebebis dacva umniSvneloa (NDI – 44percent of respondents believe thet protection of Rights of sexual minorities is insignificant), in Georgian Public Broadcaster, 01.08.2018. https://bit.ly/3peDMQ1.

Dzidziguri, Z., (2020), Oct, 2. "saqarTvelos konservatiuli partia" (Georgian Conservative Party). Rustavi 2. Retrieved from https://bit.ly/3BntRdZ.

Election Code of Georgia, (2011), The Parliament of Georgia, Tbilisi, 27.12.2011. https://matsne.gov.ge/en/document/view/1557168?publication=80.

European Center for Populism Studies (ECPS). Nativism. Retrieved 24.11.2022 from https://www.populismstudies.org/Vocabulary/nativism/.

Freeden, M., (2017), After the Brexit referendum: revisiting populism as an ideology, in *Journal of Political Ideologies*, 22:1, 1-11.

Georgian Public Broadcaster, (2023), NDI-is kvleva - evrokavSiris mxardaWera gaizarda, rac evrointegraciisadmi mosaxleobis erTgulebaze miuTiTebs (Support to EU grew, which indicates that population is loyal to eurointegration), 02.02.2023. https://bit.ly/42hhBaL.

Gidron, N., Bonikowski, B., (2013), Varieties of Populism: Literature Review and Research Agenda, in The Weatherhead Center for International Affairs (13-0004), Harvard University, https://tinyurl.com/sbjn3jx2.

Gigauri, G., (2020), "qartuli marSi-erovnuli moZraoba" (Georgian March – National Movement). Debatebi. Georgian First Channel, 06.10.2020. https://bit.ly/3MAwEXL

Jakobson, M-L., Balcere, I., Loone, O., Nurk, A., Saarts, T., Rasa Zakeviciute, R., (2012), Populism in the Baltic States, in Open Estonia Foundation, Tallinn University. https://tinyurl.com/2ujsr4z9.

Jibladze, P., (2016), "Memarcxene aliansi" (The Leftist Alliance). Interview in Radio Broadcast. Radio Free Europe/Radio Liberty, 12.09.2016. https://www.radiotavisupleba.ge/a/saubari-paata-jibladzestan/27982083.html.

Khazaradze M., (2020), Lelo's Khazaradze Speaks of Church, Queer Rights, Foreign Policy, in civil.ge 08.06.2020. https://tinyurl.com/3vrshtdd.

Kirby, P., (2023), Georgia drops "Foreign Agents" law after protests, in BBC News, 09.03.2023. https://tinyurl.com/bdz4v6tb.

Kobakhidze, I., (2023), Kanonproeqtma Tavisi mniSvnelovani saqme gaaketa – yvelam aRiara, rom agentoba saTakiloa – kobaxiZe (The draft law did its job, as now being agent is embaressing), in Radio Free Europe/Radio Liberty, 10.03.2023 https://tinyurl.com/mw332x4m.

Kukava, K., (2020a), "Tavisufali saqarTvelo" (Free Georgia). Interview in Imedi TV, 25.09.2020. https://bit.ly/3pFEh6d.

Kukava, K., (2020b), 7 prioriteti gvaqvs, rac Cvens saarCevno programaSia (We have seven priorities, set in our program), in Interpressnews.ge, 26.09.2020. https://bit.ly/44V77PV.

Kvashilava, B., (2021), Sidapartiuli demokratiuli sistema qarTul politikur sistemaSi (Intraparty democratic system in Georgian political system). Eastern European Center for Multiparty Democracy (EECMD). https://tinyurl.com/4bywt3sc.

Merriam-Webster Dictionary. Retrieved from https://www.merriam-webster.com/dictionary/discourse.

Moffitt, B., & Tormey, S. (2013), Rethinking Populism: Politics, Mediatisation and Political Style, in *Political Studies Association* 62(2), 381-397. https://doi.org/10.1111/1467-9248.12032.

Mudde, C., (2004), The Populist Zeitgeist, in Government and Opposition, Published by Blackwell Publishing, Oxford, USA, 541-563.

NDI., (2022), sazogadoebis ganwyoba saqarTveloSi. 2022 wlis agvistoSi Catarebuli pirispir gamokiTxvis Sedegebi (Public Oppinion in Georgia. Results of Face-to-face Survey Conducted in August 2022). https://tinyurl.com/yeyr2buz.

Palavandishvili, G., (2020a), "qarTuli idea" (Georgian Idea). Interview in Radio Broadcast. SaqarTvelos Radio, 16.10.2020. https://bit.ly/42OVOXy.

Palavandishvili, G., (2020b). "qarTuli idea" (Georgian Idea). debatebi. Georgian First Channel, 20.10.2020. https://bit.ly/3LJWJll.

Panayotu, P., (2017), Transnational Left-wing Populism. Political Observer on Populism: https://tinyurl.com/4k6ufhp5.

Panizza, F., (2017), Populism and Identification, in The Oxford Handbook of Populism, eds. Kaltwasser, C. R., P. Taggart, A., Espejo, P. O., Ostiguy, P., Oxford University Press, New York, 516-539.

Poblete, M. E., (2015), How to assess populist discourse through three current approaches, in *Journal of Political Ideologies*.

Radio Free Europe/Radio Liberty (RFE/RL), 16.12.2021. 2013 wlis 17 maisis lgbt aqciis darbevis saqmeze evropulma sasamarTlom saqarTvelos 193 500 evros gadaxda daakisra (The European Court ordered Georgia to pay 193,500 euros in the case of the crackdown on the LGBT rally on May 17, 2013). Retrieved from https://bit.ly/3W0DOY2

Sabanadze, N., (2010). Globalization and Nationalism. The Cases of Georgia and the Basque Country, Budapest - New York: Central European University Press.

saqarTvelos patrioti. Program 2016. Mteri Cagrulis niRabSi (The enemy in the guise of the oppressed).

Shikhiashvili, I., (2020), "qartuli marSi-erovnuli moZraoba" (Georgian March – National Movement). press-conference in press-club of mediaholding "Kviras", 06.10.2020. https://bit.ly/3W9H6IQ.

Stanley, B., (2008), The thin ideology of populism, in *Journal of Political Ideologies*, 13:1, 95-110, DOI: 10.1080/13569310701822289.

Topuria, T., (2021), Ras hyvebian daSavebuli Jurnalistebi. Radio Free Europe/Radio Liberty. 06.07. 2021. Retrieved from https://bit.ly/3BjglYD.

Usupashvili-Republicans. (2016), Netherlands Institute for Multiparty Democracy. www.partiebi.ge. Retrieved from https://bit.ly/3IeZ2fd.

Van Dijk, T.A., (2013), Ideology and Discourse, in Oxford Hadbook of Political Ideologies, eds. Freeden, M., Sargent S.L., Steras M., Oxford University Press, 175-196.

What are your policy proposals (if you have any) in terms of protecting minority rights (religious, ethnic, sexual, and other) and better integrating them in socio-political life?, (2020), in Partiebi.ge. https://partiebi.ge/2020/eng/compeare?party1=6&party2=3&party3=5&theme=79.

When Populism Meets Nationalism: Reflections on Recent Trends (Webinar), 2020, Georgian Institute of Politics. https://tinyurl.com/3975u457.

Wodak, R., (2015), The Politics of Fear: What Right-wing Populist Discourses Mean, Sage. DOI:10.4135/9781446270073.

Wodak, R., Meyer, M., (2016), Methods of Critical Discourse Studies (3rd edition), Sage.

ANNEX.

In-depth interviews:

(Interview #1 Nationalism Studies Expert, 18.03.2023)

(Interview #2 Cultural Studies Expert, 20.03.2023)

(Interview #3 Political Science Expert, 22.03.2023)

(Interview #4 Political Science Expert, 29.03.2023)

(Interview #5 Political Science Expert, 4.04.2023)

(Interview #6 Political Science Expert, 5.04.2023)

(Interview #7 Political Science Expert, 12.04.2023)

PECULIARITIES OF OBSERVING THE PRINCIPLE OF GENDER EQUALITY DURING LOCAL ELECTIONS IN UKRAINE

Mykola Buchyn

Department of Political Science and International Relations, Lviv Polytechnic National University, 12 Stepana Bandery st., Lviv, Ukraine, 79013 buchyn@ukr.net; mykola.a.buchyn@lpnu.ua

&

Halyna Danchuk

Associated professor at Ivane Javakhishvili Tbilisi State University, Faculty of Social and Political Sciences; Department of Political Science, Chavchavadze ave. 1, Tbilisi, Georgia tamar.karaia@tsu.ge

Abstract

The article analyses the peculiarities of the observance of the principle of gender equality during local elections in Ukraine. The authors noted the international legal regulation of the principle of gender equality, the peculiarities of the regulation of this issue in the electoral legislation, and showed the basis on which local elections in Ukraine take place. Based on the analysis of local elections in Ukraine, the peculiarities of observing the principle of gender equality in electoral practice are shown. A comparative analysis of the features of the application of gender quoting during local elections in 2015 and 2020 and their impact on the level of gender representation in local government bodies in Ukraine was carried out. The authors come to the conclusion that the legislative regulation of gender equality in elections has its place, but it should be supplemented by the formation of a high level of electoral culture of voters, for which gender equality during elections should become the norm of social and political life.

Key words: gender equality, elections, local authorities, gender quotas, Ukraine.

INTRODUCTION

The problem of compliance with the principle of gender equality is quite relevant in the modern civilized world, where democratic principles are followed, fair treatment is ensured for all people as a whole, and equal opportunities and rights are provided for everyone. As one of the most influential international organizations of modernity, the UN, rightly asserts, the elimination of various forms of discrimination contributes to the provision of basic human rights.

The participation of women in politics, as well as granting them the opportunity to make decisions related to the sphere of management, is important for the development of the state and society. It is worth noting that at today's stage of human development, females really play an important role not only in the political sphere, but also in many others. This is a significant achievement, especially if we compare the current situation with the one that existed in past centuries. Such broad involvement of women in various spheres of public life is ensured by special mechanisms, international agreements, conventions, and national legislations of most countries of the world. All these methods aim to ensure compliance with the principle of gender equality.

At today's stage of human development, women are actively involved in politics. A significant fraction of females not only use their passive right to vote, but also become heads of governments, countries and organizations. Today in the political arena there are many influential women politicians who carry out their activities on an equal footing with men. The world's leading economic organizations, based on numerous studies, have come to the conclusion that gender equality in the formation of government bodies is a prerequisite for the balanced development of society and the prosperity of small and medium-sized businesses.

The fact that for the dynamic, balanced development of the world community, it is necessary to listen to all opinions also becomes important. In this context, it is worth taking into account that women are half of the world's population. Therefore, in order for the authorities to be able to objectively represent the interests of the entire population of the country and make fully justified decisions, they must necessarily include women on an equal basis with men.

An important component and prerequisite for ensuring gender equality in politics is the creation of equal conditions for men and women during elections. Females should be actively involved in the electoral process, using active and passive electoral rights. At the same time, global and Ukrainian electoral practice testifies that the issue of electoral gender equality is not always followed, often ignored and requires special mechanisms to ensure it. This additionally actualizes the issues we have chosen for research and requires a comprehensive scientific study of gender equality during elections and the mechanisms for ensuring it in Ukraine.

SCIENTIFIC APPROACHES AND RESEARCH METHODS

The methodological basis of the study is the use of the following approaches to studying the issue of gender equality during elections: functional, according to which we considered gender equality and democracy as interconnected phenomena, the effective functioning of which is impossible without each other; valuable, on the basis of which we analysed the mechanisms for ensuring gender equality during elections not as formal procedures, but as a form of exercising the electoral rights of citizens regardless of gender, a qualitative characteristic of the level of democracy of the social order.

An important methodological component of the work is the theory of new institutionalism, which made it possible to consider elections as a complex of formal and informal principles and rules that determine and regulate the electoral activity of an individual; explain the difference between the norms of Ukrainian legislation on ensuring gender equality and models of domestic electoral practice; show the role and importance of formal and informal institutions in ensuring gender equality during elections in Ukraine. Also, the work is based on the ideas of structural functionalism, which made it possible to clarify the structural components of the principle of gender equality during elections and to reveal their role in ensuring the democracy of the election institution. The methodology of the work is based on the principles of interdisciplinary, historicism, integrity, logical consistency, impartiality, objectivity and completeness.

General scientific, empirical and logical research methods were used within the approaches outlined above. The system method made it possible to consider the principle of gender equality as a complex phenomenon. The use of the structural-functional method contributed to the clarification of the structural elements of the principle of gender equality and their role in maintaining the equality of women and men during elections. The evolution of women's struggle for the right to vote was analysed using the historical method. The comparative method made it possible to show the differences between the features and effectiveness of gender quotas during the 2015 and 2020 local elections.

Using empirical methods, the legal and practical component of gender equality during elections was investigated. In particular, the method of document analysis made it possible to work out the main legal acts that ensure the effectiveness of the principle of gender equality in elections. The effectiveness of the principle of gender equality and the number of women elected to representative bodies during the 2015 and 2020 local elections in Ukraine was determined using the method of statistical data analysis. We also actively used such logical methods as analysis and synthesis, induction and deduction. The choice of the specified methods made it possible to carry out a comprehensive study, to answer the research question and research hypothesis.

Research question: how effective are the mechanisms for observing gender equality during local elections in Ukraine?

Research hypothesis: the mechanisms for observing gender equality during local elections in Ukraine are effective and provide equal opportunities for men and women to exercise passive suffrage.

SOURCE BASE AND STATE OF SCIENTIFIC RESEARCH OF THE PROBLEM

International legal acts (codes, declarations, conventions), which implement the legal regulation of the principle of gender equality in the field of politics and the electoral process, became the source base for our scientific research. It is, in particular, about normative legal acts of the UN [Convention 1952; Convention 1979; International 1966], Venice Commission [Code 2002; Code of Good Practice in Electoral Matters: Guidelines 2002; Code 2008; Declaration 2006; Report 2020] and a number of other international institutions [Balanced 2003; Convention 1950].

To analyse the specifics of the legal regulation of gender equality in Ukraine, the relevant domestic legal acts were used. It is primarily about the Election Code of Ukraine [Vyborchyi 2019], the Law of Ukraine «On Local Elections» [Pro mistsevi 2015], the Law of Ukraine «On Political Parties in Ukraine» [Pro politychni 2013] and some other normative legal acts of Ukraine [Pro vdoskonalennia 2005; Pro zabezpechennia 2005]. Considerable attention in our research was paid to the practice of observing gender equality in local elections in Ukraine. Therefore, data on local elections in Ukraine in 2015 and 2020 became an important component of the source base of our research. In order to determine the level of observance of gender equality by the political parties of Ukraine, we analysed the electoral lists for the Regional and City Councils of the following regions of Ukraine: Lviv [Lvivska miska rada. Vyborchi 2015; Lvivska miska rada. Vyborchi 2020; Lvivska oblasna rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2020], Kharkiv [Kharkivska miska rada. Vyborchi 2015; Kharkivska miska rada. Vyborchi 2020; Kharkivska oblasna rada. Vyborchi 2015; Kharkivska oblasna rada. Vyborchi 2020], Kherson [Khersonska miska rada. Vyborchi 2015; Khersonska miska rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2020] abd Vinnytsia [Vinnytska miska rada. Vyborchi 2015; Vinnytska miska rada. Vyborchi 2020; Vinnytska oblasna rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2020].

An even more important indicator of the effectiveness of the mechanisms for ensuring gender equality is the results of elections by gender. Therefore, the results of the 2015 and 2020 elections to Regional and City Councils became an important part of our source base: Lviv [Lvivska miska rada. Obrani 2015; Lvivska miska rada. Obrani 2020; Lvivska oblasna rada. Obrani 2015; Lvivska oblasna rada. Obrani 2020], Kharkiv [Kharkivska miska rada. Obrani 2015; Kharkivska miska rada. Obrani 2020; Kharkivska oblasna rada. Obrani 2015; Khersonska miska rada. Obrani 2020], Khersonska oblasna rada. Obrani 2015; Khersonska oblasna rada. Obrani 2020; Khersonska oblasna rada. Obrani 2020] Ta Vynnytsia [Vinnytska miska rada. Obrani 2015; Vinnytska

miska rada. Obrani 2020; Vinnytska oblasna rada. Obrani 2015; Vinnytska oblasna rada. Obrani 2020] областей.

The relevance of the issue of gender equality in general, and its observance in the political sphere in particular, in modern science is worth noting. At the same time, a little less attention of scientists is attached to such an aspect of the issue as electoral gender equality. The issue of gender equality in Ukraine is even less researched, and the level of its observance during local elections in our country has remained outside the attention of scientists and requires thorough research

rigins and stages of the studied movements and answer research questions.

INTERNATIONAL REGULATORY AND LEGAL MECHANISMS FOR ENSURING THE PRINCIPLE OF GENDER EQUALITY IN THE ELECTION PROCESS

Equality of rights and freedoms of women and men is one of the fundamental constitutional principles, which is enshrined at the legislative level of most countries of the world. Furthermore, its observance is fundamental for the activities of many intergovernmental and non-governmental international organizations. The ability of women to actively participate in elections and politics is guaranteed by the International Covenant on Economic, Social and Cultural Rights of 1966 [International 1966], the European Convention on Human Rights of 1950 [Convention 1950], the Convention on the Elimination of All Forms of Discrimination against Women of 1979 [Convention 1979] and others. In addition, it is worth mentioning the Convention on the Political Rights of Women of 1952, approved by the UN General Assembly, which established the right to vote for women in all elections on an equal basis with men, and also guaranteed the protection of this right [Convention 1952].

Research and conclusions of the Venice Commission, which relate specifically to election problems, have an important impact on the election process. In particular, the Code of Good Practice in Electoral Matters with two additional documents, one of which is directly related to ensuring the principle of gender parity in elections, is considered exemplary in this area [Code 2002]. In July 2002, the Venice Commission adopted guidelines for elections. The commission paid attention to the equality and parity of sexes. In particular, the document states that various gender quotas do not contradict the principle of gender equality, as they establish the necessary minimum representation of a particular sex in party lists at elections [Code 2002].

An explanatory report adopted by the Venice Commission in October 2002 supplements this provision. The document notes: in order to take all the necessary measures to promote gender equality in the electoral process, a certain provision in the state constitution is necessary. If the corresponding principle is not enshrined in the constitution, then such actions will contradict the principle of equality. In addition, Article 25 states that in an electoral system with closed lists, gender parity can be ensured in case that the number of women and men is equal. But in case when there is a ranking vote or a vote against the party, proportionality in the composition of the

elected body may be violated. This is because there is no guarantee that voters will give their votes equally to women and men [Code of Good Practice in Electoral Matters: Guidelines 2002].

A significant achievement in the field of gender equality is the Recommendation of the Committee of Ministers of the Council of Europe «Balanced participation of women and men in political and public decision-making», adopted on March 12, 2003. The document states that women constitute more than half of the world's population and, accordingly, a significant part of the electorate. That is why their participation in elections and, as a result, in the political life of their country, is a necessity. Therefore, the Council of Europe in this document enshrines recommendations to member states of the organization to promote a balanced representation of both sexes, ensure the possibility of exercising the right to vote for women and men, enshrine the necessary provisions in national legislation, etc. In addition, in the annex to the document, the Council of Europe obliges member states to consider the possibility of legislative reforms in order to create equal conditions for representatives of both sexes in local, regional, national and supranational elections [Balanced 2003].

Another important document in this area is the Declaration on women's participation in elections, adopted in 2006. The document notes that in order to achieve the principle of gender equality, such measures as alternation of representatives of the sexes in electoral lists, ensuring a balanced share of representation of women and men, refusal of registration for parties that did not comply with this principle, and application of other sanctions can be applied [Declaration 2006].

Article 38 of the Code of Good Practice for Political Parties also refers to the principle of gender equality. It notes that, taking into account the practice and principles of international law, all parties must take measures aimed at ensuring compliance with the principle of gender equality. This applies both to the appointment to party positions and the formation of electoral lists. The article condemns gender unequal representation and encourages gender parity in all countries of the world [Code 2008]. It is also worth noting that the on Electoral Legislation and Electoral Administration in Europe allows the introduction of gender quotas for parliamentary candidates, as they contribute to a balanced representation of both sexes in elections [Report 2020].

LEGAL REGULATION OF THE PRINCIPLE OF GENDER EQUALITY DURING ELEC-TIONS IN UKRAINE

Ukraine is also included in the list of countries that take measures to ensure parity in the electoral process. As a relatively young country on the world political stage, Ukraine has made significant progress in the field of gender equality. As the researchers note, the situation in this area is improving every year. Today, many females are actively involved in participating in elections, and henceforth, in state management. Back in the 2000s, Ukraine began implementing reforms to ensure equal rights and opportunities for women and men in the political sphere. In July 2005, the President

of Ukraine signed a decree «On improving the work of central and local executive bodies to ensure equal rights and opportunities for women and men» [Pro vdoskonalennia 2005]. In the same year, the law «On ensuring equal rights and opportunities for women and men» was approved [Pro zabezpechennia 2005]. Ukraine has also ratified a number of international documents that regulate issues of gender equality during elections.

In 2013, the Law on Political Parties in Ukraine introduced a gender quota of 30% [Pro politychni 2013]. However, compliance with these quotas was negatively affected by the fact that no sanctions mechanism was implemented. That is, the parties could decide at their own discretion whether to comply with this provision or not. At the same time, in order to encourage political forces to observe gender equality and apply the 30% quota when forming electoral lists, a mechanism of additional funding in the amount of 10% of its annual volume was introduced.

The Law of Ukraine on Local Elections, adopted in 2015, provided for the establishment of a gender quota to ensure the principle of equal elections. Article 4 of the law states that the sexes must be represented by at least 30% of the total number of candidates on the lists [Pro mistsevi 2015]. The amendments to the Law «On Political Pariahs» of 2019 contain the provision that the quotas of at least 30% of the total number of party representatives of a certain gender on the list must be fixed in the party charter. Such a quota determines the smallest share of women's and men's representation in electoral lists at all levels of elections [Pro politychni 2013].

The next electoral reform, which also related to the field of gender equality, was carried out in Ukraine on July 11, 2019, when the Parliament of Ukraine adopted the Election Code. In paragraph 12 of Article 154, the principle was introduced, according to which at least 2 representatives of each gender should be in each of the quinary party lists at the elections. If the number of candidates is not a multiple of 5, then party representatives of different genders must alternate in the last positions. This principle is applied in national and regional elections, as well as in the formation of unified and territorial electoral lists of parties [Vyborchyi 2019].

The negative thing is that the Election Code, like the 2013 law, does not provide any sanctions for non-compliance with the relevant provisions. The authors of the project proposed to introduce a mechanism according to which the Central Election Commission (CEC) can deny a party registration in elections if men make up more than 60% of its electoral list. However, the deputies did not support such an initiative. Although Article 230 of the Code states that in case of violation of the procedure for nominating candidates, the CEC will refuse to register candidates [Vyborchyi 2019]. It should be borne in mind that the implementation of this gender quota does not guarantee that the share of women in the parliament will be at least 40% of the total number of parliamentarians in the parliamentary elections. However, it significantly increases the chances of females to enter the parliament.

FEATURES OF OBSERVING THE PRINCIPLE OF GENDER EQUALITY IN THE ELECTORAL PRACTICE OF UKRAINE (ON THE EXAMPLE OF THE 2015 LOCAL ELECTIONS)

Local elections were held in Ukraine on October 25, 2020. The study analysed whether the political forces adhered to the principle of gender equality in the electoral process. The main focus is on the elections to the Regional and City Councils of four cities representing different regions of Ukraine: Lviv (Western Ukraine), Vinnytsia (Central Ukraine), Kharkiv (North-Eastern Ukraine) and Kherson (Southern Ukraine). In this way, we will be able to compare indicators of compliance with the principle of gender equality and the share of females in local elections in different regions of Ukraine. In addition, the results of the local elections held in Ukraine on October 25, 2015 were analysed. Thus, we will be able to investigate how the number of women in the composition of political forces and local representative authorities has changed over the past 5 years. It will also make it possible to find out how effective the mechanisms for ensuring gender equality have been.

In the 2015 local elections, political forces had to ensure the representation of women in their party lists at the level of 30% of the total number of candidates [Pro mistsevi 2015]. However, the gender quota was not mandatory, so there were many violations. A total of 1,072 females and 2,296 males took part in the elections to the Regional Councils of Lviv, Vinnytsia, Kharkiv and Kherson in 2015. In Lviv, 300 women and 661 men took part in the Regional Council elections. In Vinnytsia, 249 women and 586 men took part in the Regional Council elections. In Kharkiv, there were 443 female representatives and 894 male representatives in the party lists at the Regional Council elections. In Kherson, there were 80 female and 155 male candidates for the Regional Council. The share of women relatively to the number of candidates on the electoral list was 31.21% in Lviv, 33.13% in Kharkiv, 29.82% in Vinnytsia, and 34.04% in Kherson [Kharkivska oblasna rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2015]. Thus, the smallest share of women in the elections to the Regional Councils of the studied cities in 2015 was in Vinnytsia.

Table 1. Peculiarities of observing the principle of gender equality in local elections of 2015 in Ukraine (elections to Regional Councils)

Regional Council	Number of male candi-	Number of female can-	% of female can-
	dates	didates	didates
Lvivska	661	300	31,21 %
Vinnytska	586	249	29,82 %
Kharkivska	894	443	33,13 %
Khersonska	155	80	34,04 %
In total	2296	1072	31,83 %

Source: authors

In Lviv, 16 political forces took part in the Regional Council elections in 2015. Of them, 6 parties did not comply with the principle of gender quotas. The share of women was less than 30% in the list of candidates of the All-Ukrainian Association «Svoboda», political parties «Yedynyy tsentr», « Narodnyy Rukh Ukrayiny», «Nash Kray», «Syla lyudey». In addition, the political force «Opozytsiynyy Blok» did not present a single female representative in its list of candidates [Lvivska oblasna rada. Vyborchi 2015]. In Vinnytsia, at the Regional Council elections in 2015, 7 parties used gender quotas in the formation of electoral lists, while 5 violated this principle (political parties «Yevropeyska solidarnist», «Nash Kray», «Obyednannya SAMOPOMICH «, «Ukrayinske obyednannya patriotiv – UKROP «, as well as «Ahrarna partiya Ukrayiny») [Vinnytska oblasna rada. Vyborchi 2015].

In Kharkiv, in the Regional Council elections in 2015, the share of women made up 30% of the total list of candidates in 4 political forces: «Blok Darta Veydera», «Nash Kray», «Opozytsiynyy blok» and «Syla lyudey». There were no female representatives in the list of candidates of the «Blok Darta Veydera» political party [Kharkivska oblasna rada. Vyborchi 2015].

In Kherson, at the Regional Council elections in 2015, 4 political parties also failed to comply with the principle of gender quotas. This is the «Vseukrayinska partiya dukhovnosti ta patriotyzmu», the only representative of which was a man, as well as «Yevropeyska solidarnist»«, «Syla i chest» and «Vidrodzhennya» [Khersonska oblasna rada. Vyborchi 2015].

During the elections to the Regional Councils selected by us for the study of the regions in 2015, the largest share of women was on the electoral list of the political force « Liva opozytsiya» in the city of Vinnytsia - 46.67%. That is, men and women were almost equally represented in the electoral list of this party. At the same time, the political parties « Opozytsiynyy blok» in the elections in Lviv, «Blok Darta Veydera» in Kharkiv and «Vseukrayins'ka partiya dukhovnosti ta patriotyzmu» had the lowest share, which was 0% [Kharkivska oblasna rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2015].

In 2015, 1,120 female representatives and 2,251 male representatives took part in the elections to the City Councils of Lviv, Vinnytsia, Kharkiv and Kherson. In Lviv, 280 women and 582 men took part in the elections. In Vinnytsia, 266 women and 514 men took part in the City Council elections. In Kharkiv, there were 321 women and 693 men on the party lists. In Kherson, 253 women and 462 men were candidates for the City Council. The share of female representatives was slightly higher: 32.48% in Lviv, 35.38% in Kherson, 31.66% in Kharkiv and 34.1% in Vinnytsia [Kharkivska miska rada. Vyborchi 2015; Khersonska miska rada. Vyborchi 2015; Lvivska miska rada. Vyborchi 2015; Vinnytska miska rada. Vyborchi 2015].

Table 2. Peculiarities of observing the principle of gender equality in the local elections of 2015 in Ukraine (elections to City Councils)

City Councils	Number of male candidates	Number of female candidates	% female candi- dates
Lvivska	582	280	32,48 %
Vinnytska	514	266	34,10 %
Kharkivska	693	321	31,66 %
Khersonska	462	253	35,38 %
In total	2251	1120	33,22 %

Source: authors

In Lviv in 2015, at the City Council elections, the following parties violated the principle of balanced gender representation: «Vseukrayinske obyednannya Batkivshchyna», «Narodnyy Rukh Ukrayiny», «Nash kray», «Opozytsiynyy blok», «Ukrayinske obyednannya patriotiv – UKROP». In the city of Vinnytsia, the only political force that did not meet the 30% quota was the «Ukrayins'ke obyednannya patriotiv – UKROP». In Kharkiv, such parties became «Blok Darta Veydera» and «Syla lyudey», and in Kherson – «Yevropeys'ka solidarnist», «Blok Darta Veydera» and «Vidrodzhennya». [Kharkivska miska rada. Vyborchi 2015; Khersonska miska rada. Vyborchi 2015; Lvivska miska rada. Vyborchi 2015; Vinnytska miska rada. Vyborchi 2015].

It is worth noting that in Kherson in the 2015 local elections, the share of female candidates relative to the total number of candidates for the City and Regional Councils was the highest - 35.38% and 34.04%, respectively [Khersonska miska rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2015].

In 2015, the political party «Nash Kray» violated the principle of gender quotas most often in the elections to the Regional and City Councils. In addition, the share of women was often less than 30% in the electoral lists of the parties « Yevropeyska solidarnist» («Blok Petra Poroshenka Solidarnist»), «Opozytsiynyy blok», «Blok Darta Veydera», «Syla lyudey», «Ukrayins'ke obyednannya patriotiv – UKROP», «Narodnyy Rukh Ukrayiny» ta «Vidrodzhennya». The «Liva opozytsiya» party had a fairly high proportion of women during the elections to Regional Councils (Political Party «Nova derzhava») - 46.67% in Vinnytsia and 41% in Kherson. [Kharkivska miska rada. Vyborchi 2015; Kharkivska oblasna rada. Vyborchi 2015; Khersonska miska rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2015; Vinnytska miska rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2015].

The largest share of women in the elections to the Regional and City Councils in the electoral lists was in the "DemAlyance" party in the city of Lviv - 66.67%, which indicates the predominance of female representatives. At the same time, there were no women on the electoral list of the "Blok Darta Veydera" political force in the cities of Kharkiv and Kherson [Kharkivska miska rada. Vyborchi 2015; Kharkivska oblasna rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2015; Lvivska miska rada. Vyborchi 2015; Lvivska oblasna rada.

borchi 2015; Vinnytska miska rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2015].

A relatively small number of parties had women as their first candidate. In the elections to the Regional Council in Lviv it was «Samopomich», in Kharkiv it was «Samopomich» and the «Liva opozytsiya» («Nova derzhava»), in Vinnytsia it was the «Vseukrayinske obyednannya «Batkivshchyna», and in Kherson it was the «Soyuz livykh syl». In the 2015 City Council elections in Lviv, all political forces were led by men, in Kherson women led the parties « Yevropeyska solidarnist» and «Sotsialisty»; «DemAlyans», «Nova polityka» and «Sotsialisty» in Kharkiv; and «Hromadyanska pozytsiya» in Vinnytsia. That is, most often women led such political forces as «Samopomich» and «Sotsialisty» [Kharkivska miska rada. Vyborchi 2015; Kharkivska oblasna rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2015; Lvivska miska rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2015; Vinnytska miska rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2015].

However, it is worth noting that the thirty percent quota is not enough to ensure a balanced representation of the sexes in the elected bodies, especially in the absence of a mechanism of sanctions in case of violation of the relevant provision. In addition, a more effective indicator of compliance with the principle of gender equality is not so much the presence of female candidates on electoral lists as the number of women who were elected as a result of the public expression of will.

Thus, in Lviv in 2015, 16.67% of women were elected to the Regional Council relative to the total number of deputies, and 26.56% to the City Council. In Vinnytsia, these indicators are 10.84% and 16.67%, respectively, in Kharkiv - 18.33% of women were elected to the Regional Council, and 21.43% to the City Council. In Kherson, the share of women is 17.19% and 24.07%, respectively. A fairly clear trend can be traced to the fact that in 2015 the share of women in City Councils was greater than in Regional Councils [Kharkivska miska rada. Obrani 2015; Kharkivska oblasna rada. Obrani 2015; Khersonska oblasna rada. Obrani 2015; Lvivska miska rada. Obrani 2015; Lvivska oblasna rada. Obrani 2015; Vinnytska miska rada. Obrani 2015; Vinnytska oblasna rada. Obrani 2015].

Table 3. Percentage of elected women based on the results of the 2015 local elections in Ukraine (elections to Regional and City Councils)

Region	% of elected women, Regional Council	% elected women, City Council
Lvivska	16,67 %	26,56 %
Vinnytska	10,84 %	16,67 %
Kharkivska	18,33 %	21,43 %
Khersonska	17,99 %	24,07 %

Source: authors

FEATURES OF OBSERVING THE PRINCIPLE OF GENDER EQUALITY IN THE ELECTORAL PRACTICE OF UKRAINE (ON THE EXAMPLE OF THE 2020 LOCAL ELECTIONS)

Local elections in 2020 were held in accordance with the new election code, which was discussed earlier. Therefore, in comparison with the previous local elections, there were certain changes in the representation of sexes in the electoral lists.

1,717 female representatives and 2,161 male representatives took part in the elections to the Regional Councils of Lviv, Vinnytsia, Kharkiv and Kherson in 2020. In Lviv, there were 480 women and 541 men candidates. In Vinnytsia, 304 women and 375 men took part in the Regional Council elections. In Kharkiv, there were 560 women and 767 men on the party lists. In Kherson, 373 women and 478 men were candidates for the Regional Council. Therefore, the share of women relative to the total number of candidates in the Regional Council elections in Lviv was 47.01%, in Vinnytsia - 44.77%, in Kharkiv - 42.20%, and in Kherson - 43.8%. That is, almost half of all candidates are female. The highest indicator is in Lviv, and the lowest in Kharkiv [Kharkivska oblasna rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2020].

Table 4. Peculiarities of observing the principle of gender equality in the 2020 local elections in Ukraine (elections to Regional Councils)

Regional Council	Number of male can- didates	Number of female candidates	% female candi- dates
Lvivska	541	480	47,01 %
Vinnytska	375	304	44,77 %
Kharkivska	767	560	42,20 %
Khersonska	478	373	43,83 %
In total	2161	1717	44,28 %

Source: authors

In each region, there were certain violations in the formation of voter lists for the City Council elections in the context of observing gender equality. The violations were committed by the political forces "Holos" and "Duhovna Ukraina" in Lviv, and "Nash Kray", "Syla i Chest", "Ukrayinska partiya chesti, borotby z koruptsiyeyu ta orhanizovanoyu zlochynnistyu" in Vinnytsia. "Partiya Shariya" also did not comply with the election code in the elections to the City Council in the cities of Kharkiv and Kherson [Kharkivska miska rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2020; Vinnytska miska rada. Vyborchi 2020].

The political party «Yevropeyska solidarnist» violated the principle of gender quotas most often, namely three times, during the elections to the City Council. In addition, this principle was violated twice by the political forces «Nash Kray» and «Sluha Narodu» [Kharkivska miska rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2020; Vinnytska miska rada. Vyborchi 2020].

The smallest number of female representatives in the elections to the City Council was on the electoral list of the political force "Partiya Shariya" in the elections in Kharkiv. The share of women was 20% of the total number of party members on the electoral list. The largest share of women was represented in the electoral list of the party "UDAR (Ukrains'kyy Demokratychnyy Al'yans za Reformy)" - 56.25% [Kharkivska miska rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2020; Vinnytska miska rada. Vyborchi 2020].

Among some parties, there was a tendency to place female representatives at the end of each quinary. Thus, men had a certain advantage by being in higher positions. This phenomenon is visible in the electoral lists of the political parties «Nash Kray», «Opozytsiyna platforma - Za zhyttya», «Blok Kernesa - Uspishnyy Kharkiv», "Hromadskyy rukh Narodnyy kontrol», «Nam tut zhyty» and several others in the 2020 elections both to regional and City Councils. At the same time, some parties alternated representatives of different genders in their party lists. These are such political forces as «Vseukrayinske obyednannya Batkivshchyna», «Varta», «Vseukrayinske obyednannya Svoboda», «Samopomich», «Sluha Narodu», «Propozytsiya», etc. However, at the elections in Kherson, «Vseukrayinske obyednannya Batkivshchyna» placed females in the last two positions of each of the five [Kharkivska miska rada. Vyborchi 2020; Kharkivska oblasna rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2020; Lvivska oblasna rada. Vyborchi 2020; Vinnytska miska rada. Vyborchi 2020; Vinnytska oblasna rada. Vyborchi 2020].

It is also worth noting that "Partiya Shariya" to some extent ignored the new principle of gender quotas. In particular, in the elections to the Kharkiv City Council, there was not a single female representative in the top ten list of candidates. A similar situation existed in the city of Kherson. There, only two women were represented among the top ten in the City Council elections. Thus, it significantly affected the share of women in the electoral lists of this political force - 20% and 31.25% in the respective cities. This indicator is significantly lower than the average level of representation of women in the studied cities [Kharkivska miska rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2020].

In addition, there was such a phenomenon as the placement of 4 female representatives and 1 male representative in one quinary, which is also a violation of the election code. In particular, this is how parties such as "Yevropeyska solidarnist", "Nash Kray" and "Sluha Narodu" formed the list at the elections in the city of Kherson [Khersonska miska rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2020]. This phenomenon shows that the principle of gender equality can be violated both in relation to female representatives and in relation to the male representatives. However, it is important that such violations do not occur in the upper parts of the electoral list, but in the lower ones.

The increase in the gender quota in 2020 had a significant impact on the share of women in the list of selected candidates. In particular, in Lviv there were 26.19% of women elected to the Regional Council, and 28.18% to the City Council. In Vinnytsia, this figure was 26.2% and 31.48%, respectively. In Kharkiv, the share of elected women was the highest - 28.33% among those elected to the Regional Council, 35.71% - among those elected to the City Council. In Kherson, these shares were 21.88% and 24.07%, respectively. The highest rate of elected women among the studied cities is in Kharkiv, and the lowest is in Kherson [Kharkivska miska rada. Obrani 2020; Kharkivska oblasna rada. Obrani 2020; Khersonska miska rada. Obrani 2020; Lvivska oblasna rada. Obrani 2020; Lvivska miska rada. Obrani 2020; Vinnytska oblasna rada. Obrani 2020].

Table 6. Percentage of elected women according to the results of the 2020 local elections in Ukraine (elections to Regional and City Councils)

Region	% of elected women, Regional Council	% elected women, City Council
Lvivska	26,19 %	28,18 %
Vinnytska	26,20 %	31,48 %
Kharkivska	28,33 %	35,71 %
Khersonska	21,88 %	24,07 %

Source: authors

COMPARATIVE ANALYSIS OF THE FEATURES OF OBSERVING THE PRINCIPLE OF GENDER EQUALITY IN THE ELECTORAL PRACTICE OF UKRAINE (ON THE EXAMPLE OF THE LOCAL ELECTIONS OF 2015 AND 2020)

Comparing the indicators regarding the election of deputies according to the gender principle in the local elections of 2020 with the corresponding indicators in 2015, it can be said that the share of elected female representatives has increased significantly. If 5 years ago it fluctuated between 10.84%-26.56%, then in the 2020 elections the minimum indicator was 21.88%, and the maximum was 35.71% [Kharkivska miska rada. Obrani 2015; Kharkivska miska rada. Obrani 2020; Kharkivska oblasna rada. Obrani 2015; Kharkivska oblasna rada. Obrani 2020; Khersonska miska rada. Obrani 2015; Khersonska oblasna rada. Obrani 2020; Khersonska oblasna rada. Obrani 2015; Lvivska miska rada. Obrani 2020; Lvivska miska rada. Obrani 2015; Lvivska oblasna rada. Obrani 2020; Vinnytska miska rada. Obrani 2015; Vinnytska miska rada. Obrani 2020; Vinnytska oblasna rada. Obrani 2015; Vinnytska oblasna rada. Obrani 2020; Vinnytska oblasna rada. Obrani 2020].

Table 7. Comparative analysis of the number of elected women based on the results of local elections in 2015 and 2020 in Ukraine (elections to Regional Councils)

Region	% of selected women, 2015	% of selected women, 2020
Lvivska	16,67 %	26,19 %
Vinnytska	10,84 %	26,20 %
Kharkivska	18,33 %	28,33 %
Khersonska	17,99 %	21,88 %

Source: authors

Table 8. Comparative analysis of the number of elected women based on the results of local elections in 2015 and 2020 in Ukraine (elections to City Councils)

Область	% of selected women, 2015	% of selected women, 2020
Lvivska	26,56 %	28,18 %
Vinnytska	16,67 %	31,48 %
Kharkivska	21,43 %	35,71 %
Kharkivska	24,07 %	24,07 %

Source: authors

It is also worth noting that in 2020, the number of parties headed by women increased significantly. In particular, in the elections to the Regional Council in Vinnytsia, a woman headed the "Ukrainska stratehiya Hroysmana" party. In Lviv, the first candidates of political forces «Varta», «Yevropeyska solidarnist», «Za maybutnye» were female representatives. In Kharkiv, women led the parties «Blok Svitlychnoyi Razom», «Yevropeyska solidarnist», «Partiya Shariya» and «Sluha Narodu». In Kherson, women became leaders of such parties as "Pariya Zelenyh" and "Blok Volodymyra Saldo". In total, women led 9 political forces in the Regional Council elections in 2020. [Kharkivska oblasna rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2020; Lvivska oblasna rada. Vyborchi 2020; Vinnytska oblasna rada. Vyborchi 2020]. In the 2020 City Council elections, female representatives led 8 parties. In Lviv, such political forces were «Vseukrayinske obyednannya Batkivshchyna», «Ukrayins'ka Halyts'ka Partiya», «Nash Kray», «UDAR (Ukrayins'kyy Demokratychnyy Al'yans za Reformy)». In Vinnytsia, women became the first candidates in the «Rukh Spravedlyvosti» and «Partiya Shariya» parties. In Kharkiv, female representatives became the heads of the "Bloku Svitlychnoyi Razom" and «Holos». In Kherson, all parties were headed by men [Kharkivska miska rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2020; Vinnytska miska rada. Vyborchi 2020]. In 2015, in the elections to regional and City Councils, women led 5 and 6 political forces, respectively. The share of parties led by women, relative to the total number of political forces that participated in the elections, was 8.62% in the elections to the Regional Council and 8.45% in the elections to the City Council [Kharkivska miska rada. Vyborchi 2015; Kharkivska oblasna rada. Vyborchi 2015; Khersonska miska rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2015; Lvivska miska rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2015; Vinnytska miska rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2015;].

In 2020, the indicator increased to 18% and 10.67%, respectively [Kharkivska miska rada. Vyborchi 2020; Kharkivska oblasna rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2020; Lvivska oblasna rada. Vyborchi 2020; Vinnytska miska rada. Vyborchi 2020; Vinnytska oblasna rada. Vyborchi 2020]. This shows that thanks to the introduction of gender quotas, women became more actively involved in the electoral process and political life.

Table 9. Comparative analysis of the number of political parties headed by women according to the results of local elections in 2015 and 2020 in Ukraine (elections to Regional and City Councils)

	Elections to the Regional Council		Elections to the City Council	
Local elec- tions	Number of par- ties led by wom- en	% of parties headed by wom- en	Number of parties led by women	% of parties headed by women
Elections of 2015	5	8,62 %	6	8,45 %
Elections of 2020	9	18 %	8	10,67 %

Source: authors

According to the results of the elections in 2015 and 2020, it can be argued that the most frequent violations of the principle of balanced gender representation were committed by the political forces «Yevropeyska solidarnist» and «Nash Kray». The 2020 elections were positively influenced by the fact that, compared to the local elections of 2015, fewer political forces violated the principle of gender equality when forming their electoral lists. In particular, in the Regional Council elections in 2015, 19 parties did not comply with the quota principle, which was 32.76% of the total number of parties that participated in the election process. In 2020, violations were committed by 11 parties, which is 22% of the total number of registered electoral lists of political parties [Kharkivska miska rada. Vyborchi 2015; Kharkivska miska rada. Vyborchi 2020; Kharkivska oblasna rada. Vyborchi 2015; Kharkivska oblasna rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2015; Khersonska miska rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2015; Lvivska miska rada. Vyborchi 2020; Lvivska oblasna rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2020; Vinnytska miska rada. Vyborchi 2015; Vinnytska miska rada. Vyborchi 2020; Vinnytska oblasna rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2020].

At the Regional Council elections in 2015, 11 violations of the quota principle were committed, which is 15.49% of all registered voter lists [Kharkivska miska rada. Vyborchi 2015; Kharkivska oblasna rada. Vyborchi 2015; Khersonska miska rada. Vyborchi 2015; Khersonska miska rada.

borchi 2015; Khersonska oblasna rada. Vyborchi 2015; Lvivska miska rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2015; Vinnytska miska rada. Vyborchi 2015; Vinnytska oblasna rada. Vyborchi 2015]. In 2020, violations of the principle of gender equality were committed by 7 political forces out of 75 registered, which is 9.33% [Kharkivska miska rada. Vyborchi 2020; Kharkivska oblasna rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2020; Lvivska oblasna rada. Vyborchi 2020; Vinnytska miska rada. Vyborchi 2020; Vinnytska oblasna rada. Vyborchi 2020]. That is, in the last local elections, a larger number of parties used the principle of quotas when forming their electoral lists than in the elections held in 2015.

In addition, in 2015, three political forces, namely «Opozytsiynyy blok» in the elections to the Lviv Regional Council, «Vseukrayinska partiya dukhovnosti ta patriotyzmu» in the elections to the Kherson Regional Council and «Blok Darta Veydera» in the elections to the regional and City Councils Kharkiv and Kherson City Councils did not include women in their electoral lists at all [Kharkivska miska rada. Vyborchi 2015; Kharkivska oblasna rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2015; Khersonska oblasna rada. Vyborchi 2015; Lvivska oblasna rada. Vyborchi 2015]. На місцевих виборах 2020 року в досліджуваних нами регіонах партій, у списках яких відсутні жінки, не було [Kharkivska miska rada. Vyborchi 2020; Khersonska oblasna rada. Vyborchi 2020; Khersonska miska rada. Vyborchi 2020; Lvivska oblasna rada. Vyborchi 2020; Lvivska miska rada. Vyborchi 2020; Lvivska oblasna rada. Vyborchi 2020; Vinnytska oblasna rada. Vyborchi 2020].

In general, it is worth noting that in 2020, women were much more actively involved in the election process. If we compare the results of the 2015 and 2020 elections, it is worth noting that the introduction of the new principle of gender quotas in the formation of party lists is really effective and contributed not only to a significant increase in the share of women in party lists, but also to the election of a significantly larger number of women to local authorities.

CONCLUSIONS AND RECOMMENDATIONS

The principle of gender equality is an important principle of the electoral process in all democratic countries of the world. Ensuring gender parity in the electoral process contributes to increasing the number of women in political life, which is an important factor in the democratic development of society. Compliance with the principle of balanced gender representation is ensured and monitored in most countries of the world. In order to guarantee gender equality in elections at the state and party levels, various mechanisms are used, the most common of which is gender quotas. The various gender quotas are temporary and promote balanced gender representation on electoral rolls. In general, gender quotas are applied in more than 130 countries of the world. However, they are effective only if there is a mechanism of sanctions for viola-

tion of the quota principle. It is important when implementing gender equality policy not to forget that granting privileges to one gender should not limit the opportunities and rights of another, otherwise it violates the very principle of equality.

Ukraine has ratified all key documents related to gender equality. At the local elections of 2015, a gender quota of 30% was introduced in Ukraine. And already during the 2020 local elections, the new electoral code introduced a quota of 40%, which stipulates that each quinary must have at least two representatives of each sex.

Based on the results of the research, we conclude that gender quotas in Ukraine are quite a necessary phenomenon, as they ensure a minimum share of women's representation. However, a negative phenomenon is the lack of sanctions, due to which there are some parties that do not comply with gender quotas. At the same time, it is positive that, compared to 2015, the share of parties that did not comply with the gender quota in local elections in 2020 has significantly decreased.

As evidenced by the results of the 2020 local elections in Ukraine, the established gender quota is quite effective, because it not only ensures a gender-balanced representation of women in the electoral lists of political parties, but also positively affects the share of women elected to local authorities. A positive factor that significantly influenced the election results was the fact that most parties adhered to the principle of gender quotas. This made it possible to ensure the representation of women in electoral lists at the level of more than 30% in 2015 and more than 40% in 2020. The gender quota that was used in the 2020 elections is significantly more effective than the gender quota adopted in 2015. This is due to the fact that it does not allow women to be included in the lower part of the electoral list, but forces representatives of both sexes to alternate. Thus, getting into the transitional part of the electoral list, women have more chances to be elected. However, it is worth noting that the share of women elected to local authorities is quite low, but this indicator has a growing tendency. In 2020, it increased by 10% compared to 2015.

The fact that in 2020 the number of female representatives who became leaders of political parties in the elections to Regional Councils of the studied regions increased is also positive. In particular, if there were 11 of them in 2015, then in 2020 there were 17 of them.

Comparing the local elections of 2015 and 2020, it can be concluded that the increase in gender quotas leads to an increase in the share of women in representative authorities, which contributes to gender parity in politics. And, despite some violations of the principle of balanced gender representation, it is worth noting that Ukraine is moving in the right direction in terms of achieving gender parity in the electoral process. At the same time, it is also important to form a high level of political and electoral culture of citizens, which will contribute to the formation of sustainable ideas about the equality of men and women in all spheres of social life in general, and in the political sphere, in particular.

REFERENCES

Balanced participation of women and men in political and public decision-making, (2003), Committee of Ministers of the Council of Europe [online; accessed 2022-09-15]. Available from WWW: https://rm.coe.int/1680519084

Code of Good Practice in Election Matters, (2002), Venice Commission [online; accessed 2022-09-13]. Available from WWW:https://rm.coe.int/090000168092af01

Code of Good Practice in Electoral Matters: Guidelines and Explanatory Report (2002). Venice Commission [online; accessed 2022-09-15]. Available from WWW: https://www.venice.coe.int/webforms/documents/?pdf=CDL-AD(2002)023rev2-cor-e

Code of Good Practice in the Field of Political Parties, (2008), Venice Commission [online; accessed 2022-09-18]. Available from WWW: https://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-AD(2009)002-e

Convention on the Elimination of All Forms of Discrimination against Women, (1979), UN [online; accessed 2022-09-17]. Available from WWW:https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women

Convention on the Political Rights of Women, (1952), UN [online; accessed 2022-09-17]. Available from WWW: https://treaties.un.org/doc/treaties/1954/07/19540707%2000-40%20 am/ch_xvi_1p.pdf

Convention on the Protection of Human Rights and Fundamental Freedoms, (1950), Council of Europe [online; accessed 2022-09-10]. Available from WWW: https://www.eods.eu/library/CoE_European%20Convention%20for%20the%20Protection%20of%20Human%20 Rights%20and%20Fundamental%20Freedoms_1950_EN.pdf

Declaration on women's participation in elections, (2006), Venice Commission [online; accessed 2022-09-12]. Available from WWW: https://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-AD(2006)020-e

International Covenant on Economic, Social and Cultural Rights, (1966), UN [online; accessed 2022-09-15]. Available from WWW: https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights

Kharkivska miska rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-28]. Available from WWW: https://web.archive.org/web/20170602092723/http://www.cvk.gov.ua/pls/vm2015/PVM056?PID102=5914&PF7691=5914&PT001F01=100&re-j=0&pt00_t001f01=100

Kharkivska miska rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-28]. Available from WWW: https://web.archive.org/web/20220225063310/https://cvk.gov.ua/pls/vm2020/pvm056pid102=5914pf7691=64337pt001f01=695rej=0pt00_t001f01=695.html

Kharkivska miska rada. Obrani deputatamy rady u vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-25]. Available from WWW: https://web.archive.org/web/20170701174614/http://www.cvk.gov.ua/pls/vm2015/PVM057?PID112=30&PID102=5914&PF7691=5914&PT001F01=100&rej=0&pt00_t001f01=100

Kharkivska miska rada. Obrani deputatamy rady u vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-30]. Available from WWW: https://web.archive.org/web/20220225065646if_/https://cvk.gov.ua/pls/vm2020/pvm057pid112=30pid102=5914pf7691=64337pt001f01=695rej=0pt00_t001f01=695.html

Kharkivska oblasna rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-29]. Available from WWW: https://web.archive.org/web/20160625132855/http://www.cvk.gov.ua/pls/vm2015/PVM056?PID102=5441&PF7691=5441&PT001F01=100&re-j=0&pt00_t001f01=100

Kharkivska oblasna rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-28]. Available from WWW: https://web.archive.org/web/20220225063220/https://cvk.gov.ua/pls/vm2020/pvm056pid102=5441pf7691=5441pt001f01=695rej=0pt00_

t001f01=695.html

Kharkivska oblasna rada. Obrani deputatamy rady u vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-26]. Available from WWW: https://web.archive.org/web/20170306212614/http://www.cvk.gov.ua/pls/vm2015/PVM057?PID112=12&PID102=5441&PF7691=5441&PT001F01=100&rej=0&pt00_t001f01=100

Kharkivska oblasna rada. Obrani deputatamy rady u vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-29]. Available from WWW: https://web.archive.org/web/20220225071043if_/https://cvk.gov.ua/pls/vm2020/pvm057pid112=12pid102=5441pf7691=5441pt001f01=695rej=0pt00_t001f01=695.html

Khersonska miska rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-28]. Available from WWW: https://web.archive.org/web/20170301163125/http://www.cvk.gov.ua/pls/vm2015/PVM056?PID102=3996&PF7691=3996&PT001F01=100&re-j=0&pt00_t001f01=100

Khersonska miska rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-02]. Available from WWW: https://web.archive.org/web/20220225063251if_/https://cvk.gov.ua/pls/vm2020/pvm056pid102=3996pf7691=63718pt001f01=695re-j=0pt00_t001f01=695.html

Khersonska miska rada. Obrani deputatamy rady u vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-02]. Available from WWW: https://web.archive.org/web/20170826052157/http://www.cvk.gov.ua/pls/vm2015/PVM057?PID112=30&PID102=3996&PF7691=3996&PT001F01=100&rej=0&pt00_t001f01=100

Khersonska miska rada. Obrani deputatamy rady u vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-04]. Available from WWW: https://web.archive.org/web/20220225071236if_/https://cvk.gov.ua/pls/vm2020/pvm057pid112=30pid102=3996pf7691=63718pt001f01=695rej=0pt00_t001f01=695.html

Khersonska oblasna rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-03]. Available from WWW: https://web.archive.org/web/20160305134951/http://www.cvk.gov.ua/pls/vm2015/PVM056?PID102=3698&PF7691=3698&PT001F01=100&re-j=0&pt00 t001f01=100

Khersonska oblasna rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-05]. Available from WWW: https://web.archive.org/web/20220225063236/https://cvk.gov.ua/pls/vm2020/pvm056pid102=3698pf7691=3698pt001f01=695rej=0pt00_t001f01=695.html

Khersonska oblasna rada. Obrani deputatamy rady u vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-03]. Available from WWW: https://web.archive.org/web/20160327165658/http://www.cvk.gov.ua/pls/vm2015/PVM057?PID112=12&PID102=3698&PF7691=3698&PT001F01=100&rej=0&pt00_t001f01=100

Khersonska oblasna rada. Obrani deputatamy rady u vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-02]. Available from WWW: https://web.archive.org/web/20220225070803if_/https://cvk.gov.ua/pls/vm2020/pvm057pid112=12pid102=3698pf7691=3698pt001f01=695rej=0pt00_t001f01=695.html

Lvivska miska rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-05]. Available from WWW: https://web.archive.org/web/20161105044049/http://www.cvk.gov.ua/pls/vm2015/PVM056?PID102=3670&PF7691=3670&PT001F01=100&rej=0&pt00_t001f01=100

Lvivska miska rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-05]. Available from WWW: https://web.archive.org/web/20220225063305/https://cvk.gov.ua/pls/vm2020/pvm056pid102=3670pf7691=64097pt001f01=695rej=0pt00_t001f01=695. html

Lvivska miska rada. Obrani deputatamy rady u vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-04]. Available from WWW: https://web.archive.org/web/20160304201554/http://www.cvk.gov.ua/pls/vm2015/PVM057?PID112=30&PID102=3670&PF7691=3670&PT001F01=100&rej=0&pt00_t001f01=100

Lvivska miska rada. Obrani deputatamy rady u vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-05]. Available from WWW: https://web.archive.org/web/20220225070124if_/https://cvk.gov.ua/pls/vm2020/pvm057pid112=30pid102=3670pf7691=64097pt001f01=695rej=0pt00_t001f01=695.html

Lvivska oblasna rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-06]. Available from WWW: https://web.archive.org/web/20161105043943/http://www.cvk.gov.ua/pls/vm2015/PVM056?PID102=2962&PF7691=2962&PT001F01=100&rej=0&pt00_t001f01=100#

Lvivska oblasna rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-08]. Available from WWW: https://web.archive.org/web/20220225063225/https://cvk.gov.ua/pls/vm2020/pvm056pid102=2962pf7691=2962pt001f01=695rej=0pt00_t001f01=695. html

Lvivska oblasna rada. Obrani deputatamy rady u vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-05]. Available from WWW: https://web.archive.org/web/20160304214554/http://www.cvk.gov.ua/pls/vm2015/PVM057?PID112=12&PID102=2962&PF7691=2962&PT001F01=100&rej=0&pt00_t001f01=100

Lvivska oblasna rada. Obrani deputatamy rady u vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-12-05]. Available from WWW: https://web.archive.org/web/20220225071800if_/https://cvk.gov.ua/pls/vm2020/pvm057pid112=12pid102=2962pf7691=2962pt001f01=695rej=0pt00_t001f01=695.html

Pro mistsevi vybory: Zakon Ukrainy, (2015), Ofitsiinyi sait Verkhovnoi Rady Ukrainy [online; accessed 2022-10-14]. Available from WWW: https://zakon.rada.gov.ua/laws/show/595-19/ed20151209#Text

Pro politychni partii v Ukraini: Zakon Ukrainy, (2013), Ofitsiinyi sait Verkhovnoi Rady Ukrainy [online; accessed 2022-10-12]. Available from WWW: https://zakon.rada.gov.ua/laws/show/2365-14#Text

Pro vdoskonalennia roboty tsentralnykh i mistsevykh orhaniv vykonavchoi vlady shchodo zabezpechennia rivnykh prav ta mozhlyvostei zhinok i cholovikiv: Ukaz Prezydenta Ukrainy, (2005), Ofitsiinyi sait Verkhovnoi Rady Ukrainy [online; accessed 2022-10-14]. Available from WWW: https://zakon.rada.gov.ua/laws/show/1135/2005#Text

Pro zabezpechennia rivnykh prav ta mozhlyvostei zhinok i cholovikiv: Zakon Ukrainy, (2005), Ofitsiinyi sait Verkhovnoi Rady Ukrainy [online; accessed 2022-10-15]. Available from WWW: https://zakon.rada.gov.ua/laws/show/2866-15#Text

Report on Electoral Legislation and Electoral Administration in Europe, (2020), Venice Commission [online; accessed 2022-09-16]. Available from WWW: https://www.venice.coe.int/webforms/documents/default.aspx?pdffile=CDL-AD(2020)023-e

Vinnytska miska rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal: офіційний веб-портал [online; accessed 2022-11-11]. Available from WWW: https://web.archive.org/web/20170610214358/http://www.cvk.gov.ua/pls/vm2015/PVM056?PID102=7199&P-F7691=7199&PT001F01=100&rej=0&pt00_t001f01=100

Vinnytska miska rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-11]. Available from WWW: https://web.archive.org/web/20220225063412/https://cvk.gov.ua/pls/vm2020/pvm056pid102=7199pf7691=65096pt001f01=695rej=0pt00_t001f01=695. html

Vinnytska miska rada. Obrani deputatamy rady u vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-18]. Available from WWW: https://web.archive.org/web/20160828055718/http://www.cvk.gov.ua/pls/vm2015/PVM057?PID112=30&PID102=7199&PF7691=7199&PT001F01=100&rej=0&pt00_

t001f01=100

Vinnytska miska rada. Obrani deputatamy rady u vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-15]. Available from WWW: https://web.archive.org/web/20220225065133if_/https://cvk.gov.ua/pls/vm2020/pvm057pid112=30pid102=7199pf7691=65096pt001f01=695rej=0pt00_t001f01=695.html

Vinnytska oblasna rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-15]. Available from WWW: https://web.archive.org/web/20161024215747/http://www.cvk.gov.ua/pls/vm2015/PVM056?PID102=6467&PF7691=6467&PT001F01=100&re-j=0&pt00_t001f01=100

Vinnytska oblasna rada. Vyborchi spysky kandydativ v bahatomandatnomu vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-22]. Available from WWW: https://web.archive.org/web/20220225063406/https://cvk.gov.ua/pls/vm2020/pvm056pid102=6467pf7691=6467pt001f01=695rej=0pt00_t001f01=695.html

Vinnytska oblasna rada. Obrani deputatamy rady u vyborchomu okruzi, (2015), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-16]. Available from WWW: https://web.archive.org/web/20170112023505/http://www.cvk.gov.ua/pls/vm2015/PVM057?PID112=12&PID102=6467&PF7691=6467&PT001F01=100&rej=0&pt00_t001f01=100

Vinnytska oblasna rada. Obrani deputatamy rady u vyborchomu okruzi, (2020), Tsentralna vyborcha komisiia Ukrainy: ofitsiinyi veb-portal [online; accessed 2022-11-16]. Available from WWW: https://web.archive.org/web/20220225065543if_/https://cvk.gov.ua/pls/vm2020/pvm057pid112=12pid102=6467pf7691=6467pt001f01=695rej=0pt00_t001f01=695.html

Vyborchyi kodeks Ukrainy, (2019), Ofitsiinyi sait Verkhovnoi Rady Ukrainy [online; accessed 2022-11-15]. Available from WWW: https://zakon.rada.gov.ua/laws/show/396-20/ed20191219#Text

ANALYSIS OF THE IDIOLECT OF BARACK OBAMA

Mária Kočnerová

Department of Philosophy and Politology, Constantine the Philosopher University in Nitra, Faculty of Arts, A. Hlinku 1, 949 74, Nitra, Slovak Republic mkocnerova@ukf.sk

&

Petra Grigelová

Department of Philosophy and Politology, Constantine the Philosopher University in Nitra, Faculty of Arts, A. Hlinku 1, 949 74, Nitra, Slovak Republic, The Institute of Political Science Slovak Academy of Sciences, Dúbravská cesta 9, 841 04, Bratislava, SR petra.grigelova@savba.sk

&

Michal Ďureje

Department of Philosophy and Politology, Constantine the Philosopher University in Nitra, Faculty of Arts, A. Hlinku 1, 949 74, Nitra, Slovak Republic, former PhD studentsandro michaldureje@gmail.com

Abstract

In this article, the authors will focus on the analysis of the idiolect and rhetoric of U.S. President Barack Obama through his speeches, statements, and use of terms. As the main research method, we will use the analysis and for better description and result evaluation, we also focus on comparison with other U.S. presidents. For a deeper analysis of the discursive strategies of Barack Obama, we also apply critical discourse analysis to achieve more complex characteristics of his idiolect. Following this main goal by writing the article we suppose that the rhetoric and idiolect of Barack Obama is positively disposed and very attractive for the public.

Key words: Idiolect, Rhetoric, Barack Obama, U.S. President, Critical Discourse Analysis

INTRODUCTION

There is power in the world. This assertion gains its strength when we talk about politics. State power bodies, their representatives, prime ministers, and presidents are the most influential people in the world political system. Because of this, their speeches are so sharply watched, especially when you are the president of the United States, the most powerful statesman in the world. Everyone is watching your political steps and way of speaking to predict your future political actions. This article is focused on the idiolect and rhetoric of the 44th president of the United States of America, Barack Hussein Obama. We will analyse his way of speaking, use of terms, and what is typical for him with an emphasis on the national interest presentation. As the main research method, we will use the analysis and for better description and result evaluation, we also focus on comparison with Obama's predecessors. We will work with critical discourse analysis dealing fundamentally with the identity question of who we are. Given that identity is crafted through language and communication, which could be tools of soft power. Soft power is the ability to affect others through co-optive means of framing agenda, persuading, and eliciting positive attraction, transmitted mainly in media [Nye 2011]. Soft power could be defined then as resources measurable in terms of a country's culture, political traditions and values, and foreign policy, which we will illustrate in Obama's policy. We are convinced, soft power cannot exist outside of language or discourse that gives meaning to it [Laclau, Mouffe 2001] and this language should change due the persuading countries or regions [Brhlíková 2013]. Employing relevant methods and concept of critical discourse analysis, which is concerned with problematizing the role of discourse in power relations, we dissect the framing of Barack Obama. We identify three soft power discourse practices: charm offensive, Othering offensive, and defensive denial. Among the three discursive strategies is charm offensive probably most familiar for Obama's rhetoric and idiolect. It describes the sum of public diplomacy aimed at promoting positive self-images and winning hearts and minds. It's a practice of constructing the self in a positive light. Notable examples can be found in such discourse as the "American Dream", presented also in Obama's presidential campaign. Othering offensive refers to the construction of a negative and repulsive "Other" as a foil for indirectly fashioning a positive and attractive self-identity. Obama used it against his presidential precursor's foreign policy towards the Middle East and Afghanistan in his campaign, but this is the usual method used in campaigns all over the world. Othering offensive can also be used by justifying the domination and the use of hard power typical for U.S. presidents Bush Jr. and Trump. A citing example of such discourse is the "Axis of Evil" used by Bush Jr. to manipulate the negative images of those countries and support the U.S. leadership and foreign policy. By defensive denial we mean a largely reactive strategy of resisting or denying negative discourses about Self, often as a response to an Othering offensive by other actors. For example, to refute damaging discourses about Japan's war atrocities in World War II [Pan, Isakhan, Nwokora 2020]. When Obama took the office in 2009, he faced quite a difficult situation. His mission was to show to US citizens and to the world America in a better light. American "War on Terror", which was the priority of G.W. Bush's administration, lasted for seven years. It was attended by Bush's disruptive rhetoric and erroneous war in Iraq, which caused expending of soft power possibilities. Because of that Obama's top preference was to supplement them [Bettiza 2009]. "The first shift in comparison with Obama's precursor, discernible immediately after he took Office, was in the rhetoric of the new president. Obama's first interview in his new post was to the Arab satellite TV Al-Arabiya, with the aim to address and renew his commitments to the Arab and Muslim world." [Kočnerová, Kasanová 2013:68]. In this nexus, he stressed the importance of soft power, and diplomacy as tools for national interest advocacy not only towards the Middle East.

1. MIDDLE EAST

In relation to the Middle East, "Obama distanced himself from his predecessor's faithbased agenda and stressed that he would not preach to other nations or impose American values." [Gerges 2012:8]. Many times, we have heard how Obama quoted Koran. His answer to a question about the relationship between the United States and the Muslim world was clear when he called upon its new start at the University of Cairo. According to his speech, it is necessary that the language used between the United States and the Muslim world will be the language of respect [Obama 2009b]. In an interview with Al-Arabiya, he also stressed the importance of understanding the fact, that the USA is not the enemy of the Muslim world. He added that some members of his own family are Muslims, and he has lived in Muslim countries too [Obama 2009a]. Obama was against the war in Iraq because he thought that it was the wrong war at the wrong time. But he endorsed the American move into Afghanistan after 11th September had happened and he supported the goal of this operation, which was to root out Taliban and Al-Qaeda too [Berry, Gottheimer 2011]. As he said "I don't oppose all wars... What I am opposed to is a dumb war. What I am opposed to is a rash war." [Obama, 2002]. King claims that Obama dealt far more with public rhetoric about Afghanistan and with problems of combating terrorism in comparison with his attention to ending the war in Iraq [King 2014:136]. In this connection, he used the cliché "time to turn the page" and aimed his effort to Afghanistan.

"On Afghanistan - America's longest war - Obama expressed just a continued commitment to bringing the troops home, ending "our war" while theirs continues" [Coleman, 2013]. Obama wanted to alter the interpretation of the "war on terror" against worldwide Islamofascism, to war against a "far-reaching network of violence and hatred" [Obama 2010:1], Al-Qaeda [Bettiza 2009]. His discursive strategy was othering offensive referring to G. W. Bush's activities in the Middle East. But on the other hand,

Obama eschewed his predecessor's war terminology and gave a more specific definition of the real threat, which represented Al-Qaeda [Ellis 2012]. He also added to "do whatever it takes to defeat them." [Obama 2010:1].

Obama's approach is pragmatic, which means that it is reactive. He usually defines problems as they come up, concurrently and separately too. Obama also formulates a few national interest priorities, but he doesn't express his global vision of American and the world's direction. His aim was to end the U.S. engagement in the wars. For this reason, he also awaited other countries to step up as the USA steps back. American president generally separates and reduces possible threats, as we could see in Iraq. Obama proclaimed, that mission is accomplished and moved away. This step caused Iran, which is considered to be the biggest threat in this region, has shifted into Iraq. Its intentions there are to strengthen the Shiite regime and to purvey arms to jihadists in surrounding countries [Nau 2013].

2. HOPE AND CHANGE

When we talk about Barack Obama, we must emphasize his "rhetoric of hope". Obama used this rhetoric for a long time before he became American president. It was accompanied by his post in the US Senate and his books, *Dreams of My Father and Audacity of Hope.* "His rhetoric of hope may also be defined as a rhetoric of new politics." [Atwarter 2009:7].

When Obama "spoke about hope or change, or when he was forced to address himself to the race issue, the American people listened intently. He knew he had to choose his words wisely and that he could persuade, and dissuade, in an instant." [Berry, Gottheimer 2011:5].

Atwater gave the rhetoric of hope definition as something that thanks to the use of symbols makes US citizens take care of the country their live in. To make them trust in it and of course to trust the fact, that people are more similar to each other than different. Obama used the rhetoric of hope in his campaign to persuade Americans because his intention was to make them interested in and also take part in the political process. Finally, he wanted to get their votes. Because only if you have hope and trust in something, it is thereafter possible that Obama can be the first Black president of the USA [Atwater 2009].

"In 2007, Barack Obama presented himself as the candidate of change and worked to lure Democrats with ads that promised that: We Can End a War", "We Can Save the Planet," "We Can Change the World." [Walter 2011:7]. His electoral rhetoric was focused on the slogan "Yes, we can ", meaning that yes, we can do anything, we just have to make the right choice. And the right choice for the USA should be Barack Obama, the candidate for hope, peace, and change because the USA definitely needed those attributes. The call for peace has shown as one of the most important interests of the American population at that time. This charm offensive discourse practice of Obama to promote himself and the U.S. in better light was a very successful policy

and rhetoric not only towards Americans but also to the world community, what Nobel Prize for Peace could be evidence.

Ferrara sees it differently and he defined hope as a utopian ideal. According to him "the anticipatory nature of rational utopias, like Obama's rhetoric of hope, exploits the dialectical tension between the ideal and the existing order implicit in the forward glance. "[Ferrara 2013:23]. In addition, his use of the rhetoric of hope clears up the difference between the need for values on the one hand and the demand of freeing them from ideology on the other hand [Ferrara 2011]

3. RHETORIC

When we talk about the rhetorical abilities of Barack Obama, we have to emphasize that "the election of Obama was also the first presidential election since Kennedy's narrow triumph over Nixon in 1960 in which the victor's campaign oratory was a principal reason for his success." [Sorensen 2011:1]

When Obama worked as a state legislator, he was inclined to the left. It changed and he started to incline more to the centre when he was a candidate for Congress in 1999. At the time when Obama was a presidential candidate, the main themes of his speech, which also became the main message of his presidential campaign, were well-known unity, responsibility, and change. The most important and influential elements of his campaign were his self-confidence and pleasant voice together with his natural stage performance and his poise in connection to his young, attractive family. Obama was something like amazement for the American nation, because his father was a black Kenyan, and his mother was a white woman from Kansas. He spent his childhood in Honolulu, Hawaii, and Jakarta. The United States and also the whole world have never seen anything like this before [Berry, Gottheimer 2011] and his rhetoric and way of communication could be influenced by cultures of different regions [Mészárosová 2006].

Speeches that were presented by Barack Obama during his campaign, gave an indication that Obama would have his rank with his predecessors like Jefferson, Lincoln, Wilson, Franklin, Roosevelt, and Kennedy. They all have the same feature - their oratory, which the whole world would listen to and remember. It is very important to realize, that Barack Obama as the US president was not just the instrument or a voice of his gifted speechwriters, but he was by nature a leader, as well as a thoughtful decision-maker. Obama was also a good listener, and he could reach the best opinions and advice from his team of advisers and administration [Berry, Gottheimer 2011]. "Most of Obama's use of folk speech comes in the form of proverbial phrases without any claim to wisdom or truth. He uses these metaphorical phrases to add a certain expressiveness, emotion, colour, imagery, and colloquialism to his writings and speeches. It is here where he shows himself to be part of the general population." [Mieder 2009:3]. This type of discourse we find as charm offensive because its goal is to win the hearts and minds of people.

Afra paid attention to Obama's speech at AIPAC and according to his analyse, this speech showed, that Obama's rhetoric is greatly double-edged. His intention is probably to conciliate both sides, his fans, and his objectors too. For Obama is typical to use the high-minded expression, for example, "dignity", "democracy" or "freedom". However, in the end, he deprived those expressions of any sense. That means he tried to pave his political way for political actions replete with moral relativism at best and on the other hand with a tolerance of evil at worst. Afra considers that the American president has started using words with no meaning when he commended the students present for "engaging deeply in our democratic debate." [Afra 2012].

When Obama used the pronoun "we" while addressing his speech, he thought of all Americans. He wanted to make them more active, and he also wanted to make them responsible for the future of the country they live in. What was typical for him as a president of the USA is his "attempt to concentrate on the domestic issues, "nation", "our nation" being the most prominent words and collocations and begin a "new" chapter in the relations with "the world". At the same time, the key attribute of Obama's address is the adjective "new", which characterizes the strategy and ideas of the newly sworn president and his administration." [Horváth 2009:54]. During the presidential campaign, Obama applied a little bit of dissimilar leadership, and it happened in all facets of his rhetoric. According to Dahlgreen, he modified his optimism in the year 2012, when he applied distinct levels of Optimism and Realism, in comparison with their use while governing. Obama also used diverse levels of Optimism and Certainty during his campaign travel in the year 2010 and the year 2012. Obama had the unique look of his constituency as a national audience and that is the reason why his Commonality remained from the equal population of rhetoric. When we look at the impression of the year 2012, it was exceptionally divisive and party-centric. In connection to this, we can easily note that the contrast between how Obama spoke to the American nation and to a room of campaign followers wasn't diverse. Obama's opinion of campaign leadership was other than his view on governing leadership. But what wasn't different there was the tone of his rhetoric, which is related to defining differences [Hart 2014]. In the end, Obama's words sometimes revealed conflict reconciliation intentions; however, it happened most frequently through the concept of optimism, not through the concept of commonality [Hart 2014].

When we want to understand how Obama works with language, we can't compare him to other politicians or any other gifted orators. The fact is, that his rhetoric originates the most from some particular sources like homiletic, preaching, and also the traditions of the black Protestant churches [Berry, Gottheimer 2011]. "In many ways, speech is action. When Obama speaks forcefully, as he did in his second inaugural address, he enables action to follow. Changing the public political discourse also changes public understanding, leading to new demands for political action."[Lakoff 2013:2].

The advantage of Barack Obama was his capability to connect White syntax, which was the official language of Washington together with Black style. Black style is nec-

essary to understand as a cultural way of expression of the Black population in America. This singular ability of Obama was a pivotal element in founding his identity as an American citizen, as well as Christian [Alim, Smithermann 2012].

4. RHETORICAL STRATEGIES

Efficiency of Barack Obama's speeches reside in several rhetorical strategies, he usually used and those are:

- 1. The power of allusion and its patriotic associations.
- 2. The oratorical resonance of parallel constructions.
- 3. The "two-ness" of the texture, to use DuBois's useful term.
- 4. His ability to include himself as a character in a narrative about race. [Clark 2008:8].

1. Allusion:

In the tradition of Martin Luther King, Jr., Obama starts some of his speeches with quotes¹ from the Constitution. Barack Obama notes words like democracy, Declaration of Independence, the founders, the Constitution, liberty, justice, equal, free, prosperous, etc. It is very important to mention, that many black leaders usually use two diverse modes of their discourse when they speak to white and black audiences. Obama´s wordage is patriotic. Its mission is to comfort white auditors and sober down their fears. Use of the language which betrays failures, not ideals, keeps Obama´s speech from falling into a sea of slogans and cliché. When Barack Obama didn´t want to disenchant potential voters with a dark vision of America, he usually reinstated familiar evocations of national history, ideals, and language. Examples:

- "The immigrant trying to feed his family".
- "Where our union grows stronger".
- "Out of many, we are truly one ." [Obama 2008]

2. Parallelism:

The fact is, that parallel construction in speech helps the authors make their meaning memorable. It works on the ground of equal terms to express equal ideas of the orator. Examples:

- "This was one of the tasks we set forth at the beginning of this campaign to continue the long march of those who came before us, a march for a more just, more equal, more free, more caring and more prosperous America."
- "...we may not have come from the same place, but we all want to move in the same direction."
- "...embracing the burdens of our past without becoming victims of our past." [Obama 2008]

¹ "We the people, in order to form a more perfect union..."

3. Two-ness:

In Obama's rhetoric there is noticeable use of two-ness. Dualism affords the opportunity to produce both tension and balance. It also allows Barack Obama to present himself as the one, who builds bridges, without being too much messianic. Examples:

- "on the streets and in the courts"
- "white and black"
- "too black or not black enough"

4. Autobiography:

Presidential candidates usually tend to declare, that their life is accompanied by a battle against poverty and hard circumstances too. According to Obama's words, his father was a black Kenyan, and his mother was white from Kansas. He stressed that he has members of his family of every race and every hue interspersed across three continents. He spoke about the blood of slave and slave owners, and about an inheritance, which he wants to hand on his two daughters [Clark 2008].

Obama's use of rhetorical strategies leading to the persuasive effect of his speeches also confirms Rezaei and Nourali, who analysed the use of persuasive techniques in two selected speeches of Obama. Their research based on the discourse analysis concerned the summarization of used language techniques and evaluated the metaphor as the most frequently persuasive technique used by Obama.² The authors also emphasized the influence that cultural background has on the use of persuasive techniques. [Rezaei, Nourali 2016]. As stressed also by [Tökölyová 2016], analysing foreign policy and understanding the meaning of (his) words correctly, it is necessary to know the speaker's/politician's cultural background.

5. MEDIA

Barack Obama directed his presidential campaigns purposefully and all his steps were very effective. It proved the way how Obama took advantage of the use of mass media to his own benefit. "Obama is a Master of Communication. He has perfect command of traditional as well as new media options and is able to seed his news and messages in the media in a fast and all-embracing manner. Thanks to the effective use of the modern media environment, the incumbent U.S. President enjoys a unique position due to his global personality acumen and the sheer power of his cultural environment. As a politician, he is a celebrity although he has not been known before." [Kočnerová, Kasanová 2013:69].

Many experts came to an agreement that exactly designed website for a political campaign guaranteed Obama's victory. The Internet is a very important element in politics as well as television. Typical for this century is that the Internet gains even

² In two researched speeches they studied what persuasive techniques Obama had used and tried to count them (concretely allusion, wordplay, lists of three, metaphor, alliteration, parallelism, repetition, puzzled or redundant questions).

more and more influence [Solo 2014]. It creates new possibilities for how to easily enter citizens into dialogues with politicians or the government.

6. SPEECHWRITING

As we have already said, Barack Obama has always been a gifted speaker and gifted writer. After finishing law school, he wrote several books as we have mentioned at the beginning of the chapter. Even if he wrote many of his speeches, writing took his precious time, so Obama created his own speechwriting team that caused his rhetorical and stylistic transformation [Berry, Gottheimer 2011].

Obama can be considered punctilious because he usually worked until late at night to finish his speech. However, during the presidential campaign when Obama travelled through the USA, played a key role in his speechwriting team. "Favreau or one of the other writers would speak to Obama on the phone and then, after seeing edits from Axelrod, Gibbs and others, e-mail or fax the speech to Obama's assistant, Reggie Love, who was on the road with the candidate. Obama would then send back his comments through Axelrod or Love or simply pick up the phone and call the writer. In some cases, Obama would e-mail comments to the speechwriter from his BlackBerry or send a document with tracked changes directly from his laptop." [Berry, Gottheimer 2011:18]. When it comes to president's speeches, Obama was very hardworking and took an active part in creating his speech. He did not have problems working all night just to find the right words and argue them out with his team.

7. RESULT OF BARACK OBAMA'S LANGUAGE RESEARCH

We would like to stress the research Alim and Smithermann made among the "Obama generation", where they categorized ages 18-24, with a few in their early thirties, in America. According to their results, Obama was enormously highly considered to be a speaker and communicator too. One respondent also regarded Obama to be the most powerful speaker of our age. When respondents answered the question about describing Obama's language, the most repeated word about his language use was eloquent. Other answers emphasized, that Obama spoke with conviction, and he frequently uses words like confident in order to define his language. The American president was considered to be poised, composed, and always in control of the situation too. Obama seemed to be highly educated, but he didn't patronize his audience. Although the Republican view on Obama could be described as elite and too professional, many American perceived him to be able to communicate complicated ideas in an outspoken manner. Other words that described Obama's use of language were clear, direct, careful, deliberate, etc. He made an impression of inspiring, empowering, and also motivating. Obama is considered to be a Master of Communication because he can use both ways to address his words to an audience, which means he can speak to a community as well as to individuals. Obama is in accordance with this generation like no other presidential candidate did [Alim, Smithermann 2012].

"Obama is greeted as a celebrity in the United States and the rest of the world, one who has used modern mass media Technologies to become a Master of Communication. He is considered a charismatic leader, and the key element of his rhetoric is a combination of official language with African-American slang." [Kočnerová, Kasanová 2013:71].

Language of Barack Obama in comparison with his predecessors "was described as "dynamic", "captivating", "intoxicating", and "rhythmic almost to the point of hypnosis". His speeches were seen as "vibrant, charismatic" and "replete with imagery", as "prose that flirts with the boundary of poetry". In short, Barack Obama was viewed as one helluva gifted orator, quite possibly the most effective and powerful that this generation witnessed. In Barack Obama, America heard a speaker who was "strategic" and "hyperaware" of his audience. It's one thing to know that you gotta say "the right things" in right way in terms of style. Barack was seen as someone who could speak directly and comfortably with folks across region, generations, socioeconomic divisions, racial and ethnic groups, and political and religious views." [Alim, Smithermann 2012:21]. Barack Obama belongs to those American politicians, who still consider the moral value system to be the real existing phenomenon. American society adheres to freedom of the will, which provides progress for the individual. Obama confesses American values like family, generational relations, patriotism, local communities, duty to serve good to the own country, and more universal elements like justice, respectfulness, modesty, and solidarity. This is typical terminology of charm offensive discourse used in political speeches. Obama emphasizes statesmen's moral responsibility for their verbal and written expression. According to his opinion, it is important to know, that whichever guiltless word can also have other meanings in other contexts. That is the reason why Obama dedicated himself with his speeches so carefully. He knew that he represented his political party and his voters too and this means enormous responsibility. [Dobrowolski 2008].

CONCLUSION

Year after Obama took the office he addressed 411 speeches. With his magical rhetorical performance as the president, Obama obtained not only the public but the media too. Obama knows, that rhetoric is one of the most powerful tools of persuasion. His speeches were full of emotions, optimism, hope, and change. "Obama embodied change, not only with his skin color, his youth, and his newness to the American national political scene, but also with his fresh approach to politics embodied in the themes of his speeches." [Sorensen 2011:1]. Even if Obama represented America as a designated nation, he preferred the use of soft power and diplomacy in the world political system, which has brought him the Nobel Peace Prize. After the complex discourse analysis in this article, we can describe his discursive type as a charm offensive, othering offensive is notable in his speeches criticizing the Middle East policy of G. W. Bush.

When Obama was speaking, people were listening. Typical for him was, that he wanted to get along with both sides, with everyone. In his speeches, he accosted all people, everyone, every single citizen, because he considered citizenship to be the base of the community. His words were oriented toward quality, not quantity. He usually used his own charisma and persuasion while speaking. Obama is a media star of this century.

REFERENCES

Afra, O., (2012), Analysis of Obama's rhetorical style [online]. :http://www.jewishjournal.com/zoangel/item/analysis_of_obamas_rhetorical_style_20120305>.

Alim, H.S. – Smithermann, G., (2012), Articulate while Black: Barack Obama, language, and the race in the U.S. New York: Oxford University Press, 205. ISBN 978-0-19-981296-7.

Atwater, D.F., (2009), Senator Barack Obama; The Rhetoric of Hope and the American Dream. In: Journal of Black Studies [online], http://www.umdrive.memphis.edu/ajohnsn6/African%20American%20Rhetoric/Module%205/obama-rhetoric%20of%20hope%20and%20the%20american%20dream.pdf>.

Berry, M.F. – Gottheimer, J., (2011), Power in Words: The Stories behind Barack Obama's Speeches, from the State House to the White House. Boston: Beacon Press, 304. ISBN 978-0-8070-0169-1.

Bettiza, G., (2009), Obama's Middle East Policy: Time to Decide. In: LSE IDEAS Reports: Obama's Nation? US Foreign Policy One Year On [online], http://www2.lse.ac.uk/IDEAS/publications/reports/pdf/SR003/bettiza.pdf

Brhlíková, R., (2013), Uplatňovanie soft power Európskej únie voči ázijsko-pacifickému regiónu.In: Civitas : časopis pre politické a sociálne vedy, Vol. 19, n. 45 (2013), 2-6. ISSN 1335-2652.

Clark, R.P., (2008), Why It Worked: A Rhetorical Analysis of Obama's Speech on Race [online]. http://www.poynter.org/how-tos/newsgathering-storytelling/writing-tools/88009/why-it-worked-a-rhetorical-analysis-of-obamas-speech-on-race/>.

Coleman, I., (2013), Obama's address: Where's foreign policy? [online]. http://www.edition.cnn.com/2013/02/13/opinion/coleman-sotu>.

Dobrowolski, T., (2008), Hodnotový systém prezidentského kandidáta USA. In Politické vedy. [online]. Roč. 11, č. 3–4. ISSN 1338 – 5623, p. 172 – 184. [cit. 2015-02-05]. < http://www.fpvmv.umb.sk/userfiles/file/3_4_2008/DOBROWOLSKI.pdf>.

Ellis, R.J., (2012), The Development of the American Presidency. New York: Routledge, 2012. 585 p. ISBN 978-0-4158-7884-5.

Ferrara, M.S., (2013), Barack Obama and the Rhetoric of Hope. North Carolina: McFarland, 204. ISBN 978-0786467938.

Gerges, F., (2012), Obama and the Middle East: The End of America's Moment?. New York: Palgrave Macmillan, 304. ISBN 978-0-230-11381-7.

Hart, R.P., (2014), Communication and Language Analysis in the Public Sphere. Hershey: IGI Global, 580. ISBN 978-1466650039.

Horváth, J., (2009), Critical Discourse Analysis of Obama's Political Discourse. In: Language, Literature and Culture in a Changing Transatlantic World. International Conference Proceedings. Prešov: Filozofická fakulta Prešovskej univerzity. ISBN 978-80-555-0025-6. p. 45-56.

King, E.G., (2014), Obama, the Media, and Framing the U.S. Exit from Iraq and Afghanistan. Farnham: Ashgate Publishing, 234. ISBN 978-1-4094-2964-7.

Kočnerová, M. – Kasanová, P., (2013), Analysis of the Idiolect of U.S. Presidents. The Language of George W. Bush and comparison with his successor, Barack Obama. In: The Annual of Language & Politics and Politics of Identity. Praha: Charles University, Vol. VII, 61-76. ISBN 978-80-87404-48-5.

Laclau, E. - Mouffe, C., (2001), Hegemony and Socialist Strategy: Towards a Radical Demo-

cratic Politics. London: Verso, 200. ISBN -13:978-1781681541.

Lakoff, G., (2013), Obama's speeches are not just words – they are political action. [online]. http://www.washingtonpost.com/opinions/obamas-speeches-are-not-just-words--they-are-political-action/2013/02/08/25bee9e4-6fdb-11e2-aa58-243de81040ba_story.html.

Mészárosová, Z., (2006), Lazarsfeld dvoch svetadielov, In: Anthropos, Časopis pre humanitné a sociálne poznanie, Vol. 3, N. 1, 53-55. ISSN 1336-5541

Mieder, W., (2009), "Yes We Can": Barack Obama's Proverbial Rhetoric. New York: Peter Lang Publishing Inc, 352. ISBN 978-1433106675.

Nau, H.R., (2013), Obama's foreign policy and the loyal opposition [online]. http://www.dw.de/obamas-foreign-policy-and-the-loyal-opposition/a-16563866.

Nye, J.S., (2011), The Future of Soft Power. New York: Public Affairs, 320. ISBN-13: 9781586488925

Obama, B., (2009a), Interview with Al Arabiya [online]. http://www.alarabiya.net/articles/2009/01/27/65096.html.

Obama, B., (2002), Obama's Speech Against The Iraq War [online]. http://www.npr.org/templates/story/story.php?storyId=99591469>.

Obama, B., (2010), Remarks by the President on Strengthening Intelligence and Aviation Security. [online]. :http://www.whitehouse.gov/the-press-office/remarks-president-strength-ening-intelligence-and-aviation-security.

Obama, B., (2009b), Speech at Cairo University [online].: http://www.spiegel.de/international/world/a-new-beginning-in-cairo-the-full-text-of-barack-obama-s-speech-a-628538. html>.

Obama, B., (2008), Speech on Race. [online]. http://www.nytimes.com/2008/03/18/us/politics/18text-obama.html?pagewanted=all& r=0>.

Pan, C. – Isakhan, B. – Nwokora, Z., (2020), Othering as soft-power discursive practice: China Daily's construction of Trump's America in the 2016 presidential election [online]. Politics 2020, Vol. 40(I). p. 54-69. DOI: 10.1177/02633957. Available online: journals.sagepub.com

Rezaei, S. – Nourali, N., (2016), Language and Power: The Use of Persuasive Techniques in Iran and U.S. President Speeches [online]. Journal of Language Teaching and Research, Vol. 7, No. 6, p. 1203-1209. http://www.academypublication.com/issues2/jltr/vol07/06/jltr0706.pdf>. ISSN 1798-4769.

Solo, A.M.G., (2014), Political Campaigning in the Information Age. Hershey: IGI Global, 2014. 359 p. ISBN 978-1466660625.

Sorensen, T., (2011), Foreword. In Power in Words: The Stories behind Barack Obama's Speeches, from the State House to the White House. Boston: Beacon Press, 2011. ISBN 978-0-8070-0169-1. 1-2.

Tökölyová, T., (2016), Nation-branding in small-states foreign politics[online], *Journal of Geography*, *Politics and Society* 6 (4), 7-14

Walter, A. et al., (2011), 'Hope' and 'Change' Meet Reality: President Obama's Reelection Roadmap. [online]. ">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-road-map-hope-change-meet-reality/story?id=13294144#.UWMjiKBoVg>">http://abcnews.go.com/Politics/president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelection-president-obamas-reelec

GLOBAL TRENDS FOR THE FORMATION OF THE NEW WORLD ORDER

Tetyana Nagornyak

National University of Kyiv-Mohyla Academy,
Kyiv-Mohyla School of Professional and Continuing Education,
Department of Political Science
2 Skovorody vul., Kyiv 04070, Ukraine
t.nagornyak@ukma.edu.ua

&

Natalia Natalina

Vasyl' Stus Donetsk National University, Department of Political Science and Public Administration, 21, 600-Ricchia str., Vinnytsia, 21021, Ukraine natalnatal@gmail.com

&

Ihor Ozadovsky

National University of Kyiv-Mohyla Academy, Department of Political Science 2 Skovorody vul., Kyiv 04070, Ukraine i.ozadovskyy@gmail.com

&

Maksym Studilko

National University of Kyiv-Mohyla Academy, Department of Political Science 2 Skovorody vul., Kyiv 04070, Ukraine mstudilko@gmail.com

Abstract

The article examines global trends in the process of forming a new world order, which the authors interpret as a generalised name for a set of processes, phenomena, development trends and political practices that determine systemic global shifts (their sequence, content, nature, subjectivity, perspectives). Among them, the authors pinpoint three established and cross-cutting trends, such as the asynchronous dynamics of political regimes, with democratisation serving as a conventional focal point; the asymmetric patterns of global migration movements; and the rethinking of the borderlands role, notably in the context of Russia's full-scale invasion in Ukraine. Having local specifics of implementation (at the level of states and regions), these trends in a core are subjectless and do not depend on specific political figures who come to power or lead the world rankings of influence.

Key words: World Order, Asynchrony (Non-Linearity) of the World Order, Subjectlessness of Trends, Subjects of World Political Processes, Migration, Democratisation, Borderlands.

INTRODUCTION

Russia's recent full-scale invasion of Ukraine in 2022 has surfaced as a pivotal juncture for current world order with anticipated implications stretching across a spectrum of domains, from trade, production and supply to global security and the international community's capacity to address urgent challenges such as climate change, poverty, and global health. Simultaneously, Europe has witnessed a migration phenomenon of an unparalleled magnitude since World War II, with approximately 6 million Ukrainians, as reported by the UN, seeking temporary refuge across borders. In this regard, the very concept of border areas needs to be rethought, as they fluctuate between fostering cooperation and cross-cultural interactions to becoming geopolitical flashpoints, as can be seen in the case of Crimea and Donbas. The broader European context is beset with multifaceted challenges. Growing scepticism surrounding the efficacy of contemporary democratic paradigms is evident, with a notable ascendancy of regimes labelled as authoritarian or hybrid. These challenges are accentuated by the strategic utilisation of migration narratives for political polarisation. Historical border disputes, previously subdued through diplomatic endeavours, are now becoming pronounced against the Ukraine conflict's backdrop. The escalating dynamics of such conflicts are discernible beyond the post-Soviet territories, as manifested in the Balkans, particularly in the rising tensions between Kosovo and Serbia. Concurrently, the global landscape is marred by a protracted economic downturn post the COVID-19 pandemic, China's continual ascent in military and economic spheres, and the emergence of new contention zones, notably in Africa. The media and scientific discourse concerning the evolving world order is gaining traction. For example, as of September 2023, a Google search for the key phrase "putin to change world order" yields 29.9 million results, including those from reputable media, think tanks and experts. If the name of the Russian dictator is replaced with

the word "China" in the exact phrase, more than 1 billion links will be searched. While it might be facile to attribute world order transformations to specific political leaders, institutions or territories, underpinned by their strategic objectives and aspirations, it becomes evident that the global political trajectory is influenced by a multitude of factors, often transcending an individual or institutional control. The increasing interdependence and intricacy of global systems further compound this complexity. Central to this research is the *hypothesis* that in the presence of decision-making centres (subjects) that act according to their intentions and strategies, the transformation of the world order as a dynamic system takes place subjectlessly. Such changes represent a complex and multi-level mosaic of asynchronous changes at different levels and spheres of world order. The decisions or actions of individual actors can temporarily affect the dynamics of changes, delaying or, on the contrary, accelerating them, but they are not capable of completely changing the subjectless trends that determine the general dynamics and direction of transformation of the world order.

The research aims to determine the qualitative shifts in the world order resulting from overarching global development trajectories. To realise this objective, the research embarks on a set of tasks, such as elucidating the world order concept, tracing contemporary political regimes pathways, identifying pivotal migration trends, and discerning the role of border territories in this transformation. While the shifting world order encompasses an array of alterations spanning political, economic, technological, and ethical realms, the authors prioritise the aforementioned trends as they aptly illustrate the asynchronous nature of the world order and underscore its inherent, subjectless attributes of development, which operate independently of the intentions and actions of individual actors. Understanding these intricate dynamics is quintessential for devising informed policy frameworks.

1. THEORETICAL APPROACH AND RESEARCH METHODOLOGY

The term "world order" is frequently used to discuss alterations in the global hierarchy and potential shifts in light of recent transformations. Analytically, this notion delineates the structure of power and authority that shapes global diplomacy and politics. Prescriptively, it pertains to an envisioned alignment of power and authority that fosters peace, economic prosperity, human rights, and environmental sustainability. In the academic realm, world order is extensively studied within International Relations (IR). The English school (H.Bull. A.Linklater) differentiates between *order* as a condition to achieve fundamental goals (related to life, truth and property) and *order as an object*, constituted by a set of actions and practices associated with a particular set of actors. The realist approach argues the interactions of dominant actors (states and their alliances, regions, civilisations, etc.), balancing and contending for a share of global power. It hinges on universally acknowledged rules that dictate permissible actions and maintains a power equilibrium that inhibits the domination

of one political entity over others [Kissinger 2015]. Neoliberal thinkers champion a world order grounded in partnership and legality, reflected in the functioning of international organisations and cooperative institutions established through treaties and charters [Ikenberry 2020].

Given the multifaceted nature of the world order and the rich pool of empirical data, different interpretations are inevitable and may mirror diverse political and theoretical lenses. However, as T.Flockhart underlines, it is also possible that each narrative has a valid point, but that much like "the blind men trying to describe an elephant by touching different parts of it, they are 'feeling' different parts of an overall process of change that is difficult to grasp in its entirety" [Flockhart 2016]. The modern global order is considered multilayered, as it consists of the liberal international order that is based on the solidarity of liberal values (democracy, the rule of law, economic and political freedoms) and a rules-based global order which prioritising more pluralistic state-centric principles such as sovereignty and equality, with more room for cultural and political diversity. These orders are deeply intertwined as both have been shaped by centuries of liberal/western power. The two terms are often used interchangeably, but the rules-based global order is "unconstrained" and universal, while the liberal international order is "constrained" and limited to those who share its core values. In contemplating the multifaceted scholarly perspectives, the authors posit that an understanding of world order confined strictly to the IRs could circumscribe the analytical depth of this concept. As such, it may miss the complex realities of what might be perceived as a 'new political' discourse, including, but not limited to, migration dynamics, rethinking borderlands' role, environmental discourse, as well as proliferative technological advancements. Each of these dimensions introduces a new layer of complexity and interdependency, demanding a more holistic, integrative approach to the conceptualisation of world order. On the other hand, understanding the world order as a product of the activity of exclusively dominant actors (subjects) does not take into account the effect of subjectless processes, which can take place objectively and independently of the will and intentions of key actors. Therefore, the authors advocate for an enriched interpretative approach that aims to encourage a discourse that is more reflective of the multilayered and interconnected world.

Thus, **world order** is considered to be a generalised notion for a set of processes, phenomena, development trends and political practices that determine systemic global shifts and are embodied through the system of relationships between the subjects (individuals, institutions, networks andterritories) and objective processes that can take place subjectlessly. Similar to P. Bourdieu's fields [Bourdieu 2012], order can be political, social, economic, legal, etc., depending on the nature of the global issues it addresses. In particular, the *political order* addresses such issues as the legitimacy of political institutions and the publicness of administration, information protection and legality of political practices, civic activism, the democratisation of political systems, political leadership, etc. Each of these orders may have its specifics at the *local*

level within a community, city or other local area (including border areas); the level of national sovereignty as a consequence of state policy in a particular area; the regional level, i.e. civilisational areas or clusters of states or territories, as well at the global level as a set of actions and interactions that have a global scale or global impact. The authors conceptualise the term "new world order" as a transitional model of global structures evolving due to systemic changes across various spheres and levels of order. Influenced by the multilayered nature and distinct characteristics of individual practices, these transformative processes produce intermediary outcomes in modernising the world order. The outcomes manifest as a global political system that governs the distribution of power; a prevailing mode of power organisation championing a global discourse in support of democratic values; an economic blueprint governing the rules of interaction among key players, which in turn influences contemporary migration trends; and the dominant moral and ethical tenets underpinning the developmental paradigm.

Contrary to the realist and neoliberal paradigms that conceptualise the global order as predominantly actor-centred, the authors demonstrate a predilection for a systems-oriented perspective. This perspective is rooted in a robust theoretical foundation, as exemplified by the world-system theory advanced by post-Marxist scholars (I. Wallerstein). Within the synergetic paradigm (H. Haken, I. Pryhozhyn, I. Strangers), also known as a complexity theory, the world order operates as a dynamic system, perpetually undergoing its structure, functionalities, attributes and properties alterations. Dynamic systems inherently possess the capacity for self-evolution, navigating through alternating phases of chaos (or imbalance) and order (or equilibrium). Periodically, the world order encounters bifurcation states, positioning itself in continual criticality, removed from equilibrium. During these junctures, it discerns potential trajectories for further development, cognizant of multiple prospective scenarios. Yet, a deterministic sequence of alternating order and chaos phases remains unverified in social systems; chaos does not invariably succeed an orderly phase. Evolutions propelling the system towards a transformed state might also unfold in a linear, gradual manner.

Within globalisation, the world emerges as a paramount complex dynamic system, aptly characterised as the "era of bifurcations" [Laszlo 1991]. These moments catalyse the world order's self-organisation and self-evolution, prompted by both external and internal attractors - distinct events, processes, and phenomena that can pivot the system's state, either teleologically (via typical or traditional attractors) or unconsciously (via strange attractors). While electoral processes in world republics exemplify such typical attractors, the COVID-19 pandemic or Russia's full-scale invasion in Ukraine is seen as strange attractors, or 'black swans'. They are rare and unpredictable events with a significant socio-economic and political impact [Taleb 2007]. In particular, the war in Ukraine can be estimated as the final stage of transforming the rule-based global order into a new architecture characterised by diversity

and pluralism. On the other hand, it can equally lead to reinforcing the liberal world order [Flockhart, Korosteleva 2022].

The authors argued that each order, be it political, economic, social, or otherwise, maintains its own dynamics and pattern of development, forming a general complex mosaic of *asynchronous* (or non-linear) changes. The timelines for the cycles within individual spheres of the world order are mainly situational. For instance, the lifespan of historical empires roughly spanned 250 years [Dalio 2021], while the oscillatory phases of the global economy, termed M. Kondratiev's K-cycles, typically run for 45-60 years. Consequently, it is posited that even amidst decision-making centres (or subjects) operating based on their deliberate intentions and strategies, the transformation of the world order occurs subjectless.

To delineate with greater precision within the conceptual framework, it should be noted that while the terms 'subject' and 'agent' might often be utilised synonymously, within the purview of this research, 'subjectivity' (or subjectness) denotes the capability to initiate transformative actions. Herein, a political subject is understood as an entity of effective political decisions and actions, capable of modernising the political space, shaping collective meanings and values, institutionalising processes, and constructing social reality. The notion of subjectlessness suggests that, although political subjects may possess the will, competence and resources to mould an envisioned future, the prevailing tendencies inherent in the non-linear dynamics of the world order either constrain or amplify this potential. In scenarios with congruence with systemic attributes, the influence exerted by a seemingly weaker subject might generate more profound outcomes than a potent but incongruent force. This perspective enriches the understanding of political agency, advocating for the intrinsic subjectlessness embedded within the world order system. Though not widely incorporated in European political science discourses, this concept is grounded in the synergistic approach and reflects postmodernist thought.

Asynchronous dynamics of the world order means that their forecasting, centralised management, and control possibilities are limited. The priority is trend analysis models that give an idea of what is happening and what the corridor of potential opportunities is. World processes has been studied by identifying *global megatrends* as sustainable, long-term and covering the world of development trends since the 1980s [Naisbitt 1982]. Today, various government agencies (e.g., [Global 2012]), private technological and consulting companies, and international organisations are engaged in forecasting global development megatrends. It enables governments, businesses, and the public to prepare for change and make strategic decisions to effectively meet the challenges and seize the opportunities presented by global development.

It is overly ambitious to cover all existing trends in the world order, so the authors focus on the trajectories of political regime dynamics (democratisation), the nuances of global migration, and the rethinking of border areas. These trends have been well researched in political science and other disciplines. For instance, literature on

democratisation delineates myriad pivotal facets, encompassing transitional phases, institutional fortification, and the pivotal role of civil society. Notable scholars contributing to this dialogue include S. Huntington, H. Linz, A. Stepan, R. Dahl, and L. Diamond, among others. Migration dynamics have captivated numerous research collectives, with seminal contributions from scholars such as H.de Haas, D. Massey, K. Pren, M. J., Piore, R. Skeldon, P. Bezugliy, and more. Border areas, shaped by diverse historical contexts, vary considerably in their essence, identity, and aspirations, reinforcing the interdisciplinary nature of this issue. The rich tapestry of literature consulted for this study spans works of political geographers and geopolitical scholars (I. Wallerstein, S. Rockan), cultural discourses interpreting the notion of borderland, sociological and historical inquiries into borderland identities and their evolution. However, these trends tend to be considered individually while the authors endeavour to discern the asynchronous interplay of these world-order trends to demonstrate the subjectlessness of its transformation.

Methodically, the research is based on the following methods:

- Method assemblage as accompaniment and continuous refinement of discursive practices in the general "flow" of socio-humanitarian research [Low 2004:157].
 This method involves encountering multiple realities and allows us to recognise similarities between cases even though they might not be identical.
- Applied political and correlational analysis methods were used to achieve the set tasks in terms of finding the correspondence between subjectless global trends and local subject manifestations of the formation of a new world order.
- Analysis and synthesis of empirical indicators of democracy and world migration
 presented in studies by such organisations as the Economist Intelligence Unit,
 Fletcher School at Tufts University, Freedom House, OECD, UN DESA, UNHCR,
 World Bank, and World Economic Forum. Computer programs IBM SPSS Statistics and Google Excel were used to generalise and correlate data, and the Flourish
 app for visualisation.

2. CONTEMPORARY POLITICAL REGIMES DYNAMICS

As a process of spreading political democracy in society, democratisation involves forming institutions to ensure citizens' participation in decision-making and spreading democratic values and practices among the population [Huntington 1991]. Democratic political culture reflects such political behaviour and norms that correspond to the values of respect for the rights and freedoms of every citizen, tolerance for other opinions and views, active civic participation. Historically, three significant democratisation waves are discerned. From 1820-1920, the first observed the emergence of democracies like France, Great Britain, and the USA amidst monarchical dominions. This was followed by a period characterised by the rise of ideologies leading to totalitarian regimes. The second wave (1940-1960) saw the democratisation of nations' post-WWII and the birth of democracies in post-colonial regions. However, this

wave was unstable, primarily due to oversights in cultural assimilation and economic asymmetries. The third wave began in the 1970s, with the downfall of authoritarian regimes in countries like Greece and Spain. After the collapse of the Soviet Union in 1991, the number of democratic regimes in the world (at least in form) outnumbered autocracies, allowing proponents of liberal ideology to proclaim "the end of history". This triumph was somewhat premature. Since the 2010s, global authoritarian backsliding has been seen. In fact, as of 2022, only 15% of modern states (24) are labelled as 'full' democracies [Economist Intelligence Unit 2023]. Other 48 states are described as 'flawed' democracies. They generally hold free and fair elections and respect basic civil liberties, but there are significant deficiencies in other aspects of democracy, including governance problems, an underdeveloped political culture, or low levels of political participation. States with an authoritarian regime (59) cover over a third of the world's population (36.9%). Other 36 countries have a hybrid regime (17.9% of the world's population).

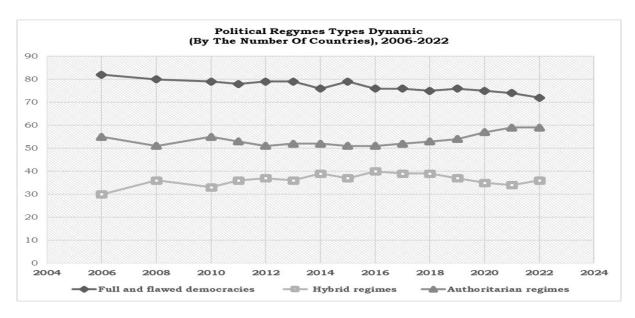


Figure 1. Political regimes types dynamic by the number of countries, 2006-2022

Source: Compiled by authors based on Economist Intelligence Unit data (2023).

Drawing from J. Ikenberry's apt analogy, the contemporary world order can be compared to a vast shopping centre. Here, nations are free to wander, evaluating and selecting the political institutions that resonate most closely with their preferences and aspirations [Ikenberry 2020]. The COVID-19 pandemic challenged democratic institutions and deepened doubts about whether modern institutions of representative democracy can distinguish the formulated interests of the public and bear responsibility [Farrell, Han, 2020]. Empirical data underscores that democratic regimes often exhibit superior governance and management. However, citizens within autocracies tend to perceive their regimes as more adept at ensuring political stability and offer-

ing a consistent, long-term vision for the future. This sentiment has contributed to the notable rise in institutional trust within autocratic regimes [Natalina 2022]. However, despite repeated subject authoritarian rollbacks in individual states or entire regions, the authors argue that *democratisation remains a subjectless upward trend in the world order over the past 200 years*. It is characterised by its dynamics and rhythm, which leads to the asynchrony of political transformations in the mod-

ern world order. It manifests itself in the following:

1. Asynchrony of political regimes dynamics. The global spread of democratic regimes is disparate. By evaluating factors like elections, civil rights, political participation, and more, we find regions like North America (with an average EUI democracy index in 2022 of 8.37) and Western Europe (8.36) traditionally at the vanguard. Conversely, the Middle East and North Africa (3.34) and Sub-Saharan Africa (4.14) are at the lower end. Eastern Europe (5.39), Latin America (5.79), and Asia & Australasia (5.46) display varied democratisation trajectories, both at regional and state levels. Such variations are sculpted by leadership choices, historical precedence, cultural nuances, economic conditions, and other intricacies. In Latin America, while many regimes are transitioning from authoritarianism to 'flawed' democracy, personalistic authoritarian regimes in Venezuela and Cuba distinguish themselves. Amid Asia's authoritarian tide, countries like India and Malaysia, with British colonial imprints on their political culture, uphold democratic values. The electoral process score [Freedom House 2023a] demonstrates this asynchrony of the democratisation trend on the world map.

Notably, states with the most deficient democratisation indicators, as gauged by the electoral process, cluster as follows:

- One-party systems in China and Southeast Asian nations (e.g., Laos, Vietnam) dominated by communist parties without universal elections;
- Post-Soviet personalist regimes like Russia, Belarus, and Central Asian states (Kazakhstan, Uzbekistan, Turkmenistan) where elections, primarily controlled by the government, serve more as an authoritarian stamp of approval;
- Monarchies in the Arabian Peninsula (e.g. Saudi Arabia, UAE, Bahrain, Kuwait) and Southeast Asia (e.g. Thailand, Cambodia, Brunei);
- Personalist dictatorships in post-colonial African nations (e.g. Libya, Sudan, Chad) and Latin America (e.g. Venezuela, Cuba);
- Regimes that are either theocratic, as in Afghanistan, or secularly totalitarian, like North Korea.

Map of the world order according to the electoral process index

Electoral process score

1 6.5 12

Source: Freedom in The World (Freedom House) 2023

Figure 2. Map of the world order according to the electoral process index

Source: Compiled by the authors based on the data by Freedom in the World, where 1 means non-free elections or their absence, 12 – free competitive elections [Freedom House, 2023a]

While states with a longer tradition of democracy tend to remain free for decades, unfree and partly free countries are less static, often experiencing waves of liberalisation or repression that move them from one category to another. Notably, such an "anti-democratic turn" was prominently observed in regions like the Balkans, Central-Eastern Europe, and Central Asia, which embarked on democratic transitions after the Soviet Union's fall in the 1990s [Freedom House 2023b]. Examining the democratic landscape between 2005 and 2022, the average democracy score (DS) for 29 transitioning states, listed as the Nations in Transit, dwindled from 3.85 to 3.42, marking an 11.8% decline. In a more detailed perspective, nations recognised as consolidated democracies in 2005 experienced a 10% erosion in their democratic scores over 17 years. Likewise, semi-consolidated democracies witnessed a decrease of 6.5%. Notably, Poland (-1.46 DS) and Hungary (-2.47 DS) lost their acclaimed statuses as consolidated democracies. The Balkan states of Serbia (-0.46 DS), Montenegro (-0.42 DS), and North Macedonia (-0.25 DS) moved from the status of semi-consolidated democracies to hybrid regimes. This resulted in an augmentation in the number of hybrid regimes in the region, rising from 4 to 11. Contrarily, there was a consolidation of authoritarianism in nations like Russia, Kyrgyzstan, Tajikistan, and Azerbaijan. States firmly seated as consolidated authoritarians in 2005, such as Belarus, Kazakhstan, Uzbekistan, and Turkmenistan showed a decrease in their democratisation index, averaging a decline of 0.27. One of the factors (if not the most significant) for the observed authoritarian tilt in the region has been Russia's multifaceted influence in the political, economic and communications spheres. Moscow's leadership is focused on reviving its imperial ambitions and re-establishing itself as

a formidable decision-making epicentre in the global arena. It is against this back-drop that Ukrainian resistance to Russia's full-scale invasion in February 2024 gains prominence. This struggle goes beyond a mere regional skirmish; it symbolises a pivotal position in the global effort to uphold the principles of a democratic world order.

2. Asynchrony of state government forms. Notwithstanding the preeminence of republican governments, monarchies persistently maintain their relevance in the global arena. Contemporary legal studies indicate over 40 recognised monarchies globally, with some reports suggesting a count of 45. A significant portion of these (16) falls under the British Commonwealth, where the symbolic head of state remains the British monarch; this includes nations like Canada, Australia and New Zealand. Notably, many monarchies have transitioned into largely ceremonial roles, acting as cultural supplements to their predominantly democratic frameworks. A case in point is Malaysia, which boasts a unique federal system wherein the king and vice-king are elected from nine monarchs in a quinquennial cycle. Although the Malaysian king's role leans towards the ceremonial, governance is principally overseen by the parliament and the prime minister. As per the 2022 EUI democratisation index, Malaysia is categorised under 'flawed democracies' with a 7.3 out of 10 score. It also possesses an impressive electoral process and pluralism index of 9.58, in contrast to the 9.17 score of the USA.

As democratic governance further entrenches itself, European monarchies will likely see a greater convergence with these modern institutions. However, expecting similar democratisation trajectories from the absolute monarchies in the Arabian Peninsula and the Persian Gulf is impractical. These states grapple with multiple factors hindering democratisation, such as the multifaceted nature of Islam, potential radical threats, distinct political structures, and an entrenched tradition of authoritarianism, among others. Even with some characteristics reminiscent of medieval feudal systems and clericalism, the inexorable dynamics of global order are compelling these Arab monarchies towards transformation. Modern economic paradigms, increasingly shifting towards digital economies, demand political transparency and adherence to established conventions to draw investors and human resources. Fletcher School at Tufts University's 2020 research classified the UAE and Qatar as standout digital economies, paralleling long-established democracies like Germany and the USA and newer democratic entrants such as South Korea, Malaysia, Israel, and others. This success is largely attributed to the assimilation of specific democratic institutions and attributes, encompassing governance efficiency, regulatory quality, rule of law, and corruption oversight.

3. Authoritarian mimicry under democracy. For at least 50 years, democratisation has been proclaimed the ultimate goal of any political regime transformation. Strikingly, no single regime, whether personalist, theocratic or militarist, has openly embraced authoritarianism as its de jure intention. Even the leadership of nations such as North Korea, which may show totalitarian tendencies, professes

a commitment to democratic principles - at least de jure - through its constitution, which describes it as a democratic republic with a parliament elected by direct, universal and confidential suffrage. As described in the framework of 'competitive authoritarianism' [Levitsky, Way 2010], such regimes often replicate the entire institutional architecture characteristic of representative democracies. Such elements may include the institution of elections, certain political and civil liberties, or even overt commitments to the rule of law or the fight against corruption. These gestures often aim to cultivate a veneer of legitimacy and foster global economic cooperation. However, the true democratic essence is often missing. Elections, for example, are marred by state-driven manipulations, including biased electoral laws, denial of registration to threatening candidates, restricted access to mass media, and even direct vote rigging. To describe them as genuinely democratic would, therefore, be a misnomer. For many contemporary authoritarian states, introducing a multi-party electoral system is not so much an embrace of democratic ideals as a strategic move by the regime. Recent decades have seen the emergence of 'spin dictators' who, with their skill at manipulating the media, have subtly reconfigured authoritarian governance in line with global interconnectedness [Guriev, Treisman 2022]. Early in their tenures, figures such as Vladimir Putin, Recep Tayyip Erdogan and Viktor Orbán have eschewed overt mass repression, opting to control their citizens by distorting information dissemination and mimicking democratic processes.

- 4. Democratic institutions and values are evolving by various global elements: the world's economic structure, advances in information and communication systems, migration flows, and more. This transformation manifests in several distinct ways:
- Decentralisation of control over symbolic fields and production of political discourses. With burgeoning digital communication, symbolic power disperses into multifaceted, shape-shifting networks influencing states and global communities [Global, 2012: 48]. Initially hailed as democratising tools, digital technologies now prompt the question, "How to save democracy from technology" [Fukuyama, Richman, Goel 2021]. Governments grapple with controlling tech giants and their citizenries, evidenced by the 12-year continual dip in global internet freedom [Freedom House, 2023c]. Evidently, the emerging global order is sculpted by the escalating contest for discourse control through novel communication technologies played out among states, tech conglomerates, and civil society.
- Searching for new models of public policy and building consensus against the background of increasing polarisation and antagonism. Empirical findings spotlight a surging and persistent political polarisation intra-state and globally [Carothers, O'Donohue 2019]. Even seasoned democracies grapple with bridging polarised value rifts, often culminating in violent civil clashes, as witnessed during the 2021 US elections. According to the agonistic democracy framework [Mouffe 2000], so-

- cietal consensus emerges only when conflicting parties perceive themselves in a shared symbolic arena. Escalating antagonism challenges this shared space, complicating consensus-building and reconciliation. The increasing complexity of the policy-making process and the inability to find solutions to some of the most pressing policy problems are prompting politicians and civil society to think about how collective public decisions should be made [OECD 2020].
- Political representation crisis and the pursuit of innovative participation formats. Empirical data indicates an 11.5% global uptick in large-scale anti-government protests from 2009-2019, with Europe witnessing a 12.2% rise [Brannen, Haig, Schmidt 2020]. Approximately 54% of all protests between 2006 and 2020 were related to the failure of political systems and lack of political representation. Over 30% of all protests included a global justice component as one of their main issues [Berrada et al. 2022]. Amidst this backdrop, traditional electoral mechanisms appear increasingly flawed as the primary political participation avenue [World Bank 2017: 24]. Political parties, experiencing membership decline, are losing their pivotal role in channelling political interests. Digital networks emerge as the new political participation avenue, forging a fresh political culture impacting traditional political institutions. The evolution of political institutions in the Industry 4.0 era, undriven by individual actors' political will, is discernible. E-governance technologies expand state capabilities, enabling efficient administrative services, evolving from the functions of a 'night watchman' to a private 'concierge service', as exemplified by Ukraine's Diia service initiated in 2020. However, this digital shift also impacts political leaders' communication modes with their citizens, offering increased transparency but also potential political chaos. The subsequent frontier seems poised to integrate artificial intelligence and virtual metaverses into political endeavours, with figures like French President E. Macron was venturing into platforms like Minecraft for electoral outreach in 2022. Such technologies promise efficient data analytics and voter behaviour predictions but risk alienating the public from the political process by elevating technocracy.
- Redefining civil liberties and the "cultural counterattack". Political freedoms and minority rights, such as women's and LGBTQ+ rights, inclusivity and multiculturalism, are coming to the fore in global discourse. However, segments of the populace, especially those affected by authoritarian populism, feel besieged by these shifting ethical paradigms. Norris and Inglehart [2019] delve into the "cultural counterattack" phenomenon as society's reactive stance to these shifts. This counteraction is especially palpable in authoritarian leaders' endorsement of "traditional" values, which is employed to craft a divisive "us-versus-them" narrative, solidifying and legitimising their hold on power. Such divisions, pitching emerging ethical norms against traditionalist propaganda, engender political tensions and rifts at both the societal and global levels.

3. MIGRATION OF HUMAN AND INTELLECTUAL CAPITAL

Factors like the education standards, adoption of cutting-edge technologies, innovative prowess, and workforce quality directly influence the competitive edge of nations in modern world order. Parallelly, migration, representing either voluntary or involuntary movements of individuals or groups on a temporary or permanent basis, significantly contributes to the reallocation of this human capital globally. UN data showcases a notable uptick in international migration over recent decades: from 153 million international migrants in 1990 to approximately 281 million by 2022, representing 3.6% of the global population [United Nations 2022]. In contrast, the World Bank's 2023 report provides a modest estimate, putting the figure at 184 million (2.3% of the global population), including 37 million refugees. Notably, nearly half of these migrants, 43%, are settled in low to middle-income countries [World Bank 2023].

Within political science, evidence suggests that migration processes serve as objective indicators of the non-linear evolution of global order, inherently political. These processes are shaped not only by the domestic policies of the origin country, where migration motivations arise but also by the deliberate political strategies of states desiring to accumulate new human capital [Bezuglyi, Nagornyak, Pachos 2020]. Therefore, while migrants are central to migration processes, they are not the sole subjects. Donor and recipient states, along with an intricate web of migration networks that facilitate the transnational movement of individuals, are equally crucial. This nexus includes employers, human traffickers, human rights advocates, volunteers, and various intermediaries. Each of these subjects operates based on specific objectives, translating their intentions into distinct practices and policies, which, in turn, mould the nature and magnitude of migratory trends. However, it is worth noting that migration, akin to democratisation, can be perceived as an overarching, subjectless trend shaping the global landscape. When viewed as a system, the global migration dynamic reveals a fluidity marked by evolving elements, the emergence of new migratory hubs, and shifts in its structure. Contemporary migration trends, which significantly influence the structure of the global order, exhibit several distinct characteristics:

1. Asymmetry in global migration flows. The movement of people across borders is notably imbalanced and tends to converge within a few persistent migration pathways. Historical political and economic affiliations can influence the dynamics and trajectories of migration flows. For instance, vestiges of colonial relationships can be pivotal determinants. Similarly, preceding migratory movements that establish systems of information exchange, capital accumulations, and the genesis of diasporas and cultural hubs also play a significant role, as outlined in the theories of migration networks. The intensity of migration flows and their direction can also be determined by previous migration waves that create exchange systems of information, capital, form diasporas and cultural centres. For example, one of

these streams connects Ukraine with Germany; geographically, it passes through Poland [Stepura et al. 2022].

De Haas et al. [2019], drawing from a comprehensive empirical dataset, have underscored a shift towards increased concentration of international migrants along primary migration routes. From 1960 to 2000, countries experiencing net emigration surged from 124 to 148, whereas those witnessing net immigration receded from 102 to 78. Remarkably, 20% of all global migrations transpire within just 15 primary bilateral corridors. Moreover, there is an observable agglomeration of migrants, predominantly from diverse non-European origins, in a diminishing group of primary destination countries, predominantly in Western Europe, North America, and the Persian Gulf. Thus, migration processes reflect the asymmetric nature of the processes of economic globalisation and are consistent with trends in migration policy, which increasingly gives immigration privileges to the skilled and wealthy, as well as to citizens of regional blocs, while maintaining (and not necessarily increasing) migration barriers for less skilled migrants, asylum seekers, and non-regional citizens.

- 2. Divergence of world migration and decision-making centres. Notably, the primary hubs of global migration are distinct from the principal decision-making epicentres of the contemporary world order. According to the World Bank's International migrant stock level as a percentage of the population in 2015 (the latest available data) [World Bank 2015], leading countries in terms of migration concentration are:
- Arabian Peninsula's Oil-Wealthy Nations: Predominantly drawing labour migrants for the oil industry and related sectors. To enumerate: United Arab Emirates (88.4%), Qatar (75.4%), Kuwait (73.6%), Bahrain (51.1%), Oman (41%), Jordan (40.9%), Lebanon (34.1%), and Saudi Arabia (32.2%).
- Caribbean Islands with Tax Advantages: Such as St. Maarten (70.4%), British Virgin Islands (57.4%), Cayman Islands (39.5%), Aruba (34.7%), and Antigua and Barbuda (30.5%).
- Smaller European Nations: Including Liechtenstein (62.5%), Andorra (59.7%), Monaco (55.7%), Luxembourg (43.9%), and Cyprus (16.8%).
- Economic Hubs in Proximity to China and Southeast Asia: Namely, Macau (58.3%), Singapore (45.3%), and Hong Kong (38.9%). Contrastingly, China maintains a minimal migrant proportion relative to its overall population, a mere 0.07%, a figure that has remained consistent since 1990.



Figure 3. Map of the world order according to the international migrant stock (World Bank, 2015)

Source: Compiled by the authors based on data from International migrant stock, % of the population (World Bank, 2015), where 0.07 is the lowest percentage of migrants among the population (China), 88.4% is the highest (UAE)

Beyond those above, other countries with significant migrant populations as of 2015 include Switzerland (29.3%), Australia (28.2%), Israel (24.9%), New Zealand (22.9%), Canada (21.8%), Austria (17.4%), Sweden (16.7%), Ireland (15.9%), and Estonia (15.4%). It is pivotal to observe that these migration hubs are not synonymous with the foremost political decision-making centres like the USA, China, or Russia. Through strategic migration policies, branding of territories, ensuring a high quality of life, and innovation promotion, these nations attract human capital without necessarily being the most politically influential on the global stage.

3. The migration outcomes are not solely determined by the subjects' efforts. The theory of the double labour market [Piore, 1979] posits that the primary motivation for labour migration is not necessarily driven by deficiencies or underdevelopment in the donor country's labour market. Instead, migration patterns are intrinsically linked to the ebb and flow of business cycles and employment prospects in destination nations, especially amid liberalised migration regulations [Chaika and de Haas 2014]. Through strategic migration policies, recipient countries aim to entice the "right" migrants—those encompassing skilled workers, students, and individuals from prioritised sectors—while concurrently fortifying barriers against "undesirable" entrants. A case in point is the UK's 2020 introduction of the Global Talent Visa, tailored for individuals with notable expertise in science, digital technology, arts, and culture. Analogous initiatives have been unveiled in countries like the USA and Canada. Spain is set to launch a 'digital nomad' visa in 2023, catering to professionals adept at working in the digital domain from virtually anywhere. Over the past ten years, nearly all OECD nations, accommodating ap-

proximately 4.4 million international students as of 2020 (constituting roughly 10% of their tertiary institution enrollments), have adopted comprehensive post-study retention strategies [OECD 2023].

While recipient countries actively shape migration policies to manage the influx of preferred migrants, they do not solely dictate the outcomes. Despite policy barriers, persistent or escalating international migration does not necessarily indicate policy failure. A downturn in migration does not inherently validate the efficacy of policy restrictions. It could also signify an economic downturn in destination nations or the cessation of hostilities in source countries [de Haas et al. 2019]. For instance, US-imposed immigration curbs on Mexicans and other Latin Americans inadvertently spurred a sequence of events over subsequent years, paradoxically augmenting the volume of Latin American immigrants rather than diminishing it [Massey and Pren 2012]. Comparable dynamics have been observed regarding migration across several prominent South-North 'labour borders', like those between Morocco and Turkey visà-vis the EU [Skeldon 1997].

4. Strange attractors (the Covid-19 pandemic and the war in Ukraine) are changing the dynamics and directions of world migration. The flux and rhythm of global migration are often shaped by certain "strange attractors" or unforeseen significant events that have exhibited transformative power over these processes. Notably, the Covid-19 pandemic caused global migration to decelerate by nearly 30% [OECD 2023]. Meanwhile, the full-scale Russian invasion in Ukraine in 2022 drastically accelerated the redistribution of human capital both regionally in Europe and globally. In particular, as of June 2023, almost 6 million forcibly displaced persons from Ukraine were registered in Europe (with 300,000 outside Europe) [UNHCR 2023], of which 4.8 million received temporary protection status. Central and Eastern European nations, such as Poland, Romania, Slovakia and Hungary, which had experienced prolonged periods of negative to moderate net migration (for some since the 1960s), became primary recipients of this exodus. However, these often served as conduits for the onward migration of Ukrainians to other European destinations. In particular, as of June 2023, only 994,000 of 3,000,000 Ukrainian refugees remained in Poland, while their number increased to 1.2 million in Germany, 345,000 in the Czech Republic, 200,000 in Great Britain; Italy and Spain - 180,000 each [UNHCR 2023] . Thus, the human capital of Ukrainian refugees is being redistributed between European countries. According to the European Central Bank calculations (2022), 25% to 55% of Ukrainian displaced people are employed or actively looking for work in recipient countries. This will increase the EU labour force by 0.2-0.8% or 0.3-1.3 million people. Consequently, migration has become a force of stratification for Ukraine and simultaneously a force of equalisation and redistribution of human capital at the level of the European Union as a whole.

2022 also saw other global strange attractors impacting migration. Factors like the economic aftershocks of the pandemic, which intensified political unrest and governmental challenges, birthed new migration donor countries. For instance, Sri Lanka, which defaulted in 2022, continued its substantial migration rate of up to -100,000 annually. Additionally, nations like Uganda, Vietnam, Chile, Peru, and others faced unprecedented migration shifts due to internal political and economic challenges post-pandemic. On the other hand, the USA, as a traditional destination country, witnessed a revival of its net migration numbers: from an average of +1.3 million annually pre-pandemic, a slump to 500-600,000 during 2019-2020, and then a recovery close to pre-pandemic figures (+998,000 in 2022). Comparable migration resurgence post-pandemic was observed in nations like Canada, Australia, Japan, Italy, and those in the Arabian Peninsula. Amid the pandemic, several Arabian states, in addition to sealing their borders, repatriated migrant workers, resulting in a dip in net migration. Territories affected by military conflicts also showcased shifting migration dynamics. In Afghanistan, the Taliban's ascendance reversed the positive net migration growth of 2020, with negative values in subsequent years. Conversely, nations like Syria and Venezuela, previously known for significant outflows, started observing positive net migration figures, with Syria witnessing +734,000 in 2022 and Venezuela +297,000.

Thus, global migration emerges as a complex interplay, a synergetic outcome combining the deliberate decisions of specific actors—namely migrants, migration networks, donor states, and recipient states— and a number of subjectless trends. Additionally, a series of unpredictable, random events influence the overarching structure of the world order. In this matrix, the very dynamics of migration processes reciprocate by becoming integral to the world order, shaping its economic underpinnings and spurring new avenues for democratisation and evolving socio-cultural discourses. Migration flows induce profound socio-cultural and political changes in recipient nations. However, establishing a direct causal relationship between migration dynamics and the democratisation of political regimes—both within individual states and on a global scale—remains elusive and mandates further scholarly exploration.

4. RETHINKING THE ROLE OF BORDERLANDS

The evolving global landscape, marked by political regimes and migration dynamics, has prompted a reevaluation of the role and perception of border areas. Such regions stand at a crossroads; they can be potential flashpoints of interstate conflicts, threaten global peace, or serve as conduits for intercultural dialogue, bolstering the stability of the world order. As globalisation unfolds, the world seems to oscillate between the increasing borderlessness and a predilection for a more gated paradigm.

Border areas are the spaces where two or more spheres of hegemony intersect, seeking to control resources and extend their sphere of influence. Their formation is rooted in various chronological and spatial contexts, with historical factors significantly influencing their nature. Consequently, these territories exhibit diversity in their essence, character, and interaction with political entities. The formation of borderlands is a non-linear process primarily determined by temporal and spatial factors. As a result, even within the same region, borders can carry distinct roles and meanings across different epochs. For instance, modern borders in Africa, Asia, and Europe have substantial variances.

The current borderlands dynamics are based, first of all, on *rethinking the nature of 'hard borders'*. Historically, border formation reflected diverse temporal and spatial contexts. Before the creation of nation-states, geographical factors played a crucial role in dictating resource potential, defence mechanisms, and even early political frameworks. For example, Catalonia and Bavaria's strategic locations made them vital European trade centres. The mountainous terrain of Wales made it impossible to conquer and absorb this territory. Geographical influences were pronounced in Europe during the Middle Ages, but such influences lasted longer in areas like the Donbas and are still evident in regions like Chechnya.

The 16th and 17th centuries saw empires use strategic violence to control their peripheries. Borders then represented not only territorial demarcations but also power dynamics [Goodhand 2018: 10-11]. As states sought to solidify their territorial claims, the distinctions between them and the "others" became more pronounced. However, the hard borders approach was not universally beneficial. While delineating territories, these borders sometimes exacerbated internal conflicts, potentially escalating to interstate confrontations. While leaders of emerging nations endeavoured to position the state as the paramount entity within their societies, this was only sometimes feasible, especially in border areas [Baud, Schendel 1997: 213-215]. In some instances, these borders further debilitated already fragile states, stripping them of the coercive capacities typically associated with territorial warfare threats. They inadvertently set up unfavourable catalysts for nation-building and removed the systems that traditionally filtered out weak states while fortifying more robust ones. Consequently, there has been a surge in internal conflicts, notably ethnic skirmishes, heightening the risk of blossoming into more significant interstate confrontations [Atzili 2007:146, 162].

Modern times witness a diminishing emphasis on hard borders. Globalisation drives a more interconnected world, weakening traditional border concepts. Catalysts such as trade liberalisation, fluid capital movements, and technological progress in communications have been pinpointed as instrumental in the erosion of borders [Andreas 2003: 82]. These economic and technological transitions augment cross-border interactions and lessen the salience of traditional security paradigms, leading some scholars to conceptualise these transformations as the "de-bordering of the world of states" [Blatter, 2003]. As traditional borders wane, power shifts to both supra-national organisations and sub-national entities. Examples like the Schengen Agree-

ment in Europe or trade pacts like NAFTA and its successor, USMCA, demonstrate how borders are being redefined in the context of greater global cooperation.

On the other hand, borderlands remain conflict zones, and this trend is also asynchronous. During the rise of empires, while preserving border sanctity in Europe and sidestepping direct confrontations amongst themselves, global hegemons have essentially redirected confrontations to the territories of less developed and evolving nations. The world wars of the XX century, which largely erupted due to attempts to redistribute borderlands, both in Europe and on the periphery of empires, were the culmination of attempts to establish power over certain regions by force. The outcome of WWII was attempted to be consolidated by introducing the inviolability of borders as one of the basic principles of international relations. However, this principle worked only in Europe and North America, while the world hegemons continued to "export" violence to other regions.

Within Europe and North America, the 'Great Zone of Peace', as identified by historian Y. Hrytsak, boasts economic growth and effective reconciliation policies, evading armed conflict for decades despite inherent border tensions [The Ukrainians 2023]. Noteworthy examples include the Ireland-Northern Ireland border, which, after 30 years of "The Troubles", saw the Good Friday Agreement in 1998 curtail violence and the ongoing diplomatic approaches amidst Brexit-related challenges. The Gibraltar-Spain and U.S.-Mexico borders too, despite tensions, rely on diplomatic and cooperative solutions rather than military confrontations. Kosovo's intricate identity and contentious borders remain delicate, especially with Serbia. Despite historical and ethnic disputes and its declaration of independence in 2008, mechanisms like the EU-mediated dialogues, NATO-led Kosovo Force, and the European Union Rule of Law Mission have averted major hostilities, though uncertainties persist.

Conversely, in other parts of the world, young sovereign states' borders, influenced by adverse economic, geographical, and political circumstances, evolve into conflict zones, progressively destabilising these nascent nations. While some arise from historical grievances, others manifest newer geopolitical or resource-driven ambitions. In contemporary war and political violence studies, border area conflicts are often not distinctly categorised. However, the number of 'events' (a term to describe instances of political violence or protest) in many border regions has increased over the past decade [ACLED 2023].

Using a descriptive method, it becomes evident that the landscape of border conflicts aligns with the asynchronous global dynamics of democratisation previously discussed. For instance, the India-Pakistan border, especially the Line of Control (LoC) in Kashmir, witnessed a marked increase in violent events from 2016 to 2019. Similarly, the number of reported violent events in the Ethiopia-Sudan border region increased notably during the 2020-2022. In North and West Africa, there has been a consistent escalation in border violence. In 2021, 23% of all violent incidents occurred within a 20-kilometre radius of state borders, and in the first half of that same

year, 60% of violent episodes resulting in casualties took place within a hundred kilometres of these boundaries [OECD 2022]. The rise of non-state militant groups has also complicated traditional border conflicts. Boko Haram has been active in the Lake Chad region, affecting the borders of Nigeria, Niger, Chad, and Cameroon. The rapid rise of the terrorist organisation Islamic State (ISIL) between 2014 and 2017 blurred the borders between Iraq and Syria, as the group captured vast territories in both nations.

Since 1991, the post-Soviet space has witnessed escalating border area conflicts, mainly initiated or supported by the former imperial centre. Thus, Transnistria's 1990 independence declaration from Moldova resulted in a 1992 war, with Russia maintaining a military presence and underlying tensions persisting. Post the 2008 Russo-Georgian War, Russia controls Abkhazia and South Ossetia, intensifying its "borderization" efforts. The 2014 annexation of Ukrainian Crimea led to a war in eastern Ukraine, culminating in a full-scale Russian invasion by 2022. Nagorno-Karabakh's ethnic Armenian majority amidst its recognition as Azerbaijani territory has been a contention point since the 1980s with outbreaks of significant escalations, including in September 2023. Tensions along the Kazakhstan-Kyrgyzstan and Tajikistan-Kyrgyzstan borders, especially in 2021, led to skirmishes, casualties and significant displacements.

Borderlands entrenched in their historical narratives of statehood, predominantly characterised by ethnic or religious identity but devoid of substantial economic assets, risk succumbing to external financial dependencies. Absent sufficient resources, their sovereignty aspirations may seem unattainable. However, neglect from their 'parent' state can catalyse separatist or irredentist sentiments, as was observed in Chechnya. This contested borderlands became *arenas of external influence*, potentially destabilising the sovereignty to which they belong. Such regions, notably Donbas and Crimea, have witnessed targeted ethnic and migration manoeuvres by Russia, intending to amplify the Russian demographic. These territories serve as strategic levers for Russia, threatening not just the sovereignty of Ukraine but also global political equilibrium. Russia's efforts hold these border areas together with the centre – by military aggression, symbolic control, cultural assimilation or even deportations, as was the case in historical retrospect and is happening in occupied Ukrainian territories.

At the same time, subjectless trends lead to the fact that the borderlands, with opportunities for free trade, the inflow of intellectual capital, and identity preservation, benefit more from remaining within their statehood than from coming into conflict with the center. Moreover, border areas can themselves become subjects of the world order. Such regions, exemplified by Catalonia, Bavaria, Quebec, or Scotland, have successfully harnessed economic potential and maintained a robust national identity. Furthermore, they have instituted political bodies adept at championing their territorial interests at both national and international levels. Interestingly, many of these

influential borderlands reside within the "Great Zone of Peace," where strategies to foster intercultural dialogue are vigorously pursued, as evidenced by the "Europe of the Regions" initiative and Quebec's interculturalism policy.

Conclusively, the development and role of border areas are determined by subjectless factors such as historical heritage, geographical characteristics, proximity or remoteness to imperial centres of power. However, amidst the backdrop of a transforming global order, border erosion, and intensifying cross-border affiliations, borderlands are evolving from mere territorial expanses to active political subjects. Depending on their historical, economic, and political contexts, they will either fortify or perturb the world order.

CONCLUSIONS

The new world order, as a transitional model of world processes, is formed due to systemic transformations at the global level. Among the trends that prove it are the dynamics of modern political regimes, human and intellectual capital migration, and rethinking the role of border areas as conflict zones and spaces for cross-border dialogue.

The authors proved that in the presence of decision-making centres (subjects) that act according to their intentions and strategies, the transformation of the world order as a dynamic system takes place subjectlessly. Such changes represent a complex and multi-level mosaic of asynchronous changes at different levels and spheres of order. The decisions or actions of individual actors can temporarily affect the dynamics of changes, delaying or, on the contrary, accelerating them, but they are not capable of completely changing the impersonal trends that determine the general dynamics and direction of transformation of the world order. Under the conditions of variability and uncertainty of the world order, erosion of borders, and strengthening of cross-border ties, borderlands will turn from objects of expansion into subjects of the political process, which, depending on the history of their formation, the current economic and political state, will contribute to the stabilisation or destabilisation of the world order.

The process of forming a new world order demonstrates the following patterns:

1. The asynchrony of political regimes dynamics, manifested by the uneven distribution of democratic institutes and values at the level of individual regions and states, the coexistence of monarchical and republican forms of government, as well as the borrowing of certain democratic institutions and practices by authoritarian regimes has a significant impact on the formation of a new world order. This asynchrony and diversity of the world's political systems dictate the need for adaptation and transformation of democratic institutions under the influence of other elements of the world order, such as the economic framework of the world, the development of information and communication systems, and migration flows. However, despite the forces of stratification, such as authoritarian rollbacks and

the backlash of traditional values, democratisation continues to be the dominant subjectless trend of the world order. Democratic institutions themselves are transformed under the influence of other components of the world order and become the subject of competition for control over political discourses. Increasing polarisation, antagonism, crises of political representation, and the rise of direct action for global justice are prompting the search for new public policy and consensus-building models.

- 2. Asymmetry migration processes, in turn, affect the world order by redistributing human and intellectual capital. Migration as a system is characterised by a dynamic change in its constituents, the appearance of new migration centres, and change structures. However, global migration is asymmetric and highly concentrated in specific migration corridors, which do not always coincide with key power centres in the world order. Another factor affecting world migrations is strange attractors such as pandemics COVID-19 and the war in Ukraine. They change the direction and intensity of migration flows, which leads to stratification for individual states and equalisation for regions. Migration processes at the level of the world order contribute to the redistribution of human capital, influence the economic framework of the world, and bring momentum to the process of democratisation and socio-cultural discourses.
- 3. Rethinking the role of border territories in forming a new world order, which for a long time remained outside the attention of researchers and from the point of view of political practice, did not have subjectivity and were the object of expansion. In the second half of the 20th century, the approach to the status and significance of borders changed significantly - for several decades, world hegemons have maintained the inviolability of borders within their spheres of influence, preventing armed conflicts on these territories. A zone of peace was formed in a large part of Europe and North America, within which armed conflicts did not occur for decades. This was facilitated by economic growth and purposeful efforts to rebuild the "reconciliation system" in the political and symbolic realm. In developed countries, in the process of forming this system, they are trying to overcome, in particular, the problems of the border areas around which international conflicts have lasted for hundreds of years. At the same time, the least developed countries become hostages of 'hard borders', which were determined without their direct participation, limit development opportunities and contribute to internal conflicts. Under the pressure of globalisation processes, the importance of borders is decreasing; instead, cross-border cooperation and the role of new political actors, such as border areas, are increasing.

Self-sufficient borderlands with significant resources and de facto formed nations, in the conditions of the transformation of the world order and the weakening of the sovereignty of the existing states, can claim the right to their subjectivity. However, to acquire it, it is not necessary for them to destabilise the states within which they

are located. These territories mostly have a certain level of autonomy, and the sovereignties to which they belong and the supranational formations formed by them implement policies aimed at forming zones of intercultural dialogue. On the other hand, borderlands, which do not have their own civil identity and were historically formed as geographical frontiers in conditions of uncertainty, can pose a threat to the states within which they are located and the world order as a whole.

REFERENCES

ACLED. Conflict Watchlist 2023. 8 February 2023. Retrieved from https://acleddata.com/conflict-watchlist-2023/

Andreas, P., (2003), Redrawing the line: Borders and security in the twenty-first century, *International Security*, 28(2), 78–111. https://doi.org/10.1162/016228803322761973

Atzili, B., (2007), When good fences make bad neighbors: Fixed borders, state weakness, and international conflict, *International Security*, 31(3), 139-173. https://doi.org/10.1162/isec.2007.31.3.139

Baud M., Schendel W.V., (1997), Toward a comparative history of borderlands, *Journal of World History*. Vol. 8, no. 2, 211–242. DOI: https://doi.org/10.1353/jwh.2005.0061

Berrada, M., et al. (2022). World Protests: A Study of Key Protest Issues in the 21st Century. Palgrave Macmillan, Cham.

Bezuglyi, P., Nagornyak, T., Pachos, Iu., (2020), Migration Processes In Modern Ukrainian-Polish Discourse, *European Journal of Transformation Studies*, 8(1-2), 33-48.

Blatter, J.K., (2003), Debordering the world of states: Toward a multi-level system in Europe and a multi-polity system in North America? Insights from border regions. State/Space (185–207). Blackwell Publishing. https://doi.org/10.1002/9780470755686.ch11

Bourdieu, P., (2012), Key Concepts (ed. by M. Grenfell). Acumen Publishing.

Brannen, S., Haig, C. S., & Schmidt, K., (2020), The Age of Mass Protests: Understanding an Escalating Global Trend. Retrieved from https://www.csis.org/analysis/age-mass-protests-understanding-escalating-global-trend

Carothers, T., & O'Donohue, A., (2019), How to Understand the Global Spread of Political Polarization. Carnegie Endowment for International Peace. Retrieved from https://carnegieendowment.org/2019/10/01/how-to-understand-global-spread-of-political-polarization-pub-79893

Czaika, M., & de Haas, H. (2014). The Globalisation of Migration: Has the world become more migratory?, *International Migration Review*, 48(2), 283–323.

Dalio, R., (2021), Principles for Dealing with the Changing World Order: Why Nations Succeed and Fail. Avid Reader Press / Simon & Schuster.

de Haas, H., et al., (2019), International Migration: Trends, Determinants, and Policy Effects, *Population and Development Review*, 45(4), 885-922. https://doi.org/10.1111/padr.12291

Economist Intelligence Unit., (2023), Democracy Index 2022: Frontline democracy and the battle for Ukraine. Retrieved from https://pages.eiu.com/rs/753-RIQ-438/images/DI-final-version-report.pdf

European Central Bank. (2022). The impact of the influx of Ukrainian refugees on the euro area labour force. Retrieved from https://www.ecb.europa.eu/pub/economic-bulletin/focus/2022/html/ecb.ebbox202204_03~c9ddc08308.en.html

Farrell, H., & Han, H., (2020), Public Governance and Global Politics after COVID-19. In Gavin, F. J., & Brands, H. (Eds.), COVID-19 and World Order: The Future of Conflict, Competition, and Cooperation (pp. 238–258). Baltimore: Johns Hopkins University Press.

Fletcher School at Tufts University., (2020), Digital in the time of COVID. Trust in the Digital Economy and Its Evolution Across 90 Economies as the Planet Paused for a Pandemic [Report]. Retrieved from https://sites.tufts.edu/digitalplanet/files/2021/03/digital-intelligence-index.pdf

Flockhart, T., (2016), The coming multi-order world, *Contemporary Security Policy*, 37:1, 3-30, DOI: 10.1080/13523260.2016.1150053

Flockhart, T., Korosteleva, E.A., (2022), War in Ukraine: Putin and the multi-order world, Contemporary Security Policy, 43:3, 466-481, DOI: 10.1080/13523260.2022.2091591

Freedom House, (2023a), Freedom in the World 2023: Marking 50 Years in the Struggle for Democracy [Report]. Retrieved from https://freedomhouse.org/report/freedom-world/2023/marking-50-years

Freedom House, (2023b), Nations in Transit 2023: War Deepens a Regional Divide. Retrieved from https://freedomhouse.org/sites/default/files/2023-05/NIT_2023_Digital.pdf

Freedom House, (2023c), Freedom on the Net 2022: Countering an Authoritarian Overhaul of the Internet [Report]. Retrieved from https://freedomhouse.org/report/freedom-net/2022/countering-authoritarian-overhaul-internet

Fukuyama, F., Richman, B., & Goel, A., (2021), How to Save Democracy From Technology: Ending Big Tech's Information Monopoly. Foreign Affairs. Retrieved from https://www.foreignaffairs.com/articles/united-states/2020-11-24/fukuyama-how-save-democracy-technology

Global Trends 2030: Alternative Worlds. (2012). The National Intelligence Council, Great Britain. Retrieved from https://www.dni.gov/files/documents/GlobalTrends_2030.pdf

Goodhand, J., (2018), The centrality of margins: the political economy of conflict and development in borderlands. Batticaloa, Sri Lanka, 57 p.

Guriev, S., & Treisman, D., (2022), Spin Dictators: The Changing Face of Tyranny in the 21st Century. Princeton University Press.

Huntington, S.P., (1991), The Third Wave: Democratisation in the Late Twentieth Century. University of Oklahoma Press.

Ikenberry, G.J., (2020), The Next Liberal Order. Foreign Affairs. Retrieved from https://www.foreignaffairs.com/articles/united-states/2020-06-09/next-liberal-order

Kissinger, H., (2015), World order. Penguin Books.

Laszlo, E., (1991), The Age of Bifurcation: Understanding the Changing World. Gordon & Breach Science Publishers Ltd

Levitsky, S., & Way, L. A. (2010). Competitive Authoritarianism: Hybrid Regimes after the Cold War. Cambridge University Press.

Low, J., (2004), After Method Mess in social science research. L-N.Y.: Routledge

Massey, D.S., & Pren, K.A., (2012), Unintended consequences of US immigration policy: Explaining the post-1965 surge from Latin America, *Population and Development Review*, 38(1), 1–29.

Mouffe, C., (2000), The Democratic Paradox. Verso.

Naisbitt, J., (1982), Megatrends: Ten New Directions Transforming Our Lives. New York, Warner Books.

Natalina, N., (2022), Democracy and Institutional Political Subjectness: Comparative Study for Europe and Central Asia. Przegląd Politologiczny, 27(3), 17-34. http://dx.doi.org/10.14746/pp.2022.27.3.2

Norris, P., & Inglehart, R., (2019), Cultural Backlash: Trump, Brexit, and Authoritarian Populism. Cambridge University Press

OECD, (2020), Innovative Citizen Participation and New Democratic Institutions: Catching the Deliberative Wave [Report]. Retrieved from https://www.oecd.org/gov/open-government/innovative-citizen-participation-new-democratic-institutions-catching-the-deliberative-wave-highlights.pdf

OECD/SWAC, (2022), Borders and Conflicts in North and West Africa. West African Studies, OECD Publishing, Paris, https://doi.org/10.1787/6da6d21e-en.

OECD. (2023). International Migration Outlook 2022. Retrieved from https://www.oecd-ilibrary.org/sites/30fe16d2-en/index.html?itemId=/content/publication/30fe16d2-en

Piore, M.J., (1979), Birds of Passage: Migrant Labor and Industrial Societies. Cambridge University Press.

Skeldon, R., (1997), Migration and development: A global perspective. Essex: Longman.

Stepura, T., Nagornyak, T., Lypchuk, V., & Sadova, U., (2022), Migration-caused qualitative changes in human potential of the states in the territorial migration labour market "Ukraine – Poland – Germany", *European Journal of Transformation Studies*, 10(1), 112–137.

Taleb, N.N., (2007), The black swan: the impact of the highly improbable. New York: Random House,

The Ukrainians. Yak istoriia dopomahaie nam zrozumity tsiu viinu? Chastyna 1 | Yaroslav Hrytsak, 2023. YouTube. Retrieved from https://www.youtube.com/watch?v=JTru5-_3LSg

UNHCR, (2023), Ukraine refugee situation. Operational Data portal. Retrieved from https://data.unhcr.org/en/situations/ukraine

United Nations, (2022, May 19), Countries review progress on global migration compact. Retrieved from https://news.un.org/en/story/2022/05/1118642

World Bank, (2015), International migrant stock (% of population) [Dataset]. Retrieved from https://data.worldbank.org/indicator/SM.POP.TOTL.ZS

World Bank, (2017), World Development Report 2017: Governance and the Law [Report]. Retrieved from https://www.worldbank.org/en/publication/wdr2017

World Bank, (2023), World Development Report 2023: Migrants, Refugees and Societies [Report]. Retrieved from https://www.worldbank.org/en/publication/wdr2023

World Bank, (2022), Net migration [Dataset]. Retrieved from https://data.worldbank.org/indicator/SM.POP.NETM

RELATED NATIONAL-ECONOMIC IMPACTS AND PARTICULARITIES OF THE CONSUMPTION TAXATION (CASE OF THE SLOVAK REPUBLIC)

Juraj Válek

University of Economics in Bratislava, Faculty of Economic and Finance, Department of Finance, Dolnozemská cesta 1, 852 35 Bratislava, Slovakia juraj.valek@euba.sk

&

Jana Kušnírová

University of Economics in Bratislava, Faculty of Economics and Finance, Department of Finance, Dolnozemská cesta 1, 852 35 Bratislava, Slovakia jana.kusnirova@euba.sk

&

Marcela Rabatinová

University of Economics in Bratislava, Faculty of Economics and Finance, Department of Finance, Dolnozemská cesta 1, 852 35 Bratislava, Slovakia marcela.rabatinova@euba.sk

Abstract

Goods burdened by excise duty are liable to tax already when they are produced, transported or imported. Together with the increase in the tax rate and the state budget revenue there occurs an expected decrease in domestic production of a given commodity, which also affects the related sectors. It should be compensated by increasing imports, which will be reflected in a negative trade balance and lead to other economic consequences. The political and legal implications should also be taken into consideration, as excise duties are highly harmonised. The main objective of the

paper is to analyse excise duties on alcoholic beverages in relation to selected macroeconomic indicators in the Slovak Republic. The comparative analyses were carried out to capture the evolution of individual quantities and their changes over a period of time, highlighting the breakthrough periods. Our research shows that a positive relationship may not always be observed between total consumption of alcoholic beverages and revenue from excise duty on alcoholic beverages. The paper concludes with the outline of political and social recommendations for practice in the field of alcoholic beverage taxation.

Key words: Excise Duty, Alcoholic Beverages Consumption, Domestic Production

INTRODUCTION

Tax policy is related to the use and application of taxes and their instruments which serve to influence the macroeconomic and microeconomic processes in the economy. Tax policy of the state is largely influenced by the normative measures taken and effective procedures for the collection of taxes and the elimination of tax evasion and fraud [Schultzová 2020].

A substantial and regular part of public budget revenue consists of excise duties. It relates only to specific types of products, such as alcoholic beverages, tobacco products, mineral oils and energies. Excise duties represent indirect taxes of selective nature which apply only to the selected types of products. This type of taxes brings stable revenue to states. Revenue can be well estimated and the taxes are directed to national budgets. That is why they are also an important political and social instrument, because governments can redistribute resources from them according the needs of the population. Political and legal sciences also respond to their application. The term "signalling effect of taxes" is used in relation with them. Additional taxation brings an effort of sending a signal to the consumer that the consumption of alcohol and tobacco products causes health problems, or the use of the selected types of energies means an environmental burden. They should discourage from their harmful consumption. When analysing their impact, the characteristics of the individual goods demand must be considered. Actually, it often happens that an increase in tax rate and the consequent effects of tax incidence on various market levels leads to a potential change in the final price ultimately paid by the consumer.

Altogether with increasing rate and state budget revenue there occurs an expected decrease in domestic production of a given commodity, which also relates to the associated sectors. It should be compensated by the increase in the import of a given commodity. Therefore, it is necessary to examine this issue in a wider context, know the mechanisms of the transfer influence and the impact of excise duties, be aware

of the chain reaction in the economy and continuously point at the macroeconomic relations in terms of these taxes rates.

In the economy one has to be aware of the fact that e.g. small changes in consumption or investments cause big changes in the output of GDP. The market is globalizing and the term "national economic" gets in the background. The protection of internal market by the use of subventions undermines justice, therefore the tax system seems to become suitable regulatory means for levelling out inequalities. Little attention is paid in the literature to the level of excise duty rates and their national-economic impacts. The state budget revenue is rather taken in consideration when increasing them.

1. LITERATURE REVIEW

The subject of the researches of many empirical studies is the impact of the prices and the income level on the consumption of the products subject to the excise duty taxation. Different taxation of goods which are subject to excise duty and higher rates imposed on them are economically justifiable, if the issue is looked at from the fiscal point of view. A consumer decides to buy them optionally. It means that the tax is characteristic by optionality, too. The consumer himself decides whether to buy or not to buy the goods. Despite the growth of the prices the consumption and demand for these goods remain the same due to the addictiveness. Therefore, distortion caused by the imposition of tax is quite small. Behaviourism, which is based on the knowledge of human psyche, agrees with the opinion of the simplicity of tax structure. Simple tax collection and gaining tax information are important for this theory. The success of taxation is attributed especially to the sense of justice and honesty each person has, and the effort to avoid penalties. While there are many exceptions and exemptions in case of direct taxation, everybody is subject to excise duties because of their consumption.

However, a key factor is the determination of the taxation of luxurious and common commodities. The increase of their tax rate should lead to the decrease of the consumption. The goods which are beneficial for health should be taxed by lower rates, since they can prevent impaired health and therefore increase the productivity of people and time spend at work. It will increase the total economic growth [Prammer 2011]. Economic growth is stimulated through fiscal policy instruments which, in addition to maintaining aggregate fiscal discipline, promote the economic and efficient use of public resources [Belkovicsová & Boór 2021].

In case of indirect taxes, the negative impact on the long-term economic growth has not been proved. They have rather positive impact. It is necessary to implement green taxes and increase consumption tax if necessary [Vrábliková 2016]. It is necessary to pass from income tax burden to excise duties, which should be progressive. It represents the way to solve growing property inequality. Such taxes do not tax savings and motivate companies to invest more [Rogoff & Cabot 2019]. Until recently the

motivation for the collection of these taxes has been higher fiscal income. However, nowadays contribution to public health is much more emphasized. Countries try to change consumption behaviour of people by the means of higher taxes. Taxes on tobacco and alcoholic beverages have been applied for a long time in all EU countries. Countries have currently started to introduce taxes also on unhealthy food and non-alcoholic drinks. These taxes generally have a good impact on health and they reduce the costs of health care [Sassi et al. 2014]. The demand is not significantly sensitive to price changes, but the tax rates are on such a high level that they cause a shift in the consumption. They are also generally accepted by the society. On the other hand, the taxes imposed on new types of food and drinks are unpopular and governments use them very rarely.

The adverse effects of the excessive alcohol consumption on the income and investments to human capital are studied, while alcohol drinking is an activity done in leisure time [Mullahy & Sindelar 2000]. The consumption of beer in relation to the income was studied by the means of regressive analysis. The relation between the income and beer consumption has inverse shape [Colen & Swinnen 2010]. It means that the beer consumption initially increases with the growing income but it decreases at the higher level of income. The fact that trade and globalisation are more open actually contributed to the convergence in the structure of alcohol consumption in separate countries and climatic conditions, religion and relative price also influence the beer consumption. The demand for alcoholic drinks is non-flexible for all classes of alcoholic beverages, i.e. beer, wine and spirits [Heien & Pompelli 1989]. In 1993 it was assumed that the implementation of the EU single market would lead to the increase of tax competition, mostly the interaction in the regulation of excise duties in the EU countries. From the data of the selected EU countries from 1987 to 2004 it follows that it happened in case of non-sparkling and sparkling wine, beer and ethyl alcohol Lockwood & Migali 2009]. The high degree of harmonisation provides countries with a secure legal framework and the need for continuous alignment with supranational directives. Similar experiences in other Member States ensure a high level of effective collection and application of excise duties. Also increasing demands for quality communication with the financial administration in Slovakia are related to new digital projects that increase the efficiency of tax collection [Ihnatišinová 2021].

2. RESEARCH OBJECTIVE, DATA AND METHODOLOGY

Taxes, which are the result of political decisions in each country, influence the behaviour of taxpayers. Therefore, it is necessary to pay more attention to increasing excise duty rates in relation to the national-economic impacts on the economy, with the emphasis on the effective tax collection.

The main objective of this paper is to analyse excise duties on alcoholic beverages in relation to selected macroeconomic indicators in the Slovak Republic, whether it is the relationship of changes in the excise duty rate on alcoholic beverages to the level of state budget revenues, to the trade balance, domestic production and consumption. We focused on two research questions: (i) Is there a positive relationship between the consumption of alcoholic beverages and the revenue from the excise duty on alcoholic beverages? (ii) Is it possible to change consumer behaviour by increasing excise duty rates in order to improve public health?

The period monitored is 1999-2021. The analysed data were obtained from the Ministry of Agriculture and Rural Development of the Slovak Republic (MPRV SR) – e.g. Green Reports or data obtained on the basis of a request for access to information according to Act No. 211/2000 Coll. on Free Access to Information and on Amendments and Additions to Certain Acts (hereinafter referred to as "requested data"); The Statistical Office of the Slovak Republic (ŠÚ SR) and The Central Control and Testing Institute in Agriculture (ÚKSÚP).

During the research, inductive-deductive method was used for sorting information, the method of analysis and synthesis for processing the statistical data. The correlation was used to examine and prove the direct, indirect and null relationship between the examined quantities. The comparative analyses were carried out to capture the evolution of individual quantities and their changes over a period of time, highlighting the breakthrough periods. The current situation as well as the situation from the previous years was analysed, i.e. ex post and ex ante - the estimated future development. Long-term analyses were used (within the horizon of 23 years), which consider the share of individual selected excise duties on the state budget revenue and the total income of excise duties, too. Short-term analyses pointed out the way the changes of the height of excise duty rate influenced the state budget revenue. Partial analyses were also done, such as the effect of selected excise duties on macroeconomic indicators and summary analyses, i.e. examination of excise duties complexly. On the basis of the results of the analyses, measures and recommendations were formulated in the conclusion.

3. RESULTS

If we want to monitor and analyse individual macro-economic indicators in relation to excise duties we have to be aware of the situation on the market as well as in the sectors and related sections which have a significant impact on their behaviour. Agriculture and food industry are such sectors. The share of consumption spending on food, beverages and tobacco in the total consumer spending of Slovak households has not significantly changed in course of the analysed period (table 1).

Table 1. The Share of Food, Beverages and Tobacco in Consumption Expenditure, in %

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Food and Non-Al- coholic Beverages	2 28.44	26.67	26.48	25.75	25.96	26.3	24.8	24.5	24.6	24.1	24.8
Alcoholic Bever- ages and Tobacco	3.36	3.12	3.10	3.00	3.09	3.0	2.9	2.9	2.8	3.0	3.4
Total	31.80	29.80	29.58	28.75	29.06	29.3	27.7	27.4	27.4	27.1	28.2
	2011	2012	2013	2014	2015	2016	2017	2018	2019		
Food and Non-Al- coholic Beverages	24.4	24.9	25.7	25.6	21.7	21.87	22.41	22.77	23.16		
Alcoholic Bever- ages and Tobacco	3.3	3.2	3.3	3.5	3.12	3.11	3.05	3.07	3.02		
Total	27.7	28.1	29.0	29.1	24.82	24.98	25.46	25.85	26.18		

 $Note:\ National\ Agricultural\ and\ Food\ Centre-Research\ Institute\ of\ Agriculture\ and\ Food\ Economics\ (NAFC-RIAFE)\ calculations.$

 $Source: \textit{MPRV SR} \ and \ \textit{NAFC-RIAFE}, 2022, \textit{Reports on Agriculture and Food Sector in the Slovak Republic (Green Reports 2009-2021)}.$

The position of agricultural and food products within the foreign market has been continuously worsening and the negative balance has been increasing. A higher dynamic of the decrease in export in comparison to import increased the negative trade balance in 2009 to the value of - 950 million EUR and the negative balance continued to deepen. In 2015 it reached the level of - 1,096 million EUR and in 2018 it was - 1,648.1 million EUR. It means the annual drop by 19.3 %. Continuously negative balance can be also seen within the monitored commodities. The factors which has had an influence on the negative development of the foreign trade include the drop of the demand resulting from the world economy crisis, the uncertainty in financial markets which caused the devaluation of the currencies of neighbouring countries. It led to the reduction of the price of imported products and overpricing of export. More stable and stronger EURO temporarily made the re-exported products more expensive. It led to the temporary loss of competitiveness. Other factors which influence the negative development of the foreign trade and they have persisted till now include insufficient domestic production, poor harvest and bad climatic conditions.

Commodities subject to excise duty are usually not regular consumption products. The market is oversaturated, i.e. it is not a problem to produce them, but it is a problem to sell them. The market capacity of domestic producers stagnates, but the contrary can be seen in case of grower distilleries and small breweries. The space for foreign suppliers opens in compliance with the free market principles. However, the economic power is misused against producers during business negotiations and

contractual relations. Foreign investors are given tax holidays as a bonus for job creation, while there is the support of travelling for work in the form of transport allowance. The production of the studied commodities is closely related to the agricultural production. In the current situation we import commodities we are able to produce. Slovak production is difficult to promote. It is observable on the fact that Slovak foods are represented in retail chains in 38.6 % (August 2019) and passive trade balance with this commodity in 2018 was 1.648 billion EUR. In 2019, it was at the level of 1.5 billion EUR. The highest share in the representation of Slovak products in Slovak shops have the categories of milk (70 %), water and mineral water (58 %), wine and beer (51 %) and spirits and liqueurs (49 %). Until 2018 the employment rate in agriculture was declining, but in the course of 2019, it increased after the long-term decline and is now about 75,000 people. This development has a negative impact on the development of country, landscaping, settlement maintenance - the development of housing infrastructure and use of state investments in countryside; and last but not least domestic production. Many enterprises feel that they have no stimulation for investments into innovation of assortment, packages or marketing. They are only aimed at the maintenance of the market with the assortment available.

Breakthrough periods within the determination of the tax rate on alcoholic beverages in the Slovak Republic:

- The tax rate was modified in March 2010 the last time and thanks to this modification the year 2010 was one of the worst years in the history for distilleries (the statistics of the Ministry of Agriculture states the annual decrease in the alcohol production in 2010 by 14.2 % related to the period after the economy crisis). It was intensified by the bad harvest and the decline in the interest in the distillation of fermented fruit as well as frontloading of retail. Since the tax change was announced in advance of 7 months, retail had enough time to frontload. The increase in rate resulted in the shopping tourism to neighbouring states, the transfer of consumption abroad. The reduction of consumption also reduces the savings and the reduction of production reduces employment.
- In 2003 the excise duty on beer doubled. The first increase happened on 1st January 2003, when the core of taxation changed and the other increase of rate happened on 1st August 2003. The increase in the excise duty on beer is not as frequent as in case of spirit in the monitored period. It is caused by the fact that the rate changed twice within one year. It is assumed that if the increase divided in several years the impact on the brewing industry would not be so significant.
- The only commodity with the zero rate (since 2001) is currently still wine. The introduction of non-zero excise duty would be a stimulus for many producers to search for the ways of circumventing the laws. It would increase the administration burden and it would mean the increase in funding the administration and controlling of such a non-zero tax. On the other hand, still wine with zero rate has a big competitive advantage against other types of alcohol. The importers of

cheap foreign wine benefit from it the most. They consequently compete with the domestic producers of spirits, beer and the domestic producers of wine in the end.

3.1. Specifications Related to the Taxation of Alcoholic Beverages Consumption

Since 1999, the distilling industry has undergone a turbulent development, while after 2010 and after the last increase of the rate the situation became stable. As the revenue from the excise duty on spirit was growing, the import of a given commodity was growing too and the production and export were going down. The increase in the rates of the excise duty of spirit in the monitored period generally represented the growing revenue for the state budget. However, the above mentioned fact had a negative effect on the domestic production and trade balance. The production of raw spirit from 1999 (15,065,000 l/year) to 2016 (5,859 l/year) dropped rapidly and its production was ceased in 2017 and 2018.

In the monitored period the beer production in the Slovak Republic dropped from 1999 (from 4.411 hl) to 2018 (to the level of 2.615 hl of beer). In 2002, a year before the double increase in the rate of the excise duty on beer, 4.829 million hl of beer was produced. The excise duty on beer which was paid to the state budget was 44.4 million EUR. In 2004, a year after the double increase of the rate, the production dropped by 585,443 hl of beer to 4,243 million hl and the state collected 67.7 million EUR on the tax on beer. In 2009, when the production was at the level of 3.506 million hl, the collection of the beer tax reduced to 59.2 million EUR and the decrease in the collection also continued in 2010, when the amount of 55.9 million EUR was collected on the excise tax on beer. In the recent years the production has been moving around 3 million hl. The decreasing production has been substituted by the import. The turning years for brewing industry were 2008 and 2009. In 2009 the import was annually growing quicker by 198 % than export which grew by 7 % in comparison to 2008. The double increase in the rate of the excise duty on beer in 2003 which reflected in the price of beer meant the administrative intervention in the Slovak beer market. In a short-time horizon (one or two years) the commodity gets more expensive within the multiple price increase. It will reflect in the production drop. Currently, a potential increase in the excise duty rate on the alcoholic beverages - beer had a more significant effect on small breweries which has registered the growth in Slovakia. The area of vineyards in Slovakia gets smaller due to the road construction and reclassification to building lands. Vineyards are set to grow at least for thirty years and it cannot be done on unsettled lands (an agreement of more than a half of the owners is necessary for a new planting). The fertility of older vineyards decreases from year to year and it reaches only the half of European average. In 2018, the Central Control and Testing Institute in Agriculture (ÚKSÚP, 2018) registers in the vineyard register the vineyard area of 15,358 ha and the Statistical Office of the Slovak Republic states the vineyard area of 10,625 ha. The domestic production had a 25 % share on the

total vine offer in 2018. It is 6.5 percentage points more than a year before.

In case of the excise duty on alcoholic beverages in the Slovak Republic we can observe that the increase of the rate strangled the export and supported the import, on the other hand. In case of all monitored commodities which are subject to excise duty on alcoholic beverages we reach the negative trade balance. Domestic producers ceased to exist and foreign investors came to the market. They fused the production and support the import of their brands from abroad. It generally applies that producers have the possibility not to assign the increased rate of excise duties to the price of goods. A question arises about a potential reaction of retail chains which could be interested in the compensation of the loss from the reduced volume of alcohol sales this way. It had to be considered that the policy of retail chains is also the sale of certain products for subsidized price to attract customers who would then buy other goods, too. It can be concluded that the system of taxation by excise duties does not differ between domestic and exported goods. However, an increase in the rate indirectly affects producers. In the case of imports, we can also observe an increasing trend towards globalisation and an open economy.

Since 2004, the annual increase of the state budget revenue from the excise duty on alcohol has been done by increasing the tax rate and importing the commodity of HSN Code 2208. Domestic production of raw spirit went down in the monitored period and the production of refined spirit and spirits was stable till the end of 2008 (in 2008 the capacities for the production of raw spirit were used only up to 3.71 % and in case of spirits only to 47.09 %). The increase in the rate on tax on spirit, which a customer will pay in the end in the price of the goods, can mitigate the purchases in the retail chain. It will reflect into the mitigation of domestic production as well as the legal import for the retail chain. The negative development is reflected in the efficiency of production capacities. If the production capacity significantly decreases, as it happened in distilling factories in 2014 in case of raw spirit, then the % of the efficiency of production capacities will rise.

In the alcohol trade balance, the system of terminology of the customs tariff is applied (HSN Codes): 2207 (undenatured ethyl alcohol of an alcoholic strength by volume of 80 % vol. or higher; ethyl alcohol and other spirits, denatured of any strength) and 2208 (undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 % vol., liqueurs and other spirituous beverages).

In the figure 1, the permanently negative trade balance for commodity of HSN Code 2208 can be seen.

Negative trade balance for 2208 ethyl alcohol deepened even more after 2014. Only in the period from 2009 to 2013 the negative balance was reduced due to the reduced import. This trend was being monitored mainly after the economic crisis which had caused the mitigation of production abroad, too. The adverse trend of the production was also reflected in the trade balance of the commodity of the customs tariff 2207 till 2006. In 2007 technical spirit which is added to fuels started to be produced. However, it is denatured. It means that it is exempt of the excise duty.

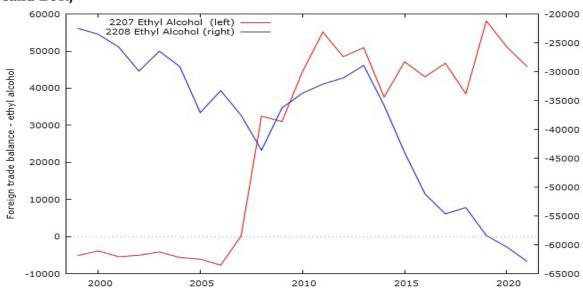


Fig. 1. Foreign Trade Balance of Commodities 2207 and 2208 from 1999 to 2021 (thousand EUR)

Note: The increase in the rate of the excise duty on alcohol in 2000, 2004, 2006 and 2010. Own figure. Source: Ministry of Agriculture and Rural Development of the Slovak Republic (MPRV SR), reguested data.

After 2008, the economic crisis resulted in the bigger pressure mainly on the quality of provided services in case of beer. It meant the decrease of unified types of beer and the increase of the types of beer with an own specific character.

Small breweries with annual beer production at the level of several thousand hectolitres build on the local-patriotism of the beer drinkers of their area and specific taste. The beer production in big breweries is continuously going down. The efficiency of production capacities was at the level of 63.9 % in 2018. Since the double increase in the rate in 2003 the production has been going down and it dropped by 2,068,501 hl of beer in comparison to 2018. Apart from the rate increase the reason for the production drop in domestic breweries is also the change of the behaviour of consumers, i.e. preference for other beverages, prices of primary raw materials which are mainly influenced by poor harvest. Therefore, from the point of view of employment in the region the support of small breweries seems to be reasonable.

In the trade balance of the commodity with the HSN Code 2203 beer made of malt, the Slovak Republic has a permanent negative balance as evidenced in the figure 2. In the year-on-year terms the negative balance of foreign trade deepened the most in 2018, when it increased almost by 25.798 million EUR in comparison to 2017. Therefore, the foreign trade balance deepened by 73,624.11 thousand EUR from 2003 to 2018, the import increased by 68,113.23 thousand EUR and the export decreased by 5,510.88 thousand EUR. Especially due to the growing import of the commodity 2203 in the recent fifteen years the state budget revenue from this excise duty has been growing. Since 2019, the opposite trend can be observed, which is due to a rise in exports and a fall in imports. The COVID-19 pandemic also had a positive impact on the situation, due to a more significant decrease in imports.

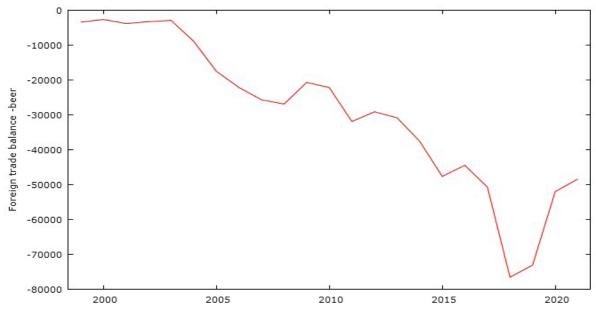


Fig. 2. Foreign Trade Balance - Beer made of Malt from 1999 to 2021 (thousand EUR)

Note: The increase in the rate of the excise duty on beer in 2000 and 2003. Own figure. Source: Ministry of Agriculture and Rural Development of the Slovak Republic (MPRV SR), reguested data.

The unfavourable trend in the development of wine sector is proved by the fact that the production of grape wine was in loss of 1 million EUR in 2009. The production capacities went down as well as their efficiency. Since 2011 the growth has been observed in comparison to the previous period from 2005 to 2010. The growth was not only linked to the production, but also to production capacities in grape wine. This production growth fully reflects the consumer preferences, since the consumption of wine per a person made from the domestic raw material was growing from 15.4 1/ person in 2010 to 20.9 1/person in 2014. Since 2014 the decrease in consumption as well as import can be registered. On the contrary, the export of wine has been growing. The import of wine made of fresh grapes grew 14.68-times in the period from 1999 to 2015 from the level of 5,082.38 thousand EUR to the level of 74,592.3 thousand EUR. The export grew 4.46 times in the monitored period.

In 1999, we had positive foreign trade balance of 2,156.19 thousand EUR in the monitored commodity. The unfavourable situation in viticulture in the Slovak Republic after joining the EU linked to the continuous deepening of negative foreign trade balance culminated in 2009 as evidenced by the following figure 3. The highest negative balance (-78,351.64 thousand EUR) was reached that year. In 2021, we had the negative foreign trade balance of -31,457.5 thousand EUR. According to the data of the Association of grape and wine producers from 2017 up to 70 % of exported wine belongs to the category of the cheapest wine (Green Report 2018 of Ministry of Agriculture and Rural Development of the Slovak Republic). At the same time, 85 % of total Slovak production is made up of quality wines and quality wines with attributes.

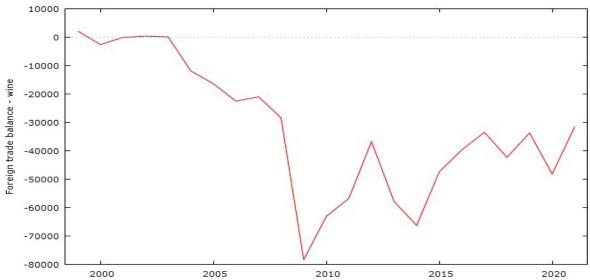


Fig. 3. Foreign Trade Balance - Wine made of Fresh Grapes from 1999 to 2021 (thousand EUR)

Note: The increase in the rate of the excise duty on wine in 2001, 2002, 2003 and 2012. Own figure. Source: Ministry of Agriculture and Rural Development of the Slovak Republic (MPRV SR), requested data.

3.1.1. Alcoholic Beverages Consumption

The increase in the excise duty rate reduces the attraction of investing in the given sector, so it became less competitive, especially in the Central European region. Based on the analysis and observation the decreasing trend in the alcohol and alcohol beverages consumption is shown from the long-term point of view. Their consumption varies in individual years. Since 2009 we can observe the gradual decreasing trend with slight fluctuations in individual years. The decrease in the consumption of alcoholic beverages is caused by the trend of healthy lifestyle as well as the improved public healthcare. This development can be observed in case of spirit. If the rate of the tax increases the consumption goes down. It can be documented using the data from 2000 to 2001, when the decrease in the spirit and spirit beverages as well as state budget revenue went down following the increase of the rate.

A similar situation happened in case of liquors in the production period following the increase of the rate, i.e. 2001/2002, 2005/2006, 2007/2008. The budget does not have to correspond to the expectations and the statement "if I increase the tax, I will increase the state budget revenue" might not be valid. Therefore, the increase of the excise duty reflected in the prices and the demand for alcohol went down or was substituted.

The opposite trend occurred after the increase of the rate on alcoholic beverages, i.e. spirit in 2004 (the change of the taxation system, a basic and reduced rate started to be applied, the basic one remained the same, the expression of volume changed from l/year to hl/year) and 2006, when a year after the consumption as well as the state budget revenue grew. In the following year a more significant drop of trade balance happened in case of the commodity of spirit, i.e. the increase in the import and the

decrease in the export. It happened only once in case of liquors in the production period following the rate increase (in 2011/2012). The departure from the consumption of hard alcohol is confirmed by the data of the Statistical Office. From 1993 to 2018 the total annual alcohol consumption calculated per a person reduced by 18 litres. The increase in the tax rate reflects in the prices of alcoholic beverages. The demand for alcohol consequently goes down or is substituted. If follows from the performed analyses that in case of alcoholic beverages it is necessary to consider the possibility of substitution. Consumers modify their behaviour within the given commodity for a cheaper alternative (e.g. with a lower alcohol content or lower quality from export), e.g. for another commodity. Wine is often a substitution commodity due to the zero rate. The substitution in consumption can be observed in case of wine and beer (the negative correlation was measured, i.e. -0.755197), and in case of wine and spirit (the negative correlation was measured, i.e. -0.312944). On the contrary, a minor substitution can be observed in case of beer and spirit (the negative correlation was measured, i.e. -0.015740).

More considerable frontloading linked to the increase in excise duties brings problems to the state as well as to producers, whereas after the introduction of the higher rate producers have a large influx of orders before the increase itself, but their demand significantly decreases after the increase of the rate. According to the Financial Directorate of the Slovak Republic in case of the commodity of spirit, spirits and liqueurs, the black market with alcohol has been growing following the rate increase. The optimal taxation system the governments try to reach is disrupted by the difference rate in comparison to the theoretical optimal model.

The consumption of wine made of domestic and foreign raw materials per person evidenced the growing trend until 2014. Then the decrease followed. While the annual consumption of beer and 40 %-spirits per person was going down, the wine consumption was growing. However, the opposite trend has been observed since 2014. If the wine consumption goes down, the consumption of beer and spirits grows. Wine has become relatively more available than other alcoholic beverages for consumers in the monitored period. Slovak winemakers use marketing strategies to convince consumers that quality wine is better and healthier than hard alcohol. We can say that the consumption of spirit and beer is in indirect proportion with the wine consumption as evidenced in the figure 4. Despite the above mentioned, the wine consumption in the Slovak Republic in 2018 (14.8 litres) was well below the EU average (26 litres). During the COVID-19 pandemic (2020-2021), it was possible to observe a decline in consumption for both the commodity beer and wine. In contrast, spirits consumption had an upward trend.

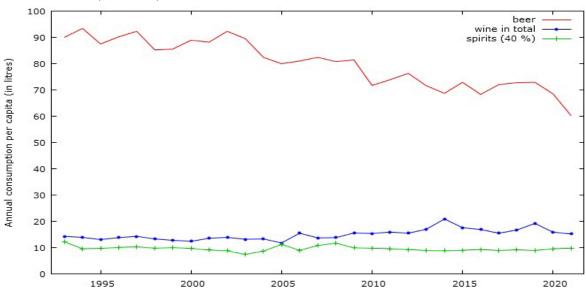


Fig. 4. Annual Consumption of Wine, Beer and 40 % Spirits per capita in Slovakia from 1993 to 2021 (in litres)

Note: own figure

Source: Statistical Office of the Slovak Republic (ŠÚ SR), 2023.

The state budget revenue is reduced by the consumption as well as by the growth of the illegal distillation of alcohol, the growth of the purchasing tourism and informal import, substitution for the goods taxed by the zero rate and the substitution for a drink with a lower alcohol content. Based on the analysis the division of the rates of the excise duties on alcoholic beverages divides into shock rates and the increase resulting from international agreements and contracts. Alcohol industry lacks the economic motivation for new investors and the market is over-saturated. From the business perspective the concentration of the production to one factory or the import of finished commodity might be considered economically more effective. However, originality and uniqueness disappear this way. Despite this fact, the growth of small breweries and grower distilleries was being registered in the monitored period from 1999 to 2018. They are able to find their place on the market and succeed. They benefit from originality as well as history and unique taste. Therefore from the point of view of national economy it is necessary to support uniqueness and quality of produced products and emphasize employment in regions.

From the point of view of the efficiency of the excise duty collection the biggest tax evasions on the monitored commodities are observed in case of spirit. The increase of the rate results in the illegal production, since the risk is low in comparison to potential profit. It especially weakens the domestic production of spirits and liqueurs. The drop in the domestic production is substituted by the import and negative trade balance deepens even more. We can observe the situation when a multiple increase of the excise duty rate in a short-term horizon results in the growth of the alcohol price and the decrease of legal (monitored) consumption. The state budget revenue decreases and stagnates. Tax evasions in the excise tax on alcoholic beverages, such

as beer, also follow from the purchasing tourism and informal import. Still wine is subject to zero tax rate. We can state that the illegal production of this product does not actually exist.

3.1.2. Relation between Total Consumption of Alcoholic Beverages and Revenue from Excise Duty on Alcoholic Beverages

The excise duty which is not a significant price-setting component represents the same burden for domestic producers as well as foreign ones who only import alcoholic beverages. The taxation is generated at the moment of the release of the product in the circulation from the mode of tax suspension, or in case of the production immediately after the commodity the excise tax is imposed on, is produced apart from the tax suspension. Therefore the tax increase itself has not a direct impact on the development of the trade balance. However, according to the observation and the analysis of the previous development it can have an indirect impact. It also applies to the consumption of the given commodity. Therefore if the rate of the excise duty on alcoholic beverages is planned to be applied it is necessary to know the previous development, consider the emphasis on the amount of the tax especially in the neighbouring countries and also know the development of the situation in the given industry and the secondary sectors bound to it, too. It follows from the table 2 that a positive relation might not always been observed between the studied quantities, i.e. it does not always apply that if the total consumption of alcoholic beverages grows (decreases), the revenue from the excise tax on alcoholic beverages grows (decreases). Table 2 describes the years 1999 to 2021 in more detail. In this period there occurred negative relations between quantities. In certain years from 2005 to 2021 we can observe the situation that despite the decrease of the total consumption of alcoholic beverages, the revenue from the excise duty on alcoholic beverages has a slightly increasing trend or vice versa.

Table 2. Year-on-Year Growth Rates of Alcoholic Beverages Consumption in the Value of 100~% of Spirit and Revenue from Excise Duty on Alcoholic Beverages

Year	Consumption	Revenue	
1999	0.83%	-12.45%	change of the spirit taxation system
2000	9.79%	24.83%	growth of excise duty on beer; growth of excise duty on spirit
2001	-1.31%	-6.82%	change of the wine taxation system (zero rate on still wine)
2002	0.81%	-6.60%	
2003	-8.21%	-3.71%	change of the beer taxation system - double growth of excise duty on beer; growth of excise duty on intermediate product
2004	3.27%	18.87%	change of the spirit taxation systemt - growth of excise duty on spirit; growth of excise duty on intermediate product
2005	8.30%	19.57%	
2006	-4.10%	7.27%	growth of excise duty on spirit
2007	3.89%	5.57%	
2008	6.19%	6.78%	

2009	-4.91%	-11.84%	
2010	-4.76%	4.11%	growth of excise duty on spirit
2011	-0.08%	-0.11%	
2012	-0.54%	-2.00%	growth of excise duty on intermediate product; decrease of excise duty on sparkling wine with a lower alcohol content
2013	-2.32%	-0.12%	
2014	3.23%	0.38%	
2015	0.60%	1.72%	
2016	-3.03%	2.07%	
2017	-2.07%	1.40%	
2018	4,04%	3,86%	
2019	2,23%	-0,60%	
2020	-1,83%	-4,97%	COVID-19 pandemic
2021	-5,66%	2,12%	

Source: own calculations according to data of Statistical Office of the Slovak Republic (ŠÚ SR), 2023.

In 2000, the growth of the excise duty on beer also reflected in the increase of the state budget revenue. On the contrary, that year the revenue from the excise duty on spirit reacted to the change of the taxation system and the increased rate by a drop. In 2001, the zero rate on still wine was introduced. It also reflected in the decrease of the state budget revenue from the excise duty on alcoholic beverages, while the decrease was going on in the following years until 2003 (inclusive). In 2004, the state budget revenue grew due to the double increase of the rate of the excise duty on beer and the increase of the rate on spirit and intermediate product. In 2006, the increase of the rate on spirit reflected in the decrease of the consumption, while the revenue gradually stabilized.

After the drop in the budget revenue in 2009 the rate of the excise duty on spirit grew in 2010. It helped to stop the decrease in the revenue of this tax, but it did not reverse the decrease in the consumption in the following years until 2014 (inclusive). From 2010 to 2012 the beer consumption grew from 70.7 l/person/year to 76.3 l/person/ year. The consumption of wine stagnated in the same years. It also showed in the consumption of alcoholic beverages, 100 % spirit and the state budget revenue. The decrease of the consumption and the revenue increase in 2010 can be interpreted just by the increase of the rate on spirit and the decrease of its consumption (higher strength of alcohol in comparison to other beverages). Since 2013 the decrease of the beer consumption and the increase of the wine consumption might have been seen. Spirit has been stagnating till now after the noticeable drop in 2012. From 2016 to 2018 the wine consumption decreased by 2.1 l/person from 16.9 l to 14.8 l. The beer consumption grew by 6.2 l from 68.3 l to 74.5 l/person in the same years. The consumption of spirits stagnated in the same time (9.3 1; 8.9 1; 9.2 1). It also showed in the consumption of alcoholic beverages, 100 % spirit and the state budget revenue. The decrease in the consumption and the increase of revenue in 2016 and 2017 can be interpreted right by the decrease of the wine consumption (higher strength of alcohol and the zero rate on still wine) and the growth of the beer consumption (lower strength and non-existence of zero rate).

In the case of the excise duty on alcoholic beverages, such as beer, we can actually see the double increase of the rate within one year, in 2003. In the following years the beer production started to decrease, while a year-on-year production growth was registered only in 2012 by 0.7 %, in 2016 by 5.1 % and in 2017 by 2.1 %. In 2018 the beer production was lower by 44.2 % in comparison to 2003. The export also decreased. On the contrary, the import increased. It was 48.2 % more in 2004 than in 2003. In 2018 the export was higher by 497.7 % in comparison to 2003. In yearon-year terms it went down only in 2010 by 3.5 % and in 2016 by 1 %. The domestic production decreased and it was substituted by import. Foreign investors unified the production into one place and closed the other production sites. It had the impact on the beer quality. The production started to focus more on unified beer brands. In 2003 there were 11 breweries in Slovakia. In 2011 there were only 5 and nowadays there are 4. The production and consumption of beer has been having a decreasing trend in the monitored period. Consumption has been declining in 2020 and 2021, which has also been reflected in a decrease in revenue to the state budget. This was mainly due to the COVID pandemic, which caused the closure of restaurants and pubs where alcohol consumption was significant.

4. DISCUSSION

Nowadays governments try to expand the use of tax instruments in order to support healthier consumption. They include the increase in the tax rate on commodities such as tobacco products and alcoholic beverages which are significantly harmonized and the examination of the possibilities of their future taxation. They are e.g. alcoholic beverages or the selected foods with the high content of salt, sugar or fat. It is the way of motivating people for healthier lifestyle. Frequent consumption of alcoholic beverages lead to aggressive behaviour, it is the cause of accidents and it is harmful for our health (organ damage, congenital defects). However it represents the cost savings, e.g. in the form of payment of pensions due to premature death. External costs which are generated by the excessive alcohol consumption should be included in the price of the commodity by the means of the excise duty. Its purpose is to ensure that all costs are taken in consideration within the decision-making about consumption. Therefore the increase in the rate should send a signal about the harmful effect in case of the excessive consumption. The aim is to discourage the consumption. The issue of externalities is one of the big problems and failures in economy which do not affect only one subject but they have a negative impact on the whole society. Negative externalities lead to the reduction of GDP and so the economic efficiency decreases, too. The increase in the tax rate results in influencing consumers about the potential purchase or consumption of the products. On the other hand, they represent stable and regular state budget revenue.

A key reason for the use of the excise duties in relation to the improvement of the public health lies in the ability to change the behaviour of consumers. The increase

in the rates could motivate the producers to reduce the alcohol content in beverages and therefore to prevent the increase in the prices of these commodities. The introduction of the taxes on so called "unhealthy food" is only one of the measures and does not produce the desired results on its own. A more complex issue solving is necessary. It should include the summary of social, cultural, economic and biological factors. The taxes can influence people in the choice of food and drinks and their behaviour in relation to consumption, but only to certain extend. They have their limits and costs. The thoughts about the tax policy operation and tax reform contribute to the uncertainty in the society. Other factors which can significantly influence the behaviour of people depend on the specifications of social and economic environment, the methods of the introduction, respectively the increase of the tax rate as well as the extent of other available political measures in this sector. One of other negative externalities of the existence of alcoholic beverages is their packages and bottles, so called excessive waste production and related environmental burden. The fundamental problems linked to the waste management is land filling - the big amount of waste as well as a big number of landfill sites. The support activities mainly include the deposit option and the option of further processing of bottles and packages for recycling the secondary raw materials and the change of plastic bottles to the glass ones, so called deposit of PET bottles, cans and glass. The packages accumulated this way will not be returned back for the repetitive usage after they are cleaned but they will be recycled directly for the processor. It is about the savings of washing water polluted by chemical additional substances and environmental protection, but also the use of secondary raw materials including the effective stimulation of consumers to the pointed and sorted recycling. Responsibility for recycling (material and formal one) is transferred to the producers of goods who pack them to easily or hardly recyclable packages as a service for a consumer, but they have no direct impact on recycling those packages. It is necessary to stimulate and force a consumer to recycling, so that it becomes a part of their everyday life and routine by the introduction of the system of the deposit of some more easily recyclable packages, such as glass bottles, PET bottles and cans.

In recent years no bigger fluctuations in the state budget revenue and in the consumption of these commodities have been monitored. It can be attributed to the fact that no change in the rate of the excise duty on alcoholic beverages happened. Producers and consumers adequately adapted to the amount of the excise duty and gradual consolidation followed otherwise unchanged conditions. The development of the studied indicators including the state budget revenue, the commodity consumption, trade balance and domestic production signalized the necessity of the realisation of the aims which should relate to the improvement of the position of the products on the market. On the basis of the examined facts the following measures might be proposed:

- Tax relief for smaller breweries, since the reduced rate determined for the producers up to 200-thousand hl is rather suitable for a medium industrial brewery.
 Classification of breweries into several categories according to the size of production and the use of this classification for the determination of the tax amount.
- The increased tax control especially in the regions with a low number or no registered grower distilleries. Realize the controls in pubs and restaurants where there exists a suspected sale of illegally produced alcohol.
- Higher degree of control and consequent restriction of the import of non-quality wine.
- The support and promotion of Slovak wine routes, wine festivals and the tastings of fruit spirits, as well as the existence of small breweries and therefore the contribution to the development of tourism in Slovakia.
- The introduction of national tax ceilings of the alcoholic beverages taxation within the EU member states which would be able to reduce economic and fiscal costs related to cross-border shopping.

CONCLUSIONS

The existence of selective taxes is one of the reasons for increasing the state budget revenue, respectively reducing the deficits. The main aim of these taxes is a fiscal function. High rates of the selective taxes with a low elasticity of the demand represent the stable public budget revenue. Another reason for the taxation is also the influence of the final consumption. The different rates of taxation result from the fiscal reasons and they are economically justified. However, there exists a factor of negative externalities, when the goods with a negative impact on the public health and the environment are taxed by a higher rate. Non-existence of substitutes causes the situation when the demand for these goods, such as tobacco, alcohol and energies, is not elastic. The substitution effect does not occur. It means that the consumer does not substitute the taxed goods but they try to reduce the consumption of other goods. The high rates of these taxes and their low elasticity provide stable revenue. However, there exists the substitution within commodities. Alcoholic beverages, i.e. wine, beer, spirits and liqueurs substitute one another.

The search for the optimal combination of the taxation of income and consumption in the Slovak Republic also lead to the transfer of the tax burden from direct taxes to indirect one, which is positive for the state in the end. The need for the study of the sector of excise duties is confirmed by the fact that the current consumption is more complementary to leisure time. The combination of the reduction of costs and the increase of revenue is a frequent method for achieving the balance of the state revenue and costs. The increase of the revenue by the means of the increase of excise duties and VAT has shown to be the most effective as well as the introduction of new indirect taxes, such as tax on electronic cigarettes, environmental taxes. The growth

of tax evasions can be observed if the rate of the tax on alcoholic beverages or tobacco products is inadequate.

The development of the excise duty rate on alcoholic beverages was compared to the development of the consumption, production and trade balance, highlighting the breakthrough periods. Every increase in the tax rate does not necessarily mean the increase in the state budget revenue. The decrease of the domestic production is substituted by the growth of the import. It results in the negative trade balance. It can also cause the overpricing of goods and a consequent decrease of the consumption or its substitution for lower quality goods. The decrease in the employment in the given sector as well as bound sectors, especially in the agricultural sector, would be only another negative result of disproportional increase in the rate of the excise duty on alcoholic beverages.

On the basis of the findings the main principles can be formulated. They should be considered within further increase of the excise duty rate on alcoholic beverages. They can also be seen as a political-social recommendation for practice. These are:

- The taxation by a higher tax rate can motivate producers to reduce the alcohol volume in the products (e.g. the increase consumption of non-alcoholic beer was observed) or to produce healthier products.
- Increasing the rate on alcoholic products only to the certain extent considering the purchasing power of people as well as the efficiency of the economy (and so preventing the tax evasions in the form of shopping tourism and illegal domestic production).
- A multiple tax increase within a short time period (in course of one year) can be threatening for domestic producers from the point of view of their existence.
- The possibility of the substitution within the taxed commodities, while wine with its zero rate has a competitive advantage over other types of alcohol.
- Considering the prices and rates of the excise duties on alcoholic beverages in the neighbouring countries.

Apart from the increase in the rates of indirect taxes, there are other factors with a significant impact, such as the negative development and economic situation in the country and in the world, the reduced quality of goods, social situation of people, national habits, shopping behaviour of consumers, the harvest in the given year, the state of surpluses of agricultural raw materials and colder weather, too. The energy crisis will have a significant impact on the policy context, including on energy prices and consumption. Considering domestic production, the increase in the rates of excise duties and during the negative development is risky. The production of alcoholic beverages has a positive impact on the economy, even when considering the employment development, job creation by business partners and suppliers. The support of regions within the existence of small breweries, grower distilleries and family wineries is also important. For these reasons the increase in rates should be approached with

the emphasis on the situation in the sector considering broader national-economic relations.

ACKNOWLEDGEMENTS

This article was supported by the Scientific Grant Agency VEGA, under research project VEGA no. 1/0679/23 "Indebtedness of Economic Entities and Countries in the Euro-pean Union"

REFERENCES

Belkovicsová, D., Boór, M., (2021), Quantification of the Optimal Level of Fiscal Decentral-ization in OECD Countries, *Politická ekonomie*, 69 (5), 595-618. doi: 10.18267/j.polek.1326

Central Control and Testing Institute in Agriculture, (ÚKSÚP, 2018), Vineyard Register, Available at: https://www.uksup.sk/ovv-vinohradnicky-register

Colen, L., Swinnen, J. F. M., (2010), Beer Drinking Nations - The Determinants of Global Beer Consumption. In LICOS Discussion Paper Series, Discussion Paper 270/2010. Available at: http://ssrn.com/abstract=1752829

Heien, D., Pompelli, G., (1989), The Demand for Alcoholic Beverages: Economic and De-mographic Effects, Southern Economic Journal, 55(3), 759-770. https://doi.org/10.2307/1059587

Ihnatišinová, D., (2021), Digitalization of Tax Administration Communication Under the Effect of Global Megatrends of the Digital Age, In Globalization and Its Socio-Economic Con-sequences 2020: The 20th International Scientific Conference. Žilina: University of Žilina, 2021. ISSN 2261-2424. 1-10 online.

Lockwood, B., Migali, G., (2009), Did the Single Market Cause Competition in Excise Taxes? Evidence from EU Countries, The Economic Journal, 119 (536), 406-429. Available at: https://doi.org/10.1111/j.1468-0297.2008.02235.x

Ministry of Agriculture and Rural Development of the Slovak Republic (MPRV SR) and Na-tional Agricultural and Food Centre – Research Institute of Agriculture and Food Eco-nomics (NAFC-RIAFE), (2022), Reports on Agriculture and Food Sector in the Slovak Re-public (Green Reports 2009-2021). Available at: https://www.mpsr.sk/index.php?navID=122

Mullahy, J., Sindelar, J. L., (2000), Health, Income, and Risk Aversion: Assessing Some Welfare Costs of Alcoholism and Poor Health. NBER Working Paper No. w4649, University of Wisconsin, Madison, Department of Population Health Sciences and Yale University - School of Public Health. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=254535

Prammer, D., (2011), Quality of Taxation and The Crisis: Tax Shifts from a Growth Per-spective, Taxation papers, Working paper No. 29, Directorate General Taxation and Cus-toms

Union, European Commission. Available at:

https://taxation-customs.ec.europa.eu/system/files/2016-09/taxation_paper_29_en.pdf

Rogoff, K., (2019), Could a Progressive Consumption Tax Reduce Wealth Inequality? in World Economic Forum, 17/09/2019. [online]. Available at:

https://www.weforum.org/agenda/2019/09/the-benefits-of-a-progressive-consumption-tax

Sassi, F., Belloni, A., Capobianco, Ch., Alemanno, A., (2014), Taxation and Economic In-centives on Health-Related Commodities: Alcohol, Tobacco and Food, HEC Paris Research Paper No. LAW-2014-1038.

Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2400930#

Schultzová, A., (2020), Behavioural Approaches to Tax Collection: The Case of Slovakia, *European Journal of Transformation Studies*, 8 (2), 210-221.

Statistical Office of the Slovak Republic (ŠÚ SR), 2023. DATAcube Statistics. Available at: https://datacube.statistics.sk/#!/lang/sk/?utm_source=susr_portalHP&utm_medium=page_DATAcube&utm_campaign=DATAcube_portalHP

Vráblíková, V., (2016), The Impact of Indirect Taxes on Economic Growth, Politická ekonomie, 64 (2), 145-160. doi: 10.18267/j.polek.1060

FACTORS OF CHANGES IN THE DEMOGRAPHIC PROFILE OF THE SOCIETY

Eva Pongrácz

University of Economics in Bratislava, Faculty of National Economy,
Department of Social Development and Labour,
Dolnozemská cesta 1, 852 35 Bratislava, Slovak Republic
eva.pongracz@euba.sk

85

Simona Polonyová

University of Economics in Bratislava, Faculty of National Economy,
Department of Social Development and Labour,
Dolnozemská cesta 1, 852 35 Bratislava, Slovak Republic
simona.polonyova@euba.sk

&

Hana Poláčková

University of Economics in Bratislava, Faculty of National Economy,
Department of Social Development and Labour,
Dolnozemská cesta 1, 852 35 Bratislava, Slovak Republic
hana.polackova@euba.sk

&

Kornélia Beličková

University of Economics in Bratislava, Faculty of National Economy, Department of Finance,
Dolnozemská cesta 1,
852 35 Bratislava, Slovak Republic
kornelia.belickova@euba.sk

&

Jakub Girašek

University of Economics in Bratislava, Faculty of National Economy,
Department of Social Development and Labour,
Dolnozemská cesta 1, 852 35 Bratislava, Slovak Republic
jakub.girasek@euba.sk

Abstract

This article is focused on the issue of population aging from the point of view of connecting the social (view of overall population aging) and individual (aging of individuals within their life cycle) perspective. The aim of the article is to present the aging process of the Slovak population from above with an emphasis on the factors of research reflecting changes in the population of those aged over 65 years of age on the level of the individual regions of Slovakia. A quantitative strategy was used in the research, based on theoretical-epistemological sources and secondary data was used by applying desk-research. The research was carried out by a combination of desk research and a research strategy focused on the quantification of data collection and analysis. The result of this research is the findings of different dynamics of population growth of those over 65 years of age in individual regions, the findings of different development of the percentage change in the population over 65 years of age in the Bratislava region and identification of factors in a mutual relationship with the development of the population of the over 65 age group in Slovakia and in its individual regions. These findings can serve as a basis for further research in the researched area. The results of the research are partially influenced by the Covid-19 pandemic, which affected the data for the years 2020-2021, but they nevertheless indicate the assumption of further development in the individual regions of Slovakia.

Key words: Slovakia, Aging Theories, Demographic Aging, Aging Intensity, Demographic Profile, Regional Disparities

INTRODUCTION

The topic of population aging was presented as part of international discussions at the first World Assembly on Aging in Vienna in 1982. Population aging has since been considered a strong demographic trend with far-reaching consequences for every aspect of an individual's life and society [UN 2023a].

The process of population aging is the result of long-term demographic changes [Ortega 2021; Muszyńska, Rau 2012; Sanderson, Scherbov 2010], which began in Europe several decades ago. This trend is visible in the changes in the age structure of the population and it is manifested in the growing share of an elderly population together with the decreasing share of the working age population in the total population [Eurostat 2022]. It can be stated ty the Europehat, on a European scale, the improvement of a person's life span is the main determinant of the age structure, and improvements in life span are the result of qualitative changes in the case of elderly people (people live healthier; they are more educated, etc.) [Ortega 2021; Muszyńska, Rau 2012; Sanderson, Scherbov 2010].

From the point of view of the last decade, life expectancy at birth increased in the EU, while it has been increasing by an average of more than two years per decade since the 1960s. However, the latest data for the year 2021 in several EU member states point to a halt (in some member countries returning to the level before the Covid-19 pandemic) or even to a decrease in life expectancy. According to preliminary data

from 2021, the mentioned pandemic had a negative impact on the decrease in life expectancy at birth in almost half of the EU member states. Specifically, the largest decreases compared to 2019 were recorded by Bulgaria (-3.7), Slovakia (-3.0) and Romania (-2.7) [Eurostat 2022]. In the long-term horizon, the latest Eurostat forecast EUROPOP 2019 (Eurostat demographic projections with base year 2019) for the period from 2019 to 2070 shows a continued increase in life expectancy at birth and also at 65 years of age for both men and women. Within the EU as a whole, life expectancy at birth should be increased by 7.4 years for men and 6.1 years for women. However, it should be added that since the given forecast was issued in April 2020, it does not yet take into account the impact of the Covid-19 pandemic [European Commission 2021: 19].

The impact of aging is seen as an intergenerational burden [Bohn 2011], which has an increasing trend [Bohn 2011: 164]. As a result of demographic changes, the proportion of the working age population in the EU is decreasing, while the relative number of pensioners is increasing. The share of elderly in proportion to the total population is expected to increase significantly in the next few decades. This can subsequently lead to an increased burden on the working age population, especially from the point of view of covering expenses in the social sphere, which are required by the aging population for a range of related services [Eurostat 2023]. Therefore population aging opens a broad discussion about the impact of this trend - on citizens regardless of their age and on society as a whole. It raises issues that extend across the life cycle, i.e. up to retirement [European Commission 2022: 1]. It is therefore necessary to identify and remove legal, social, financial or other obstacles, which prevent elderly people from seeking and developing opportunities for their participation in personal development and in society [UN 2023b: 4].

The Green Paper on Aging newly published ban Commission from 2021 refers to these demographic changes, to their intensity as well as their impact on society as a whole. It points to the fundamental fact that there are several ways to prevent the negative consequences of the alarming aging of society, or to limit its possible consequences [European Commission 2021: 24; EuroHealthNet 2020]. The key is to anticipate the opportunities it brings and react to them in time. As it further states, the demographic profiles of EU regions differ considerably, especially between urban and rural areas; while some places are aging significantly and in others the number of the working age population is increasing [European Commission 2021: 2].

In this context, it is added, that it is particularly important to recognize regional disparities in aging within a given country and take this key aspect in the adoption of measures and proposals for changes at the regional and national level into account. The purpose of this article is to present a view of the demographic profile of Slovakia in a regional context. A view of the analysis of the development of the population of the age group over 65 years of age at the level of individual regions of Slovakia for the period from 2000 to 2020 is presented. As the absolute numbers depend to

a large extent on the size of the population in a given country, three transformations that express the change in the number of the population over 65 years of age in relative proportions, namely the share of the population over 65 years of age, the percentage change in the number of the population over 65 years of age and the percentage change in the share of the population over 65 years of age are presented. For this purpose, those factors influencing the growth of the population over 65 years of age were identified. The mutual relationship between selected indicators and the share of the population aged 65+ was sought.

In this sense, the aim of the article is based on an analysis, to present a view of the process of the aging of the Slovak population from above, with an emphasis on examining the factors of changes in the number of residents over 65 years of age at the level of individual regions of Slovakia. This contribution is structured as follows. The first part of the article outlines the significant opportunities of population aging for sustainable development. Key aspects of aging in an individual's life are characterized in more detail, supplemented by theoretical approaches to aging. The second part describes the methodology used in the empirical analysis. The following section provides an overview of the demographic profile of Slovakia in a regional context. Based on the results of the analysis, the article deals with the evaluation of the researched transformations expressing the change in the number of residents over 65 years of age old at the level of individual regions of Slovakia.

1. THEORETICAL STARTING POINTS OF POPULATION AGING AS A CONTEMPORARY PHENOMENON

Population aging provides significant opportunities for sustainable development. This mentioned fact is related to the assumption of the active participation of the older population in the economy, the labor market and society as such, as the elderly can be a significant contributor in the following interrelated areas [Dugarova 2017: 11-13].

In the area of economic development: the elderly can make a significant contribution to the economy through their work activity, often after reaching retirement age; also through taxes, consumption, transfers of assets and resources to their families. Even if, for example, the breadwinner is absent, their work can be the only source of income to support their families. In the area of unpaid nursing work: the elderly, especially women, play a key role in providing unpaid care to spouses, grandchildren and other relatives. In the area of political participation: the elderly have the potential to become more influential in society as they make up an increasing proportion of the total population. This fact can have a significant impact on social, economic and political outcomes in the country. In the area of strengthening social capital: many elderly tend to be actively involved in community and civic life through volunteering and participation in community institutions, which can contribute to strengthening social capital [Dugarova 2017: 11-13].

Population aging includes a combination of bio-physiological, psychological and social processes that take place over time and lead to death. It therefore concerns all areas of life, i.e. the physical area, psychological area and social area [Filipová in Draganová et al. 2006: 121]. The term "old age" is multidimensional. It includes chronological (referring to the date of birth), biological (related to the capabilities of the human body), psychological (related to psycho-emotional functioning) and social age (related to social roles such as grandparents) [Dugarova 2017: 21]. It is a complex phenomenon that is influenced by biological factors (diseases, heredity), social factors (family, family and economic conditions), ecological factors (environment), health and hygiene factors (nutrition, lifestyle) and living conditions [Filipová in Draganová et al. 2006: 121].

As aging affects the biological, psychological and social areas, it is possible to talk about the following key aspects of aging in an individual's life:

- biological aging, which is a manifestation of deterioration of adaptation processes, biological changes in the structure, appearance and functioning of the organism [Hangoni et al. 2014: 13];
- mental aging manifested mainly by changes in personality traits, reduction of cognitive abilities, slowing down of psychomotor pace,
- social aging, which is related to the individual's adaptation to a change in social status, to retirement [Filipová in Draganová et al. 2006: 121-122].

1.1. Theoretical approaches to the aging of the individual

Population aging, which is influenced by biological, psychological and social factors, is considered to be the dominant phenomenon of the present times [Tokovská, Šolcová 2014]. Currently, many experts agree that high levels of physical, cognitive, and social functioning are related to health and successful aging [Franklin, Tate 2008]. The beginnings of the development of theoretical approaches to aging can be observed since the beginning of the 1950s. The oldest theories concerning aging are associated with psychosocial theories (psychological and sociological) that perceive aging in connection with changes in behavior, personality and attitudes. From a narrower point of view, while psychological theories focus on personality development, particularly how an individual's attitudes, emotions, motivation, and personality influence adaptation to physical and social demands; sociological theories consider how changing status, relationships, roles in society affect an individual's ability to adapt [Mauk 2006: 58]. In this context, it is possible to mention, for example, the view of sociologists on the research of interdependence between society and persons of 65 years of age and over in the 1970s. One of the results of the research was that individuals of different generations have different experiences that can cause them to age in different ways [Riley, 1994 in Mauk 2006: 62].

Tavel summarised the theory of aging, taking the biological, psychological and social aspects into account. From this point of view, theories are divided into eight basic

groups: aging theories emphasizing the biological aspect (deficit theory, wear and tear theory, free radical theory, telomere theory), qualitative models of aging (E. Erikson's life stage theory, R. J. Havighurst's theory of developmental tasks, Gutmann's theory of increasing gender similarity, gerodynamic theory of old age), growth theories, cognitive theories (cognitive theory of the Bonn School), continuity theory, cultural-anthropological theories, the interaction model of longevity and feeling of satisfaction in old age and theories of successful aging (activity theory, disengagement theory, dynamic theories, SOK-model by P.B. Baltes and M.M. Baltesova. Tavel presents this division despite the statement that the criteria of successful aging are subjective and objective, not clearly defined and generally accepted) [Tavel 2009].

Knight [Knight 1995] starts from the idea that the biological basis of aging remains unclear and that aging is associated with the random event of "wear and tear" (e.g., stochastic theories). Farková [Farková 2012] uses the WHO periodization. which is expressed by chronological age, to define aging but is also based on other changes that occur during the aging period (e.g. genetic program theory, immunological theory, crossover theory, ecological theories). At the same time, attention is drawn to the fact that both scientists and experts deal with the reasons and causes of aging, as a result of which there are now a number of theories of aging, none of which has yet been generally accepted.

Nevertheless, it is still desirable to study aspects of the aging of individuals, even in the context of population aging. According to Tokovská and Šolcová, the negative effects of aging can be mitigated to a certain extent by the active involvement of seniors in solving the challenges that older age brings, by passing on experience to younger generations and peers and by further education [Tokovská, Šolcová 2014].

1.2. Indicators of changes to the demographic profile of the company

A population is classified as aging when the elderly make up a proportionally larger share of the total population [UNFPA 2012: 12].

The process of population aging reflects changes in the age structure of the population with a shift in favor of older age groups, while changes can occur in three ways, namely through changes in birth rate, death rate and migration. Birth rate is one of the basic demographic processes that, together with mortality, significantly influence population growth [Katuša et al. 2014: 8]. Mortality and mortality ratios, representing the process of the natural movement of the population and reproduction of the population. They are influenced by the level of health care, lifestyle including nutrition and physical movement, the quality of the environment, as well as the intensity of the population's psychological, social and economic burden. Education, marital status, age, gender, genetic disposition, better availability of drugs and medical technology are also important factors [Katuša et al. 2014: 26]. One of the basic demographic processes already mentioned is migration, which affects the distribution and structure of the population in the territory [Hamada, Casa Grande 2014].

It most often involves the working age population, when the decreasing representation of this population group during emigration causes the aging of the population [Káčerová, Nováková 2016; Káčerová, Ondačková, Mládek 2013]. Population aging can thus be the result of both a slower growth in the number of young age groups, which is caused by a lower birth rate, and an accelerated increase in the number of older age groups caused by a rapid decrease in mortality [Tomeš 2005: 5].

The population aging process, due to the decrease in the birth rate can be characterized as aging of the population from below and an aging of the population due to the extension of life, aging of the population from above [Jurčová 2005: 57]. In connection with the rapid increase in the number of people, especially in old age, demographers work with the term "aging at the apex of the age pyramid" [Litomerický 1992; Cséfalvaiová 2012: 3]. The dynamics of aging can also be influenced by changes in the volume of the productive age group of the population aged 15 to 64, which can be characterized as population aging from the center [Mackellar 2003; Káčerová, Ondačková 2015: 45].

Two basic historical milestones can be defined, which are to a certain extent explanatory for the reproductive behavior of populations from the point of view of demography. One of them is the demographic revolution, which can be defined as a process during which quantitative and qualitative transformation of demographic phenomena takes place. It arises at a certain stage of development of the given company and it forms and ends again after a certain period. As mentioned above, reproductive behavior itself is related to various societal factors. At the moment when their fundamental transformation takes place, this fact is also reflected in the reproductive behavior of the population, leading to significant changes and a demographic revolution [Pavlík, Rychtaříková, Šubrtová 1986 in Dimitrová 2007: 25].

The deeper and more radical the transformative changes are manifested, the more radical changes in demographic behavior can be expected in a transforming society, as the demographic behavior of the population reacts to transformation very sensitively [Michalek, Podolák 2017: 2]. The second milestone is the so-called demographic transition. Its essence lies not only in maintaining a low level of mortality and therefore pushing the aging population process, but also in reducing the level of the birth rate [Dimitrová 2007: 25].

In addition to the above, it can be stated that the demographic behavior of the population is to a certain extent determined and will be significantly determined also in connection with modernization, green and digital transformation. A potential question may be what effect the ongoing and further expected structural, cultural and technical changes in society will have on the future level of mortality and the health status of the population. It can be expected that the share of physically demanding work, in which the human body wears out quickly, will continue to decrease. In this direction, further improvement in mortality ratios can be expected. There are also a number of cultural changes taking place in society and they bring, among other

things, higher education. It is known and proven that more educated people can take better care of their health and live longer. And last but not least, a series of new technical changes that will also affect the field of medicine and health care can be observed in developed countries. All the above mentioned changes result in the improvement of the mortality ratios in the given population and the associated increase in the average life expectancy at birth [Fiala, Langhamrová 2013: 338, 353].

Strategic forecasting can have an important role in the demographic context in the process of identifying and anticipating challenges and for better preparing policies to address them altogether [European Commission 2020: 26, 28].

The rate of population aging is monitored through three indicators, namely the aging index, the average age of the population and the average life expectancy, i.e. the average number of years of life for persons of both sexes [Hasa 2019].

Mortality ratios are best described by the average life expectancy (life expectancy), because it clarifies the effect of the age structure, which the crude death rate indicator does not take into account. Average life expectancy at a certain age provides information about how long, on average, a person of a given age will live, assuming that the mortality rates do not change throughout his life [Katuša et al. 2014: 28].

However, it shall be noted that the process of population aging is not only a demographic issue, but also an economic-political one. [Michalek, Podolák 2017: 11].

From this point of view, it significantly affects the number and structure of the workforce. From an economic point of view, aging is indicated by the economic burden index, which defines three economic generations, and thus represents the number of persons in pre-productive age (0-14 years of age) and in post-productive age (65 years of age and more) per 100 persons in productive age (15-64 years) [Šilhár 2019]. Changes in the demographic profile of society create new limits and conditions for development in various spheres: 1. in the economic sphere (risk of unsustainability of public systems, declines in the population at productive age; changes in the rate of savings), 2. in the social sphere (changes in the formation of family structures, new demands in the area of social protection and long-term care; the issue of active aging), 3. in the political sphere (systemic reforms in the conditions of an aging society emphasizing higher demands on the area of public resources), 4. in the sphere of international relations (e.g. the ability to respond to new development conditions on time) [Hvozdíková et al. 2008: 68].

As the economic and social situation changes, it can be assumed that there will be an increase in the variability of demographic behavior in proportion to social status, economic security, achieved education and the subjective definition of life values [Michalek, Podolák 2017: 13].

2. METHODOLOGICAL APPROACH

This article focuses on the issue of population aging from the point of view [MoLSAF SR 2021: 9] of connecting the societal (view of the overall aging of the population) and individual (aging of individuals within their life cycle) perspective. The article is based on a combination of desk research and quantitative research - a research strategy focused on the quantification of data collection and analysis. The article analyzes the data on the development of the share, percentage change in the number and the percentage change in the share of the population over 65 years of age. The basic source of relevant data for the researched issue was mainly data obtained from PHC 2021 [The 2021 population and housing census], from the National Health Information Center, from the Health Yearbook of the Slovak Republic 2021 and from the document of the Statistical Office of the Slovak Republic We in numbers: Population change in 2021 compiled from statistical data on the results of demographic processes. The basic dataset was created from the data of the above-mentioned sources, while other indicators (e.g. the ratio of expenses and income) were created from them. The amount of the population over 65 years of age was expressed in proportion to the total number of the population in a given region in order to remove the influence of the difference in the total number of population in different regions. It pointed out the differences in the development trend of the population of the age category of people over 65 years of age in the regions of Slovakia based on the data analysis, it also deals with the evaluation of the investigated transformations expressing the change in the number of the population over 65 years of age at the level of individual regions of Slovakia. Based on the results of the data analysis, a correlation analysis was carried out, as a result of which several statistically relevant factors were identified in the context of population aging in Slovakia.

3. THE VIEW AT POPULATION AGING IN THE DEMOGRAPHIC PROFILE OF SLO-VAKIA

The need to create conditions for sustainable development is increasingly reinforced by the consequences of population aging. In the context of current forecasts in the area of the impact of demographic development on the sustainability of social conditions of prosperity, Slovakia adopted for the next period the National Program for Active Aging for the years 2021-2030, which immediately follows on from the first strategic document prepared for the years 2014-2020 [MoLSAF SR 2021: 3].

There are several ways in which the negative consequences of aging on society can be prevented or reduced, as stated in the 2021 Green Paper on Aging. These include supporting healthy and active aging, increasing the resilience of health and care systems, improving the performance of the labor market and modernizing social protection [European Commission 2021: 24]. Healthy and active aging and lifelong learning are two political concepts that make a prosperous aging society possible [European Commission 2021: 4]. The already mentioned Green Paper on Aging also points to

the fact that the demographic profiles of EU regions differ considerably, especially between urban and rural areas, while some places are aging significantly and in others, the number of the working-age population is increasing [European Commission 2021: 2].

In this context, it is added that it is also particularly important to recognize regional disparities in aging within a given country and to take this key aspect into account when adopting measures and proposals for changes at the regional and national level. In 2021 the population and housing census (PHC)¹ was carried out. The research was based on data for 2020, since the data from the mentioned PHC were published gradually during the research. For completeness in this section, (table no. 1 and table no. 2) shows the status and growth of the population of the Slovak Republic and the regions of the Slovak Republic for the year 2021, whereas in previous years, after taking natural increase, natural decrease and increase/decrease due to migration into account, the total number of the population of the Slovak Republic grew, in the 2020s the total increase slowed down and in 2021 there was an even more significant decrease in the population. The stated fact is primarily a consequence of the Covid-19 pandemic or the impaired availability of health care for non-covid patients. The Slovak Health Yearbook for 2021 states that the second most common cause of death in 2021 was confirmed as the Covid-19 infection [NHIC 2022: 16]. According to the National Health Information Center (NHIC), deaths in 2021 were most often caused by one of three causes of death in the following order: circulatory system diseases (38.6%), confirmed Covid-19 infection (20.3%) and tumors (17.7%) [NHIC 2022]. Unfortunately, the mentioned statistics did not apply only to the older generation. According to data from the publication Health Yearbook of the Slovak Republic 2021, 11% more people died in the Slovak Republic in 2020 than in 2019 [NHIC 2022] and in 2021, the so-called second year of the Covid-19 pandemic, 24.3% more people died in Slovakia in comparison to the previous year [NHIC 2022].

Table 1. The state and the change of the population in 2017-2021

Year	Natural popula- tion increase/ decrease	Population increase/ decrease by migration	Total population in- crease/ decrease	State of the population as of 31.12. of the given year
2021	- 16 896	2 338	- 14 558	5 434 712
2020	- 2 439	4 347	1 908	5 459 781
2019	3 820	3 632	7 452	5 457 873
2018	3 346	3 955	7 301	5 450 421
2017	4 055	3 722	7 777	5 443 120

Source: Own processing according to the National Health Information Center (2022, p. 19) based on data from the Statistical Office of the Slovak Republic

¹ Compared to the previous PHC carried out in 2011, there were methodological changes, for example, from 2012, children born abroad to mothers with permanent residence in the Slovak Republic are not included in the number of live births. Such children are included in the number of inhabitants of the Slovak Republic only after their first application for permanent residence in the Slovak Republic, i.e. in the number of immigrants.

Table 2. The state and the movement of the population in 2021 in the regions of Slovakia

Region	Natural popula- tion increase/ decrease	Population in- crease/decrease by migration	Total population increase/de- crease	State of the population as of 31.12. 2021
Bratislava (BA)	83	4 094	4 177	723 714
Trnava (TT)	- 2 332	1 620	- 712	565 296
Trenčín (TN)	- 3 155	- 610	- 3 765	573 699
Nitra (NT)	- 4 514	161	- 4 353	673 547
Žilina (ZA)	- 1 689	- 399	- 2 088	689 525
Banska Bystri- ca (BB)	- 3 595	- 1 020	- 4 615	620 986
Prešov (PO)	53	- 1 327	- 1 274	807 657
Košice (KE)	- 1 747	- 181	- 1 928	780 288

Source: Own processing according to the National Health Information Center (2022) based on data from the Statistical Office of the Slovak Republic

Table 3. shows how the average age of the population in the Slovak Republic and other age indicators changes between 2012 and 2021. Age indicators in 2020 compared to Slovakia and the EU-27 are shown in Table 4. Due to the fact that the article deals with aging "from above", the focus was more on indicators including residents in the 65+ age group.

Table 3. Age indicators of the Slovak population in 2012 - 2021 (male and female total)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2012
Average age	39,32	39,60	39,87	40,13	40,37	40,59	40,82	41,06	41,26	41,39	39,32
Median age	38,20	38,60	39,00	39,40	39,80	40,20	40,60	41,00	41,40	41,80	38,20
Aging In- dex (%)	85,51	88,34	91,17	94,22	96,96	99,43	101.9	104,8	107,34	108,27	85,51
Index of economic burden (%)	39,81	40,57	41,39	42,41	43,77	45,21	46,59	47,95	49,20	50,26	39,81

Source: Own processing according to data from Podmanická, Z. et al. (2022)

Table 4. Age indicators of Slovakia 2020 compared to the EU-27

	Slovakia	EU – 27
Population aged 65+ (%)	17,1	20,8
Median age	41,4	44,1
Index of economic burden (%)	49,2	56,0
Aging index - total men and women (%)	107,3	138,4

Index of economic dependence of the elderly (%)	25,5	32,5
Average life expectancy	76,9	81,3

Source: Own processing according to data from Podmanická, Z. et al. (2022)

The aging index is gradually increasing in Slovakia. It is shown from the data in Table 3 that in 2012 there were approximately 86 inhabitants aged 65+ for every 100 children aged 0-14 in Slovakia, in 2020 there were already more than 107 and in 2021 more than 108 inhabitants over 65 years of age. For comparison, in the EU - 27 (as a whole), there are more than 138 persons aged 65+ per 100 children (table no. 4). Italy has the highest aging index across the EU-27 countries at 182.6 and Ireland the lowest at 73.9. Europe is aging, Slovakia is slightly better off than most of the EU-27 countries (only the already mentioned Ireland, Luxembourg 91.5 and Cyprus 102.5 had a lower aging index for 2020) [Podmanická et al. 2022]. The data on the share of the population of Slovakia in the post-productive age in the total population are shown in Table 5. From 2012 to 2021, an increase (despite the Covid-19 pandemic, which mainly threatened seniors) of 4.26 percentage points is recorded.

Table 5. Share of the population of Slovakia aged 65+ (%) in the years 2012 - 2021

Year	Percentage of the population aged 65+ (%)
2012	13,13
2013	13,54
2014	13,96
2015	14,45
2016	14,99
2017	15,52
2018	16,04
2019	16,58
2020	17,07
2021	17,39

 $Source: Own\ processing\ based\ on\ data\ from\ the\ Statistical\ Office\ of\ the\ Slovak\ Republic\ (2022)$

It can be concluded that the population aging of the Slovak Republic in the development of the age structure is mainly influenced by changes in the intensity of fertility and mortality, less by the influence of foreign migration. The growth in the number and share of seniors is accelerating (Šprocha et al., 2022, pp. 90 - 95). An increase in life expectancy can also be observed for people 65 years of age (for example, between 2000 and 2018, the average life expectancy increased from less than 13 years to more than 15 years for men and from less than 16.4 years to 18.8 years for women) (MoLSAF SR 2021, p. 11). In addition, the increase of population aging is reinforced by a significant increase in the number of so-called young-old persons aged 65-74 (compared to 2000 by 63%); in the so-called old-old persons aged 75 and over (by

37%) and even in the oldest residents aged 85+, the so-called oldest old persons (the highest increase in the number of up to 85.7% compared to the year 2000) [von Humboldt, Leal 2015; Šprocha et al. 2022: 90-95]. However, according to the latest available data, the unfavorable epidemiological situation had a negative impact on both the number of deaths and the intensity of mortality [Šprocha et al. 2022: 51]. The Covid-19 pandemic accounted for approximately 80% of the total reasons for the shortening of life for both sexes (-3.15 years for men; -2.71 for women). This meant a decrease in the average life expectancy at birth for men by almost -2.6 years and for women by almost -2.2 years [Šprocha, B. 2022: 104-105] in absolute terms.

The next part of this article focuses on an analysis of the development of the age category of the population over 65 years of age with the aim of identifying the factors of changes in the population over 65 years of age. The first step was to research the frequency of the age category over 65 years of age in Slovakia for the period from 2000 to 2020.

1000000 5.00% 900000 4,00% 800000 3,00% 700000 600000 2.00% 500000 1.00% 400000 300000 0.00% 200000 -1,00% 100000 -2,00% 0 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020

Figure 1. The number and change in the number (in %) of the population over 65 years of age between years 2000 and 2020

Source: own compilation based on data from the Statistical Office of Slovak Republic

The number of the population in the age category 65+ is continuously growing during the monitored period, when researching the percentage change in the number, certain differentiations in the development trend are obvious. Three transformations that express the change in the number of the population over 65 years of age in relative proportions were observed, as the absolute numbers largely depend on the

number of the population in a given country. The next part of this research focused on the following three factors:

- the share of the population over 65 years of age,
- the percentage change of the population over 65 years of age
- the percentage change in the share of the population over 65 years of age.

Table 6. Examined factors expressing changes of the population over 65 years of age

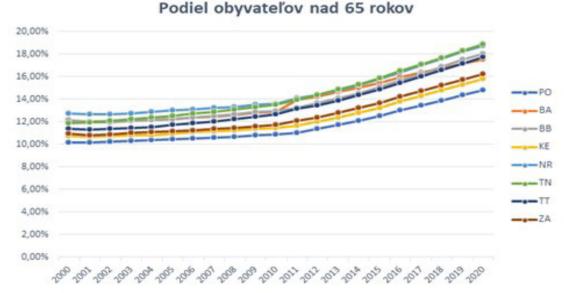
Factor	Calculation		
I. Share of the population over 65 years of age	Number of population over 65 years of age in the region The total number of population in the region		
II. Percentage change in the number of the population over 65 years of age	Number of population over 65 years of age t+1 - Number of population over 65 years of age t Number of population over 65 years of age t +1		
III. Percentage change in the share of the population over 65 years of age	Number of population over 65 years of age t+1 - Number of population over 65 years of age t Number of population over 65 years of age t +1		

Source: own processing

In the first step, it was decided to research the age category over 65 years of age in proportion to the total population in the regions of Slovakia. It is stated that an increasing trend can be observed in all regions of Slovakia, the difference is observed in the intensity of the increase of this indicator.

When expressing the percentage growth of the share of the population over 65 years of age, certain differences can be observed in the regions of Slovakia in the period 2000-2020. The most intensively aging region is the Trenčín region (7.0%), and the lowest growth is reported for the Prešov region (4.6%). Based on the data presented in Table no. 7, it was concluded that although the share of the population is growing in each region, 3 groups can be formed from them.

Figure 2. Share of the population over 65 years old by region and year



Source: own compilation

Table 7. Growth of the share of the population over 65 years of age in the period from 2000 to 2020 (percentage points)

Region	Growth of the share of the population over 65 years of age in the period from 2000 to 2020 (percentage points)
BA	5,4%
BB	5,9%
KE	5,1%
NR	6,0%
PO	4,6%
TN	7,0%
TT	6,4%
ZA	5,3%

Source: own compilation

Table 8. Groups of regions according to the development of the share of the population over 65 years of age

Regions	Description
BA	Although it has a high share of the population over 65 years of age, the growth of this share is moderate – 5.4 percentage points.
BB, TN, NR, TT	Already in 2000, it had a high share of the population over 65 years of age, and the growth of this share is still significant – over 6 percentage points (BB 5.9 percentage points). The most significant growth is in the Trenčín Region - up to 7 percentage points.
KE, PO, ZA	In 2000, the share of the population over 65 years of age was around 10%, and by 2020 this value reached 15%. The growth is more moderate, around 5 percentage points.

Source: own compilation

Based on the above facts, it is expected that the growth dynamics of the population over 65 years of age will continue to differ in individual regions. Next, factor II listed in Table no. 6 was researched, i.e. the percentage change in the number of residents over 65 years of age was monitored.

5,00%

4,00%

3,00%

2,00%

1,00%

0,00%

-1,00%

-1,00%

-2,00%

-3,00%

-3,00%

-4,00%

Figure 3.Change in the number of population by regions and years aged 65 plus.

Source: own compilation

In the years 2005-2019, the largest change in the size of the population over 65 years of age occurred in the Bratislava Region and the smallest in the Nitra Region.

The next part of our research was focused on an analysis of the researched phenomenon based on factor III. listed in Table no. 6. The development of the percentage change in the size of the population over 65 years of age shows a similar trend in all regions except the Bratislava Region. The difference in the Bratislava region can also be explained by the above-mentioned facts and the crude rate of net migration- the change in the absolute number of the population over 65 years of age is the highest, but at the same time the number of the population in other age categories is growing faster than in other regions. This is confirmed by the crude rate of net migration balance in Figure 4 below.

In the next part of our research, the identification of indicators that influence the growth of the population over 65 years of age was carried out, the mutual relationship between the selected indicators and the share of the population 65+ was sought. The data available in the databases of the Statistical Office of the Slovak Republic were used. The research focus was on 201 indicators indicating the socio-economic background of the population and which were examined from the point of view of individual regions. Preference was given to those data that were available for the period from 2000 to 2020. For this purpose, a correlation analysis was performed on

all three factors listed in Table no. 6.: Share of the population over 65 years of age (factor I), Percentage change in the population over 65 years of age (factor II), Percentage change in the share of the population over 65 years of age (factor III). The results of the correlation analysis reached the same results from the point of view of all three factors. Mutual dependence with a very high correlation was observed mainly on indicators that are also relevant from the point of view of research on the given issue. It was concluded that the greatest positive dependence at the national level appears to be with indicators that describe economic prosperity (the correlation coefficient for the average monthly nominal wage is 78%, or for the employment rate between the ages of 20 and 64, 77%). On the other hand, there is a negative dependence with indicators that express a less favorable economic background, the correlation coefficient for the percentage of expenditure on food from total income has a value of -73% and the ratio of expenditure and income -63%. The disparity between individual regions was observed in indicators such as the unemployment rate, where this factor has less influence on the growth of the population over 65 years of age in the Bratislava and Trnava regions (the value of the correlation coefficient is -63% and -68%, respectively) than in the Banska Bystrica or Košice regions (-95%, respectively -87%). Similarly, in the case of the indicator of the ratio of expenses and income, the correlation coefficient showed a more significant negative dependence in Bratislava, Nitra and Košice regions (-95%) as in the Trenčín and Trnava regions (-76% and -69%). These findings can serve as a basis for further research, examination and characterization of mutual relationships between the analysed variables.

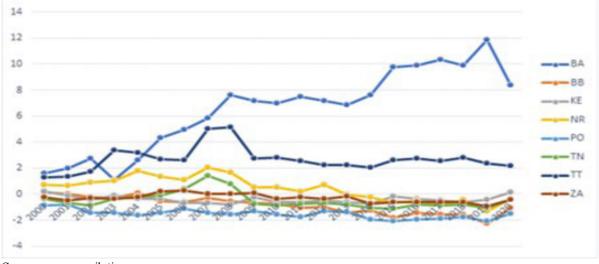


Figure 4. Crude rate of net migration according to the regions of the Slovak Republic

Source: own compilation

CONCLUSION

Demographic aging is an irreversible process and at the same time a challenge for all member states of the European Union. The European population as well as the population of Slovakia is aging, while the intensity of aging in the Slovak Republic is more prominent. The process of population aging can be studied "from below" (reducing the birth rate) or "from above" (extending the lifespan). It is desirable to introduce public policy measures to increase the birth rate, which will create favorable conditions for young people and systematically improve family support. The article focused on the research of the aging process "from above". In Slovakia, life expectancy has been continuously increasing since the mid-1960s.

The importance of biological, psychological and social determinants of aging from the perspective of individuals was pointed out. Many experts are supporters of the fact that it is possible to contribute to the solution, or to mitigate the negative impacts of population aging by applying knowledge from research focused on aspects of individual aging in practice. By analysing the aging process in the Slovak Republic, it was discovered that the share of the population over 65 years of age is growing in every region. The growth of this share in the Bratislava region is moderate, in 4 regions of Slovakia it is over 6% and in 3 regions it is around 15%. This development indicates that the growth dynamics of the number of this age category will continue to be different in individual regions. All regions show similar results, except for the Bratislava region, mainly because of the Crude rate of net migration when monitoring the percentage change in the population over 65 years of age. Approaches were triangulated in order to strengthen the results of this analysis, i.e. the correlation was performed on three factors created by us (share of the population over 65 years of age - factor I., percentage change in of the population over 65 years of age - factor II., percentage change in the share of the population over 65 years of age - factor III). As a result of the research, indicators have been identified in a mutual relationship with the development of the population of the over 65 age group in Slovakia and in its individual regions.

ACKNOWLEDGEMENT

This work was supported by the research project of the Scientific Grant Agency of the Ministry of Education, Science, Research and Sports of the Slovak Republic and the Slovak Academy of Sciences (VEGA) No. 1/0851/21 The social economy a modern tool for building an inclusive society in the context of global change and the challenges of the UN 2030 Agenda for Sustainable Development.

REFERENCES

Bohn, H., (2011), Should public retirement plans be fully funded? Journal of Pension Economics and Finance, 10(2), 195–219. Retrieved February 21, 2023 from http://doi.org/10.1017/S1474747211000096.

Cséfalvaiová, K., (2012), Demografické starnutie populácie ako spoločenský fenomén. Retrieved February 21, 2023 from https://relik.vse.cz/2012/sbornik/download/pdf/55-Csefalvaiova-Kornelia-paper.pdf.

Fiala, T., Langhamrová, J., (2013), Vývoj ekonomického a sociálního zatížení a stárnutí populace. Politická ekonomie, 2013, roč. 61, č. 3, s. 338-355. ISSN 0032-3233. Retrieved February 21, 2023 from https://polek.vse.cz/pdfs/pol/2013/03/03.pdf.

Franklin, C. N. - Tate, A. Ch. (2008). Lifestyle and Successful Aging: An Overview. AMERICAN JOURNAL OF LIFESTYLE MEDICINE OnlineFirst, published on November 15, 2008 as doi:10.1177/1559827608326125 Retrieved May 15, 2023 from https://www.researchgate.net/publication/244920327_Lifestyle_and_Successful_Aging_An_Overview.

Hasa, P., (2019), Analýza sociálno-ekonomických aspektov kvality života seniorov na Slovensku. Retrieved February 21, 2023 from https://www.prohuman.sk/socialna-praca/analyza-socialno-ekonomickych-aspektov-kvality-zivota-seniorov-na-slovensku.

Hvozdíková, V. et al., (2008), Riziká aktuálnych vývojových trendov vo svetovej ekonomike: finančná, demografická, potravinová a environmentálna kríza. Bratislava: Ekonomický ústav SAV, 2008. ISBN 9788071441700. Retrieved February 21, 2023 from https://ekonom.sav.sk/uploads/journals/123_monografia2008.pdf.

Jurčová, D., (2005), Slovník demografických pojmov. Bratislava: Inštitút informatiky a štatistiky. Retrieved February 21, 2023 from http://www.infostat.sk/vdc/pdf/slovnik_2verdd.pdf.

Dimitrová, M., (2007), Demografické souvislosti stárnutí. Retrieved February 21, 2023 from https://cvvm.soc.cas.cz/media/com_form2content/documents/c3/a1131/f28/Dimitro-v%c3%a1,%20Michaela.%20Demografick%c3%a9%20souvislosti%20st%c3%a1rnut%c3%ad.pdf.

Draganová, H. et al., (2006), Sociálna starostlivosť. 1. vyd. Martin: Osveta, 2006. 195 s. ISBN 978-80-8063-240-3.

Dugarova, Esuna, (2017), "Ageing, older persons and the 2030 agenda for sustainable development." United Nations Development Programme; New York.

Hamada, R., Kasagranda, A., (2014), Vybrané ekonomické, demografické ukazovatele, ukazovatele infraštruktúrnej vybavenosti a vzdelanostnej úrovne obyvateľstva na meranie regionálnych disparít, in Regionální rozvoj mezi teorií a praxí, roč. 3, mimoriadne číslo, 2014, s. 44 Retrieved February 21, 2023 from http://www.regionalnirozvoj.eu/sites/regionalnirozvoj.eu/files/03_hamada_kasagranda_vybrane_demograficke_ukazovatele.pdf.

Hangoni, T. et al., (2014), Sociálne poradenstvo pre seniorov. Prešov: Vydavateľstvo Prešovskej univerzity v Prešove. P. 209. Retrieved February 24, 2023 from https://www.unipo.sk/public/media/13489/Soci%C3%A1lne%20poradenstvo%20pre%20seniorov.pdf.

EuroHealthNet, (2020), Zelená kniha o konzultáciách o starnutí – Demografické zmeny v Európe. Retrieved February 24, 2023 from https://eurohealthnet.eu/sk/publication/green-paper-on-ageing-consultation-demographic-change-in-europe/.

Európska komisia, (2021), Zelená kniha o starnutí. Podpora medzigeneračnej solidarity a zodpovednosti. Retrieved February 24, 2023 from https://op.europa.eu/sk/publication-detail/-/publication/d918b520-63a9-11eb-aeb5-01aa75ed71a1.

European Commission, (2020), European Commission Report on the Impact of Demographic Change. Retrieved February 21, 2023 from https://www.age-platform.eu/publications/european-commission-report-impact-demographic-change-europe.

European Commission, (2021), Directorate-General for Economic and Financial Affairs, The 2021 ageing report: economic & budgetary projections for the EU Member States (2019-2070), Publications Office, 2021, Retrieved February 21, 2023 from https://data.europa.eu/doi/10.2765/84455.

European Commission, Directorate-General for Communication, (2022), Green paper on ageing, Publications Office of the European Union, 2022, Retrieved February 21, 2023 from https://data.europa.eu/doi/10.2775/785789.

Eurostat, (2022), Population structure and ageing. Retrieved February 8, 2023, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population_structure_and_ageing&oldid=584064#Past_and_future_population_ageing_trends_in_the_EU.

Eurostat, (2022), Life expectancy continued to decrease in 2021 in the EU. Retrieved February 8, 2023, from https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20220506-2.

Eurostat, (2023), Population structure and ageing. Retrieved February 8, 2023, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population_structure_and_ageing&oldid=584064.

Farková, M., (2012), Dospělost a její variabilita. Bratislava: Grada Publishing, a. s., 118-119.

Káčerová, M, Ondačková, J., Mladek, J., (2013), Contribution of population processes to population ageing: a comparison of the Czech and Slovak Republics. Acta Universitatis Palackianae Olomucensis Facultas Rerum Naturalium. 1. 27-43.

Káčerová, M. - Ondačková, J., (2015), Proces starnutia populácie Slovenska v európskom kontexte. Slovenská štatistika a demografia 3 (25), 44-58. Retrieved February 21, 2023 from http://www.humannageografia.sk/clanky/kacerova_ondackova.pdf.

Káčerová, M.- Nováková, M., (2016), Vplyv populačných procesov na starnutie obyvateľstva v krajinách V4. Slovenská štatistika a demografia r. 26, č. 2, s. 47-62. Retrieved February 21, 2023 from https://www.researchgate.net/publication/301287592_Kacerova_M-_Novakova_M_2016_Vplyv_populacnych_procesov_na_starnutie_obyvatelstva_v_krajinach_V4_Slovenska_statistika_a_demografia_r_26_c_2_s_47-62/link/5731877808ae6cca19a205c9/download.

Katuša, M. et al., (2014), Vývoj obyvateľstva v Slovenskej republike a krajoch v roku 2013. BA: ŠÚ SR, 2014. Retrieved February 21, 2023 from https://slovak.statistics.sk/wps/wcm/connect/6fad4776-6fff-4d13-948e-b8e5310fa055/Vyvoj_obyvatelstva_v_Slovenskej_republike_a_krajoch_v_roku_2013.pdf?MOD=AJPERES&CACHEID=6fad4776-6fff-4d13-948e-b8e-5310fa055.

Knight, J.A., (1995), The Process and Theories of Aging. In: Annals of clinical and laboratory science, 25 (1), No. 1. Copyright © 1995, Institute for Clinical Science, from: http://www.annclinlabsci.org/content/25/1/1.full.pdf.

Litomerický, Š. (1992). Geriatria. Martin: Neografia, 1992. ISBN 80-217-0499-3.

Mackellar, F., L., (2003), The predicament of Population Aging: A review Essay, in Vienna Yearbook of Population Research, 2003, Vol. 1, pp. 73-99.

Mauk, K.L., (2006), Gerontological nursing: Competencies for care. Sudbury, MA: Jones and Bartlett, Retrieved February 21, 2023 from http://repository.poltekkes-kaltim.ac.id/595/1/Gerontological%20Nursing%20%28%20PDFDrive.com%20%29.pdf.

Michalek, A. - Podolák, P., (2017), Spoločenská transformácia na Slovensku a jej dôsledky na demografické správanie. European Spatial Reasearch and Policy. 8. 23-37. Retrieved February 21, 2023 from https://www.researchgate.net/publication/313845579_SPOLOCENSKA_TRANSFORMACIA_NA_SLOVENSKU_A_JEJ_DOSLEDKY_NA_DEMOGRAFICKE_SPRAVANIE.

MPSVR SR, (2021), Národný prográm áktívneho stárnutiá ná roký 2021-2030. Retrieved February 21, 2023 from https://www.employment.gov.sk/files/sk/ministerstvo/rada-vlady-slovenskej-republiky-prava-seniorov-prisposobovanie-verejnych-politik-procesu-starnutia-populacie/narodny-program-aktivneho-starnutia-roky-2014-2020/narodny-program-aktivneho-starnutia-roky-2021-2030.pdf.

Muszyńska, M. M., & Rau, R., (2012), The old-age healthy dependency ratio in europe. Journal of Population Ageing, 5(3), 151–162. https://doi.org/10.1007/s12062-012-9068-6.

Národné centrum zdravotníckych informácií, (2022), 2021 Zdravotnícka ročenka Slovenskej republiky. Retrieved February 1, 2023, from https://www.nczisk.sk/Documents/rocenky/2021/Zdravotnicka_rocenka_Slovenskej_republiky_2021.pdf.

Ortega, J.A. Is Active Ageing Coping with Population Ageing?. Population Ageing 14, 37–52 (2021), Retrieved February 21, 2023 from https://doi.org/10.1007/s12062-020-09265-8.

Pavlík, Z., J. Rychtaříková, A. Šubrtová, (1986), Základy demografie. Praha: Academia.

Podmanická, Z. et al., (2022), My v číslach : Pohyb obyvateľstva 2021. Retrieved February 1, 2023, from https://slovak.statistics.sk/wps/portal/ffc7276b-e3fc-414c-994c-de4260a65e-

c8/!ut/p/z0/jY2xDoIwFEW_xcGxvNdaWxhBE6OJAzEm2MW0tWhFAaWi_r24Obqc3HuTk-wsKClC17v1RB9_U-jL0nRL7XC7jLKMpopzOcbnazvPFJqHIEVagvLlGT3uNMKIsloI-zyuOETYb81dl9PVsfQbU6nIivywaKsrSSSWGIm5SWcMotSZIBB8eZQC2mzsZf1Z9vN5WCsk-0d3CtA0ZhOn0hXkfZhxjjg4ittvRtj37lQvX-Xv07aSpn3Mx19AF4-n0Q!/.

Sanderson, W. C., & Scherbov, S., (2010), Remeasuring aging. Science, 329(5997), 1287–1288. https://doi.org/10.1126/science.1193647.

Šilhár, K., (2019), Starnutie obyvateľstva na Slovensku a zmeny na trhu práce. Retrieved February 21, 2023 from https://epale.ec.europa.eu/sk/content/starnutie-obyvatelstva-na-slovensku-zmeny-na-trhu-prace.

Šprocha, B., (2022), Zmeny v úmrtnostných pomeroch na Slovensku v časovej a priestorovej perspektíve. NFOSTAT – Výskumné demografické centrum. Centrum spoločenských a psychologických vied SAV. ISBN 978-80-89398-44-7. Retrieved February 21, 2023 from http://www.infostat.sk/vdc/pdf/2022/Zmena_umrtnost_SR.

Šprocha, B. et al., (2022), Populačný vývoj Slovenska v prierezovom a kohortnom pohľade. INFOSTAT – Inštitút informatiky a štatistiky Výskumné demografické centrum. ISBN 978-80-89398-47-8. Retrieved February 21, 2023 from http://www.infostat.sk/vdc/pdf/2022/Populacny_vyvoj_Slovenska_prierezovy_kohortny_2000-2021.pdf.

Štatistický úrad Slovenskej republiky, (2022), Obyvateľstvo a charakteristiky veku. Retrieved February 1, 2023, from http://statdat.statistics.sk/cognosext/cgi-bin/cognos.cgi?b_action=cognosViewer&ui.action=run&ui.object=storeID%28%22i5C596BD-613BA4A6A9E92C3FB96F763F8%22%29&ui.name=Obyvate%C4%BEstvo%20a%20 charakteristiky%20veku%20%5Bas1001rs%5D&run.outputFormat=&run.prompt=true&cv. header=false&ui.backURL=%2Fcognosext%2Fcps4%2Fportlets%2Fcommon%2Fclose.htm-l&run.outputLocale=sk.

Tavel, P., (2009), Psychologické problémy v starobe I. Retrieved May 5, 2021, from https://vydavatelstvo-f.sk/sites/default/files/psychologicke_problemy_v_starobe.pdf.

Tokovská, M. Jana Šolcová, J., (2014), Kognitívna a psychomotorická aktivizácia v pomáhajúcich profesiách. Vysokoškolská učebnica Banská Bystrica, 2014. Belianum. Vydavateľstvo Univerzity Mateja Bela v Banskej Bystrici. ISBN 978-80-557-0716-7.

Tomeš, Z. (2005). Je stárnutí populace výzvou pro hospodářskou politiku?, Centrum výzkumu konkurenční schopnosti české ekonomiky. Working Paper č. 8. Retrieved February 21, 2023 from https://is.muni.cz/do/econ/soubory/oddeleni/centrum/papers/wp2005-08.pdf.

UN, (2023a), First World Assembly on Ageing, 26 July-6 August 1982, Vienna. Retrieved February 8, 2023, from https://www.un.org/en/conferences/ageing/vienna1982.

UN, (2023b), Fourth review and appraisal of the Madrid International. Plan of Action on Ageing, 2002. Retrieved February 24, 2023 from https://documents-dds-ny.un.org/doc/UN-DOC/GEN/N22/705/05/PDF/N2270505.pdf?OpenElement.

UNFPA, (2012), Ageing in the Twenty-First Century: A Celebration and A Challenge. Retrieved February 24, 2023 from https://www.unfpa.org/sites/default/files/pub-pdf/Ageing%20re-port.pdf.

von Humboldt, S., & Leal, I., (2015), The old and the oldest old: Do they have different perspectives on adjustment to aging? International Journal of Gerontology, 9(3), 156-160. http://dx.doi.org/10.1080/03601277.2016.1272355.

Wolf, I., Levi, S., & Lopez del Rio, L.C.Y, (2021), Moving toward funded pension scheme: Pure economic argument due to population aging or responsibility abdication of governments?. Economics and Sociology, 14(4), 151-166; from: doi:10.14254/2071-789X.2021/14-4/9.

SCIENCE AND EDUCATION FOR SUSTAINABLE DEVELOPMENT

FEMININITY, CONSUMPTIONISM AND ILLNESS

Weronika Kaminska

Department of Social Medicine, Medical University of Gdansk ul. M. Skłodowskiej-Curie 3a, 80-210 Gdańsk, Poland w.kaminska@gumed.edu.pl https://orcid.org/0000-0002-5148-2324

Abstract

The article is a reflection on the impact of the social construct of femininity on individual identity, examining what it means to be a woman for individuals and for the society (observers). There are more cosmetic procedures and aesthetic medicine, that promises 'being beautiful' and 'feeling beautiful' as the norm and a woman's duty. This obligation to be beautiful is increasingly present in mass media when individuals struggle with cancer. More campaigns are supporting the individual's fight against cancer by offering metamorphoses. Similarly, more websites focused on helping cancer patients place focus on the correct skin care or applying makeup during and after anti-cancer therapy, promising to enhance the well-being of patients. Thus, we observe both criticism of the pressure associated with the constant construction of femininity, and the support for women diagnosed with cancer by offering them ways to look attractive while fighting the disease.

Key words: Ildentity, Social Exclusion, Cancer, Consumption, Well Being.

INTRODUCTION

Consumerism invariably affects most aspects of people's lives. It generates people's needs for better products that make life easier, save time, and allow individuals to allocate time for other purposes. People want better, easier, more visually appealing products. They want to keep up with the times, follow current trends, be in constant exchange for self-improvement. This machine drives people so much, that we see

endless possibilities four our "tomorrow". Consumerism gives us the control and perspective of thinking that our "tomorrow" will always be manageable day by day. This sense of control is enhanced by the illusory of the possibilities of stopping time - slowing it down or even reversing aging. There are many ways - diets, treatments, and supplements, promising eternal youth. This leads us to take for granted that the fact that every day we are getting older and will eventually die. The pursuit of youth and beauty affects women in particular, who in many cases try to adapt to the standards set by television and social media. They undergo treatments that promise them a beautiful complexion, shiny hair, slim figure, or reduction of wrinkles. They decide on these procedures regardless of the pain, recovery time or cost. We desire not only to feel beautiful, but also to be perceived by society as attractive people. Consumerism and the social construct of femininity also influences situations when an individual faces a disease, especially cancer. More and more attention is paid to recognizing the role of self-care during illness, including the impact on the patient's well-being. However, there are situations when the patient goes into an advanced disease stage, where she begins to face her own impending death.

CONSTRUCTING OF FEMININITY AND BODY DISCIPLINING

Initially, the body was perceived as a biological object, described as a "bag for unconscious desires and impulses" [Schier 2010: 10]. However, thanks to Sigmund Freud's theory of development, marked a key shift in our thinking about the connection between the psyche and the psyche [Schier 2010: 10]. The tradition of experiencing the inner works of a body with the in connection to personality and identity in sciences such as philosophy or psychology, has an extensive history. According to Katarzyna Schier, "it was the omnipresence of death and human fear of it that led to the emergence of the awareness of the bodily self" [Schier 2010: 11]. Among the ancient Egyptians, mummification was performed because it was believed that the soul might need a body after death. Additionally, painting posthumous artwork, or placing a name with a photograph on gravestones was supposed an attempt to "assure oneself or one's relatives that one's body and soul would last in time" [Schier 2010: 11]. In recent times, research began to focus on issues related to the mental representation of the body, i.e. the image of the body that arises in the mind of individuals. David W. Krueger [2007] believes that "the body and its evolving mental representation is the foundation of a sense of self." According to this author, "the body self refers to the vast field of bodily experiences on and within the body, including bodily functions" [Krueger 2007: 7]. The body is "a specific phenomenon in the world of objects because it contains the paradox 'I-others'" [Schier 2010: 27]. Moreover, there has been a noticeable surge in interest on the subject of body image, both among researchers in various scientific fields, as well as women, for whom numerous books on this subject are being written. Self-image consists of: self-assessment, self-esteem and self-awareness, including one's personal needs.

In the late 1990s, Kevin Thompson et al. [1999] provided a list of sixteen different definitions of the term "body image" employed by researchers of this phenomenon. Among them, the author lists: body satisfaction - the accurate estimation of the dimensions of the body and its parts or distortion in this area; adequate perception of body size – the appropriate evaluation of proportions between the elements of the body, its dimensions and parts, or distortion in this area; satisfaction with appearance - satisfaction with the overall appearance; usually associated with facial features, hair, weight, but also, for example, with sex appeal and body distortion. Given the large number of definitions of what we consider body image, researchers find it necessary to specify which definition they use each time [Thompson et al. 1999]. According to many authors, the body, especially the female body, is subject to discipline and control. However, the body cannot be "manipulated indefinitely" or constantly beautified. As Kashak [1996: 186] observes, "it can be fought constantly with cosmetics and clothes, diets and exercises, and even with the increasingly popular plastic surgery." They can also be "modeled, shaped and corrected" [Kashak 1996: 186]. However as a woman pays more attention to her appearance and counts on better treatment, she may find herself lost when reconciling her own needs, which are contrary to societal requirements. The body, and above all the female body, "becomes a product that can be manipulated and displayed in the most favorable light" [Kashak 1996: 187]. This can lead to certain psychological conflicts, as the woman is burdened because she does not perceive her body only as an object, but also though the lends of its social construct, including meanings and symbols. Certain props and elements used to emphasize appearance evoke specific feelings or thought patterns [Zwolinski 2006]. For example, hair originally associated with fur, carries linkages the hair found on animals. The lack of one's hair care or the lack of a hairstyle correspond with associations related with wildness or chaos, whereas a well-groomed hairstyle aligns the norms prevailing in culture and "incorporating into the order of the human community" [Zwolinski 2006: 33]. Messy hair was formerly used to define a sick or unclean person.

According to Lemmy [2014: 43], "the body remains an exposed territory throughout life." No matter how hard we try to hide, cover or change it, "the body never escapes the mark left by the gaze of another" [Lemma 2014: 43]. The term 'Other' is understood as every person with whom we come into contact both during interaction and with whom we only pass without having direct contact. This look "of the other" is related to the desire to dominate and rule, granting access to the body without physical contact. Sometimes it also causes the other to exercise control over our body [Lovber, Moore 2011]. Individuals define the body as something that belongs to us, with its desires and limitations, while agreeing that "the same body is the area where we meet the other and determine what it means to be the same and different, dependent and separate" [Lemma 2014: 43-44]. There are two types of looking: "I-looking (watching) and I-exposed-on-view (viewed)" [Lemma 2014: 44].

The perspective of the other is also beyond the reach of the observed, because we are unable to control his thoughts, perceptions or feelings [Schier 2010]. Being watched, our "foundations are outside of us" or even that "we exist only for the other" [Lemma 2014: 44]. The other's gaze also diminishes our sense of power over our own bodies [Shilling 2010; Kurczewski 2006]. Moreover, we are not able to fully control how our presentation will affect the actual perception of us by others [Kurczewski 2006]. The way we will be perceived by the other comes from individual unconscious feelings, but also from projections [Schilling 2010]. Sometimes, regardless of how others perceive us, a sense of 'insufficiency' is generated in the context of feeling a lack of desire by those around us [Thompson 1999]. This feeling is rooted in the body, and it is within our bodies that we feel it most intensely. In order to address this feeling of insufficiency, one can reach for available methods such as cosmetic treatments and better clothing to increase one's own attractiveness [Kurczewski 2006; Schier 2010].

We experience the sense of our own omnipotence when we feel the desire for others and "we can experience ourselves as his ideal" [Lemma 2014: 46]. It is only through the eyes of the other that we are able to "discover and/or rediscover the ideal image of ourselves", although accepting this fact can be difficult, because the other can either give us an ideal image or take it away [Lemma 2014: 46]. Some people experience this unavoidable dependence as a threat, because the perception of another's image of us in a negative way can disturb their own sense of integrity. Nowadays, the so-called "reality show" focued on changing the body's appearance, have emerged. According to Lemma, programs of this type "play the role of an archaic fairy tale who can do the impossible" because they emphasize the possibilities of metamorphosis and body transformation [Lemma 2014: 53]. The imperfect bodies of the participants also bring mental problems. Metamorphosis, modifying their bodies so that they are beautiful or even satisfying, as declared by patients, will help them get rid of their internal barriers or disorders [Kashak 1996; Schier 2010]. Often, in such programs, you can hear from patients who have already undergone treatments that they can finally be themselves. Lemma [2014: 53] noted that girls "do not feel comfortable in their bodies". Interestingly, according to her, they made a "caricatured impression" [Lemma, 2014: 53]. Some of them did not feel any signs of femininity and adopted masculine body posture and masculine clothing. Others, on the contrary, hid their complexes under the cloak of an extreme sexualized attitude. They hid a great fragility under the very carefully constructed facade. The Respect of one's body is the result of "respect for order, boundaries, purity and indivisibility" [Lemma 2014: 74]. In the Renaissance era, the canon of beauty, which was considered classic, emphasized the aesthetics of the desirable body, in relation to cleanliness and order. This classical canon of the ideal figure was separated from "any connection with birth, death, or everyday mundane functions" [Lemma 2014: 53]. In contrast, the grotesque body

was associated with everyday functions and death or birth, which is why it was considered as something unfinished.

We always seek to avoid what is ugly or unsightly. In movies, characters we consider ugly are associated with bad deeds. According to Lemmy [2014: 53], "ugliness is too often portrayed as evil." Being ugly, as the author suggests, perhaps scares us enough that it should be a category beyond good and evil. We often want to distance ourselves from ugly people because they can be a threat to the 'I'. Julia Kristeva [2007] analyzes, among other things, the concept of impurity. For example, the corpse is regarded as impure,"that which has irreversibly fallen" [Kristeva 2007: 9]. According to her, the cloaca and death cause a violation of identity in people who stand over a corpse, because this experience makes the living see how fragile and fraudulent they are. Consequently body secretions in sick individuals, are as repulsive as the "corpse" itself: "a wound full of blood and pus, or a sweetish and acrid odor of sweat, secretions" [Kristeva, 2007: 9]. Marked death can be signaled, among others, by a flat encephalogram, which shows specific vital parameters and deviations from the norm with which the individual cannot disagree or negate. Waste, corpses, and "a real theater without make-up and masks" indicate what a person tries to push aside in order to live [Kristeva, 2007: 9]. According to Kristeva [2007: 10], if the impurities associated with dying represent "the other side of the border", where one ceases to exist and no longer lives, then the corpse as "the ugliest of all waste" is, according to her, a border that has taken everything. At this point "it is not I who throws out, 'I' was thrown out". This border turned into an object (corpse). Lack of purity or health is not what Kristeva finds most disgusting, it is the ultimate suspension of identity, system and order. Suspension of identity occurs through 'fainting', which is a metaphor for a sudden 'disappearance' from the realm of living.

In Western culture, girls, especially "middle-class white girls," are "thoroughly protected" and expected to "look nice and gentle" [Lemma, 2014: 53]. Already during childhood games, girls frequently engage in dress up in their mothers' clothes and use their make-up cosmetics [Aucoin, 2012]. It is also evident that female children receive admiration for their appearance, especially when wearing dresses. During therapy with a psychoanalyst or outside of it, in adulthood, women recall traumatic moments in childhood, they refer to their external appearance and insufficient attractiveness, which could lead to rejection by young "boys or teenagers. Kashak [1996: 73] argues that the "essential period of female identity development", which is based on outward appearance, "runs from birth, when that identity is primarily physical and preverbal, to adolescence, when it is introduced and implemented throughout the complex social influences: by adults, peers, books, magazines, mass media, and even the reactions of strangers on the street". According to her, it lasts throughout a woman's life, but with a different fluidity. Adolescence is an important stage in the development journey. It is a phase in which individuals deal with the creation and crystallization meanings linked to their body and generic identity. Although certain

attitudes of adults and parents refer to "identifying a woman with her appearance and attractiveness", they are present from birth, but only during adolescence do they become a "numbering determinant" [Kashak 1996: 73]. At this developmental stage, the pressure from parents and peers to "observe gender roles is greatest" [Kashak 1996: 73]. In addition, peers judge females by focusing on their appearance. Girls are more preoccupied with their appearance, often perceiving themselves as less attractive than boys their age. The research cited by Kashak [1996] reinforces those conclusions, also emphasizing how the environment of girls also focuses on the same aspect, i.e. assessing them through the prism of physicality.

During the adolescence period, young people are eager to engage in various kinds of movements that express their rebellion against the values prevailing in society. Each of these movements is characterized by a different code that determines how its members should dress (e.g. hippies, punks). From childhood through adolescence, "hair and clothing are the clearest clues to sex" [Kashak 1996: 77]. Ellyn The author argues that in society, women in particular are seen through the lens of their own bodies. However, this assessment is not judged by its strength or ability to act, but by its appearance. The dexterity of the body is not assessed, but the shape, size and whether they appearance aligns with male standards of femininity. If a woman's appearance is accepted, then "it means that the woman is attractive and will be treated accordingly", but if her appearance is assessed negatively, "her object is less valuable" [Kashak 1996: 77]. Conversely, appearance that does not fit the criteria may be a threat to the individual within their social environment, and the lack of attractiveness may be perceived as a deliberate choice.

The wearing of high heels by women is an example of a "cultural marker of gender" [Kashak 1996: 79]. Wearing high heels is often associated with a lack of comfort, and sometimes even with pain. However, women wear these types of shoes because "it would dispel the illusion", moreover, each women understands that she should not reveal discomfort [Kashak 1996: 79]. Appearance and attractiveness is conspicuous to such an extent, that paradoxically they render invisibility [Berry 2016]. The perfect figure is someone that is admired, to which other people react. In a 1989 interview with the Times, one supermodel said "I'm a visual illusion", another model, Janice Dickinson, describing herself confessed: "I don't have breasts, but I know how to hold on to make it look like I do. With makeup, you can create cheekbones and cover up a black eye" [Kashak 1996: 99]. In this quote, the model showed how to construct and display female attributes using the available means and observations.

CULTURE EXPECTATIONS, FEMININITY AND ILLNESS

Body image is also shaped in a cultural context [Schier 2010]. In recent years, in many countries including the United States, Great Britain, have can observed a "significant increase in the interest of the mass media in the issues of the body", in particular plastic surgery, tattooing, piercings and diets [Schier 2010: 187]. In media,

there are also discussions on anorexia and the growing interest in sculpting body muscles in women. Moreover, there is an increasing number of programs dedicated to changing one's own appearance, where participants voluntarily undergo often painful plastic surgeries in order to increase their self-esteem and satisfaction with their appearance. Among the mass media, the female body "stands for lust, hunger, thirst, fast cars, perfume, jeans, and a thousand other phenomena" [Kashak 1996: 96]. Femininity itself consists in caring for the appearance as well as the belief that it is what defines a woman. This is part of the process of understating what is femininity involves parents and caregivers, family and friends, doctors, nurses, teachers, peers and the media.

According to Schier [2010: 53], "the cosmetics, clothing and food industries 'prey' on a woman's dissatisfaction with her body, so she is 'condemned in the effort to preserve her own identity'. The ideal silhouette not only determines what a woman should look like, but media and specialists alert that a slim body is supposed to protect and prevent various diseases, including hypertension, diabetes or heart disease. However, the latest research on overweight people should be distinguished from obese people, because the latter are more likely to suffer from these health problems. According to another researcher, Nancy Etcoff [2002: 15], with the exception of extreme thinness and obesity, it is the proportions, and above all the ratio of the hip circumference to the waist, that prove the female beauty, and not the weight itself. Interestingly, Etcoff [2002: 15] believes that "beautiful is what we actually perceive as average - "beautiful are those physical properties that suggest sexual maturity, fertility, health and proper constitution." As for the face, its attractiveness depends on the mediocrity of its features, which is synonymous with health and vitality [Leder 1990]. The second aspect is facial features reminiscent of a child's appearance, while maintaining the characteristics of adult femininity.

Cultural patterns regarding acceptable body image are conveyed through all mass media targeting children, teenagers and adults. Magazines aimed at teenagers focus on "dress, makeup, appearance and how to get a boyfriend. The emphasis is on looks, looks and more looks" [Kashak 1996: 54]. With these messages generating a cult for the perfect figure, in men's magazines prevailing topics discuss increasing body musculature, wheras, aimed at weight reduction are found in magazines for women. According to the conducted research, women's magazines prioritize appearance related issues far more than in newspapers aimed at men, where these topics are discussed to a lesser extent. This extends to movies and tv shows aimed at targeting women. In them the ideal female body is slender, and women with obesity are often devalued. Katarzyna Schier [2010: 96] refers to the research of Dohnt and Toggeman, in which it was demonstrated that young girls who reach for popular magazines aimed at adult women, "show a higher level of dissatisfaction with their own appearance, and vice versa, those who reject the cult of a slim figure are characterized by a higher level of body satisfaction. It should be noted, however, that "women are more susceptible to

the influence of the media and peers than men" because they want to meet the expectations that are imposed on them [Schier 2010: 96]. It should be noted that women's sense of attractiveness is also significantly influenced by their individual predispositions: "the stronger a person's acceptance of social patterns and stereotypes related to appearance and the greater the perceived pressure to achieve them, the more negative the assessment of their own body" [Schier 2010: 96]. Body image studies among women between the ages of sixteen and seventy-seven have shown that most of them rate themselves low or average in terms of appearance. Other studies on Polish and Spanish female students showed that "women pay more attention to their own attractiveness and men the opposite". Moreover, men in their responses preferred slim women with feminine shapes, while women paid attention to such features as height and elegance [Schier 2010: 96].

Caring for one's appearance has become an important topic in the context of cancer. There are dedicated cosmetic treatments for women fighting cancer and guidelines on when and what procedure can be performed. There are also many websites on the internet giving advice to people during and after chemotherapy. They refer to this "how to keep looking and feeling like yourself during chemotherapy" (oprahdaily.com). These websites focus on showing and describing the beauty of women regardless of the disease. Cancer Research UK also published a tutorial on how to apply make-up during chemotherapy. Interestingly, their article is also addressed to patients who did not wear make-up before cancer. Many scientific studies analyzing the impact of cancer on the sense of beauty in patients focused primarily on breast cancer. In the study by Abend and Williamson [2002], the authors highlighted how interest and support from partners and the environment were important in helping cancer patiens achieve a sense of attractiveness. Moreira et al. [2010] in a study on hospital patients in Portugal, found that cancer patients invested in grooming their appearance reported better results in counteracting anxiety and depression in terms of adaptation to the disease. Hopwood et al. [2001: 1] also pointed out that "body image is an important endpoint in quality of life evaluation since cancer treatment may result in major changes to patients' appearance from disfiguring surgery, late effects of radiotherapy or adverse effects of systemic treatment". Rogers et al. are of a similar opinion [2007], they support the idea that cancer patients who decided to exercise not only began to work on their fitness, but they also began to feel more attractive. In many countries, programs offering metamorphosis to cancer patients have been created. An example of this is the "Look good, feel better program", the idea of which is to support women in the fight against the disease by offering beauty treatments, advice on breast reconstruction procedures, or fitting wigs while waiting for the patient's own hair to grow back [Kendrick 2008]. All initiatives are designed to support the spirits of women with cancer, improve their well-being, give them strength to continue their fight and help them return to life after treatment.

CONCLUSION AND DISCUSSION

In Western society, women have been preoccupied with their body since childhood, treating it as a means of communication. This is not only related to achieving physical fitness, but also to "fulfilling social expectations" [Schier 2010: 54]. According to Etcoff [2002: 15], "a woman's attractive appearance is the best asset and currency, prestige, wealth and even love can be gained in return." Kashak [1996: 96] is of the opinion that a woman in this context "becomes, in her own way, the enemy of her body." As a result, people whose weight exceeds the established norm accept themselves only from the neck up, and people with eating disorders, such as bulimia or anorexia, isolate themselves from the social world. With constant attention to appearance, this brings with it "a kind of social, collective madness about building an external image" [Kashak 1996: 72]. Consumerism fuels the pressure of constantly taking care of one's appearance. The felt obligation to take care of oneself, on the other hand, influences the need for better and more effective ways to construct one's appearance - to control it. Illness and therapies can significantly affect our appearance changes, which are no longer within our control, they elude us. The aim of the article was to illustrate that, on the one hand, we see in the social discourse the negative aspects of influencing self-care, especially among women, and on the other hand, it can be significantly helpful in the case of cancer - significantly improving the quality of life, giving a sense of control again, helping in regaining 'own self', or building oneself anew.

REFERENCES

Abend, T.A., Williamson, G.M., (2002), Feeling attractive in the wake of breast cancer: Optimism matters, and so do interpersonal relationships, *Personality and Social Psychology Bulletin*, 28(4), 427-436.

Aucoin, K., (2012), Makijaż-sztuka przemiany, Wydawnictwo Galaktyka, Łódź.

Berry, B., (2016), The power of looks: Social stratification of physical appearance, Routledge.

Etcoff, N., (2002), Przetrwają najpiękniejsi, Wydawnictwo WAB, Warszawa.

Hopwood, P., Fletcher, I., Lee, A., Al Ghazal, S., (2001), A body image scale for use with cancer patients, *European journal of cancer*, 37(2), 189-197.

Kendrick, K., (2008), 'Normalizing'female cancer patients: Look good, feel better and other image programs, *Disability & Society*, 23(3), 259-269.

Kashak, E., (1996), Nowa psychologia kobiety. Podejście feministyczne, Gdańskie Wydawnictwo Psychologiczne, Gdańsk.

Kristeva, J., (2007), Potęga obrzydzenia. Esej o wstręcie, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków.

Kurczewski, J. M., (2006), Praktyki cielesne Trio, Warszawa.

Leder, D., (1990), The Absent Body, The University of Chicago Press, Chicago.

Lemma, A., (2014), Pod skórą. Psychoanalityczne studium modyfikacji ciała, Wydawnictwo IMAGO, Gdańsk.

Lovber, J., Moore, L. J., (2011), Gendered bodies: feminist perspectives, Oxford: Oxford University Press, New York.

Moreira, H., Silva, S., Canavarro, M. C. (2010), The role of appearance investment in the adjustment of women with breast cancer, *Psycho-Oncology*, 19(9), 959-966.

Schier, K., (2010), Piękne brzydactwo, Wydawnictwo Naukowe Scholar, Warszawa.

Shilling, C., (2010), Socjologia ciała, Wydawnictwo Naukowe PWN, Warszawa.

Thompson, J.K., Heinberg, L.J., Altabe, M., Tantleff-Dunn, S., (1999), Exacting beauty: Theory, assessment, and treatment of body image disturbance, American Psychological Association.

SMETA STANDARD AS A TOOL TO SUPPORT SUSTAINABLE DEVELOPMENT GOALS AND FOOD SAFETY. A CASE STUDY

Małgorzata Z. Wiśniewska

University of Gdańsk, Faculty of Management, ul. Armii Krajowej 101, 81-824 Sopot, Poland malgorzata.wisniewska@ug.edu.pl

&

Tomasz Grybek

University of Gdańsk, Doctoral School of Humanities and Social Science, ul. Wita Stwosza 63, 80-308 Gdańsk, Poland tomasz.grybek@phdstud.ug.edu.pl

Abstract

The purpose of this paper was to analyze the essence of the SMETA standard and identify the extent to which the selected food supply chain organization, by complying with the standard's requirements, fulfills the goals of sustainable development and supports systemic food safety management, in practice. Critical literature analysis, case study analysis, secondary data analysis, comparative analysis, synthesis method, and logical inference were used as research methods. The analyzed company contributes to the implementation of 16 out of 17 SDGs. Furthermore, the management standards contribute to compliance with 12 out of 13 SDGs supported by the SMETA standard. Twelve SDGs are supported parallelly by SMETA and ISO 14001, followed by IFS and BRCGS contributing to the implementation of four SDGs, next ISO 9001 and ISO 45001 supporting two SDGs each, and finally, MSC CoC supporting one SDG.

Key words: Voluntary Sustainable Standards, SMETA, Sustainable Development Goals, Food Safety

INTRODUCTION

Companies involved in the food supply chain, through their operational activities, have a significant impact on the state of the environment, climate change, and the social dimension of the functioning of the country's and the world's economy. Studies conducted worldwide confirm that this undeniable impact, most in the case of the environment, which is notably negative. The European food and beverage industry climate impact was detailed in the report produced by Cameron et al. [2021]. At the same time, basic directions for decarbonizing this industry to net zero by 2050 are outlined. This is particularly important because the global food chain generates 690 Mt of carbon dioxide equivalent annually. This equates to one-third of global emissions of this gas (and 30% of EU emissions). Most decarbonization interventions in Europe will be related to the modernization of existing food plants, due to the technological obsolescence of many companies and the environmentally unfriendly way sourcing methods [https://www.pfpz.pl/dekarbonizacja... 2020] On the other hand, climate change has direct consequences for food safety and food security. According to Codex Alimentarius [2020], food safety is an "assurance that food will not cause adverse health effects to the consumer when it is prepared and/or eaten according to its intended use". Food security, in turn, is when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life" [Food Security 2006]. For example, extreme weather events, such as floods and droughts, can contaminate soil, farmland, water and food, and animal feed by introducing various pathogens, chemicals, and other hazardous substances from wastewater, agriculture, and industry [Tirado et al. 2010]. This situation places dual responsibility on food industry organizations to ensure that the product delivered to the market, meets increasingly stringent requirements. Market expectations are causing many food industry organizations, in addition to the need to operate according to quality, food safety management systems or environmental management systems, to comply with other requirements embedded in Voluntary Sustainability Standards (VSS). The SMETA (Sedex Members Ethical Trade Audit) standard is among the most important of these standards.

A research gap in the literature makes it difficult to recognize the experiences of different organizations in implementing VSS. While institutional commitments to use VSS to meet sustainable procurement policies have grown rapidly over the past decade, there is still relatively little understanding of the direct environmental benefits of large-scale VSS adoption, potential perverse indirect impacts of adoption, and implementation pathways [Smith et al. 2019; Dietz et al. 2021]. This gap also extends to food related entities. For this reason, the research problem is as follows: Whether and to what extent, does the selected organization using VSS meet the various sustainability goals? The purpose of the research is to analyze the essence of the SME-

TA standard and identify how, and to what extent and in what areas in practice the selected food supply chain organization, by complying with the requirements of the standard, fulfills the goals of sustainable development and supports systemic food safety management. The research methods used in this article include critical literature analysis, case study analysis, secondary data analysis, comparative analysis, synthesis method, and logical inference.

1. THE GENERAL ESSENCE OF VSS AND THE SMETA STANDARD

Sustainability standards, particularly voluntary sustainability standards (VSS), have become integral to facilitating green consumerism and promoting a green economy and growth [Hoffmann and Bhutani 2021]. Voluntary standards have become a promising mode of governance for promoting sustainable production and consumption in global value chains [Iweala and Soon 2022]. The United Nations Forum on Sustainability Standards (UNFSS) defines VSS as "standards specifying requirements that producers, traders, manufacturers, retailers or service providers may be asked to meet, relating to a wide range of sustainability metrics, including respect for basic human rights, worker health and safety, the environmental impacts of production, community relations, land use planning, and others" (UNFSS 2013: 4). According to the United Nations Conference on Trade and Development, VSS are norms and standards designed to ensure that a product is produced, processed, or transported sustainably to contribute to specific environmental, social, and economic targets [https://unctad.org...]. In turn, selected researchers define this phenomenon this way: "Voluntary sustainability standards (VSS) are stakeholder-derived principles with measurable and enforceable criteria to promote sustainable production outcomes" [Smith et al. 2019]; "a significant private, market-based transnational governance instrument to pursue sustainable development" [Marx et al. 2022]. VSS, although not required by law, play a significant role in organizations, making them into entities concerned not only with their profits but above all with the welfare of the general public and future generations.

The world's largest VSS database, The Standards Map of the International Trade Centre (ITC), contains detailed information on more than 300 voluntary sustainability standards applicable to nearly 60 different sectors, such as agriculture, textiles and apparel, consumer products, forestry, mining, and services. The standards are implemented in 192 countries and are classified according to 1,650 criteria. Examples of food industry standards included in the database cover the BRC Global Standard for Food Safety, International Featured Standard (IFS Food), and Marine Stewardship Council (MSC) standards [https://www.standardsmap.org...].

One of the most popular standards is BRCGS - Global Standard for Food Safety, adopted by over 22,000 sites in more than 130 countries, and accepted by 70% of the top 10 global retailers, 60% of the top 10 quick-service restaurants, and 50% of the top 25 manufacturers [https://www.brcgs.com...]. Now in its 8th edition with the 9th

edition to be published in 2022, the standard has evolved to meet the industry's needs and to protect the consumer [Lambert and Frenz 2021]. The standard is owned by BRCGS, a British trade organization that represents the interests of retailers. BRCGS standards consist of a set of recommendations and guidelines for companies operating in the food industry, especially retail chains and companies supplying private-label products. BRCGS - Global Standard for Food Safety, developed with input from the industry, provides a framework to manage product safety, integrity, legality, and quality, and the operational controls for these criteria in the food and food ingredient manufacturing, processing, and packing industry [https://www.brcgs.com...]. The standard's requirements are related to the quality management system, the HACCP system, and relevant prerequisite programs, including GMP (Good Manufacturing Practice) and GHP (Good Hygiene Practice) requirements [https://www.dnv.com...]. Part II of the standard, defines the basic requirements to which organizations must adhere to, those are: Senior management commitment; The food safety plan; Food safety and quality management system; Site standards; Product control; Process control; Personnel; High risk, High-care and ambient high-care production risk zones; and Requirements for traded products.

A standard similar to the BRCGS is the IFS (International Featured Standards) Food, (current Version 7). It was developed in 2003 by the German Retail Federation - Handelsverband Deutschland (HDE) - through collaboration with members of its French counterpart, the Fédération des Entreprises du Commerce et de la Distribution (FCD) [IFS Food...2020]. Like BRCGS, the IFS Food Standard is internationally recognized by the Global Food Safety Initiative (GFSI). IFS Food is built on the general aspects of a food safety and quality management system. However, its primary focus is on instilling confidence in products and processes. This means that safety, quality, legality, and compliance with the customer's specific requirements are ensured through on-site assessment and documentation review/inspection and inspection. The main differences between the two standards relate to the procedures for conducting a final assessment of a food manufacturer and the guidelines relating to each requirement. In both standards, there are specific requirements tailored to the organization's specific operations in the supply chain. For example, if an organization is involved in distribution, then in the case of BRCGS, the appropriate standard for it is BRCGS, BRC Storage & Distribution, while in the case of IFS it is IFS Logistics.

Also there are noteworthy industry-specific VSS standards. For example, standard such as MSC has been developed for the fishing industry, among others. The MSC (Marine Stewardship Council) Sustainable Fisheries Standard is used to assess fisheries in terms of their impact on wild fish populations, their impact on the marine ecosystem, and their overall management. The standard reflects the latest scientific developments in fisheries and international best practices in fisheries management. It was developed in consultation with a wide range of experts including: fishermen, scientists, fishing industry representatives, and representatives of conservation orga-

nizations [https://www.msc.org...]. The standard is based on the three fundemental principles: the sustainable use of exploited fish stocks; ecosystem maintenance on which fisheries depend; and effective and responsible management. To ensure that only seafood from MSC-certified sustainable fisheries bears the MSC eco-label, all companies in the supply chain must be certified to the MSC Chain of Custody Standard [https://www.dnv.pl...].

As mentioned in the introductory section, the SMETA standard is also in the group of VSS standards covered by the VSS database. SMETA (Sedex Members Ethical Trade Audit) aims to reduce the duplication of effort in ethical trade auditing, thus benefitting retailers, consumer brands, and their suppliers [Gurzawska 2020]. It is Sedex's audit methodology and social auditing standard that businesses can use to assess a supplier's working conditions, across the areas of labour, health and safety, environment, and business ethics [https://www.sedex.com...]. SMETA is "not a code of conduct, a new methodology, or a certification process". It is an audit procedure reflecting the compilation of good practices in ethical audit techniques [Gurzawska 2020]. Sedex (Supplier Ethical Data Exchange) is a non-profit organization founded in London in 2004 as an initiative of Marks & Spencer, Tesco, Walmart, Carrefour, and Metro [Marques 2019]. It is a global platform developed to share information on ethical production standards within the supply chain. The Sedex database allows its members to reduce the risk of their business by sharing information about meeting ethical requirements. Suppliers that undergo SMETA audits share information through the Sedex database and can prove to their customers that they have met ethical and social standards. Customers, on the other hand, can manage their suppliers through this tool, thereby reducing risks [Kubasiński and Sławińska 2021]. Sedex's platform allows suppliers to share one set of data with multiple customers, thereby combining auditing resources and harmonizing standards among companies. Organizations that join Sedex are first asked to complete a questionnaire on their labor, health and safety, environmental, and business ethics policies and practices. This information is then shared with multiple buyers and third-party auditors. Companies benefit since they do not need to undergo discrete audits for each customer, thereby saving themselves time and resources. By serving as a mechanism for sharing audit data, Sedex's platform incentivizes suppliers to become members so that they can not only share information with multiple buyers but also link their data to other underlying suppliers [Sarfaty 2021]. Audits are conducted based on the SMETA audit guide, which was developed by the Sedex Associate Auditor Group (AAG) [https:// dqs.pl...]. SMETA consists of four core documents: SMETA Best Practice Guidance; SMETA Measurement Criteria; SMETA Audit Report; and SMETA Corrective Action Plan Report (CAPR). SMETA uses the Ethical Trading Initiative (ETI) Base Code and the local law as its monitoring standards [Sedex Members... 2019]. The SMETA Best Practice Guidance describes the key steps of planning, executing, and documenting a SMETA Audit against the following auditing pillars [Sedex Members... 2019]:

- A SMETA 2-Pillar audit comprises: Labour Standards; Health and Safety; Additional Elements, such as Universal Rights covering UNGP (The UN Guiding Principles on Business and Human Rights), Management Systems, Entitlement to Work, Subcontracting and Homeworking, Environment (shortened);
- A SMETA 4-Pillar audit in addition encompasses Environment (extended); and Business Ethics.

Base Code, but the audit result is presented in the form of a report prepared using a template provided by SEDEX. Additional post-audit documentation is a completed non-compliance and corrective action form. The report provides a picture of the state of the required ethical principles at the plant on the day of the audit [https://www.dnv.pl...]. The overall structure and share of each criterion in the SMETA standard are presented in Table 1.

Table 1. SMETA 4-Pillar standard criteria

Criteria	Subcriteria	Number of requirements (%)
Environment	Water Biodiversity Forest Input Waste Energy Climate	50 (21%)
Social	Human Rights Labour rights Local communities	142 (60%)
Management and Ethics	Sustainability management Supply chain responsibilities Ethics	43 (18%)
Quality	Manufactured products quality, technical and environmental specifications (Criteria on environmental management instruments like EMAS or ISO 14001; Criteria non-food production: Workers/staff protective clothing)	2 (1%)

Source: Own elaboration based on: https://www.standardsmap.org/en/home

Cross-sectional studies conducted by Lambert and Frenz [2021] identified the effects on organizations resulting from the implementation of the VSS. Their studies confirm their high usefulness and a range of benefits associated with VSS adoption . As the researchers highlight in the report, the empirical evidence indicates that certification to VSS generates extensive and positive business impacts for suppliers, on a scale greater than might have been expected in the light of previous research. This is more notable since these standards have primarily been developed to ensure the production and distribution of safe food, with the objectives not explicitly focused on

business growth, profitability, operational efficiency, and innovation. According to the report, 55% of respondents experienced increased sales having gained certification to VSS, and 70% of respondents stated that changes in production methods had resulted in greater efficiencies and productivity. A key finding from the research has shown that e.g. BRCGS standards, which do not in themselves include innovation as a purpose, act as a determinant of broad-based innovation, including product innovation, operational efficiency, and business expansion. Many companies reported that they had undertaken changes in business practices or production resources, including upgrades to the factory, equipment, and facilities, as well as the technology and product development processes. These changes, in turn, contribute to more efficient use of material resources, a reduction in waste and improved of energy consumption. Most importantly, from a food safety perspective, the implementation of BRCGS standards has resulted in a 40% reduction in food recalls since achieving certification. Researchers worldwide have recognized the benefitial role of the VSS. Many benefits are recognized as a consequence of its implementation, ranging from the typically organizational and managerial ones [Paunescu et al. 2018], to the reduction of mistakes, errors, and waste [Kafetzopoulos and Gotzamani 2014; Carmona-Calvo et al. 2016], and those related to ethics and social responsibility [see e.g.: Rincon-Ballesteros et al. 2019; Rincon-Ballesteros et al. 2021]. Of course, its important to consider the limitations of implementing and maintaining these systems. A paper by Barbancho-Maya and López-Toro [2022], based on a literature review, highlights two major barriers. The first, and most important, is resistance to change, while the second is the belief in the high cost of implementing and using the system, coupled with a belief in the difficulty of implementation. Nevertheless, VSS implementation fosters compliance with sustainability goals (see Figure 1) and other standards in this regard, which, among other things, was highlighted in the 5th Flagship Report of the United Nations Forum on Sustainability Standards [2022].

Figure 1. United Nations Sustainable Development Goals



Source: https://www.un.org/development/desa/disabilities/envision 2030. html

The implementation of the SMETA dSedex platform every year is similarly favourable for companies [https://www.sedex.com...]. When Sedex first launched the SMETA methodology, 90% of the audits uploaded onto the platform were based on company codes for audits whereas now 90% of the audits are performed against SMETA, demonstrating the success of the initiative [Gurzawska 2020]. The positive impact of adhering to the requirements of this standard is also confirmed by scientific studies [Marques 2019; Suthavivat 2019; Gurzawska 2020]. Nonetheless, there is a large research gap in this area.

2. METHODOLOGY

In our research, in the empirical part, the main research method employed is a case study, supported by a secondary data review. The study was conducted in November 2022.

A case study generally covers the "how", "what", and "why" questions, focusing on real-life context [Halkias and Neubert 2020]. According to Creswell [2009] a case study is when the "researcher explores in-depth a program, an event, an activity, a process, or one or more individuals". The structure of a case study encompasses the problem, the context, the issues, and the lessons learned [Creswell 2014]. According to Simons [2009] a case study involved an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, program, or system in a real-life setting. Additionally a secondary document analysis was employed for this study. Secondary data examined included the organization's system documents, which the paper's authors obtained with the organization's permission on the condition of anonymity. For this purpose, we utilised the READ approach: R (Ready) - make the materials ready; E (Extract) - extract data, A (Analyze) - analyze data; D (Distill) - distill the findings [Dalglish et al. 2020].

The institution covered by our study operates in the northern region of Poland. Its key activities provide logistic services; handling and storage of packed frozen food products; cross-docking; documentation flow; value-added logistics services; etc. The company employs 24 staff and has seven operational, tactical, and strategic divisions.

3. RESULTS AND DISCUSSION

The company has implemented various food quality and safety management systems, those include: ISO 9001 (Quality Management), ISO 14001 (Environmental Management), and ISO 45001 (Occupational Health and Safety), and is complying with IFS Logistics, BRCGS Storage & Distribution, MSC CoC - Chain of Custody standards, and SMETA 4-pillar norm. With the research problem and purpose this study, a comparative analysis of each of the standards and norms was carried out in terms of compliance with the sustainable development goals (SDGs).

The analysis carried out confirmed that through the implementation of ISO 9001 the organization had gained the ability to operate in accordance with the two SDGs (8

and 9). This is because the systemic approach to ensuring the quality of core services leads the company to increase the effectiveness of the company's assets and development of sustainable and resilient production infrastructure. In addition, the constant development of service quality, based on the PDCA cycle, supports economic and social growth on both micro and macro scales, ensuring stable working and production conditions [Surisetti et al. 2021].

With regards to ISO 14001, it should be noted that the organization, through its environmental policy, helped the company achieve defined goals aimed at innovative and sustainable approach to the core production process. Furthermore, the monitoring of environmental aspects supports optimization of negative influences on the natural environment, therefore contributing to improved work and living within the vicinity of the facility. Implementation of safe, comfortable, non-polluted industrial working conditions supports gender equality and inclusion of people with disfavored social minorities. Other researchers, also found a clear link between the use of ISO 14001 and an organization's ability to meet the SDGs, as presented in the works by Hasanah and Suripto [2022] and Horry et al. [2022]. By analyzing the specificity of the organizations operations and its compliance with the ISO 14001 standard, it is possible to confirm its compliance with the following SDGs: 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, and 13.

Another management system implemented in the company is ISO 45001, dedicated to occupational health and safety. In this case, it allows the organization to comply with two SDGs, such as 3, and 8. This is because safe and healthy working conditions enable the stable performance of the company's human capital at work, as well as lead to a more balanced after-work life. Systemic mitigation of work hazards and risks establishes a sustainable system for providing the desired quality of service, food safety, as well as professional development of the company's employees [Jacob-John et al. 2022].

Other important systems in the organization required by retail chains are BRCGS and IFS, representing food safety management systems (FSMS). The implementation of FSMS supports the maintenance of a hygienic, secured, and monitored production environment aimed at optimizing the use of natural resources (water, energy), implementation of innovative service solutions of Industry 4.0 allowing to optimize workflow, and the reduction of production waste, including food waste. The comprehensive FSMS also supports the building and development of a food safety culture (FSC) which empowers the company in decreasing the negative impact of the food supply chain on the natural environment and climate change. The positive impact of implementing the BRCGS standard on the realization of sustainable development has been described by Jones and Comfort [2019], and Osmundsen et al. [2020], among others. Their research confirmed that in the analyzed organization, this applies with the following SDGs: 6, 9, 12, and 14.

In the MSC CoC system, a typical industry standard used by the organization, in the seafood sector,, compliance with this standard allows the organization to achieve SDG 14. The MSC CoC standard ensures that products from MSC-certified sustainable fisheries are traceable and separated from non-certified products [Mohamed and Malayilethu 2021]. Ensuring the traceability of sustainable seafood products within the food supply chain ensures the trustfulness of efforts undertaken to protect the natural sea environment. Furthermore, involvement in the farm-to-fork approach supports the company's share in ensuring the sustainable use and growth of natural sea resources as well as the entire blue economy sector [Baker et al. 2023].

In summary, when adhering to the previously mentioned systems, the analyzed company contributes to the implementation of 16 out of 17 SDGs. In addition, according to a comparative analysis involving the SMETA 4-pillar standard, the above-mentioned standards contribute to compliance with 12 out of 13 SDGs supported by the SMETA standard. Most of the 12 SDGs, are supported parallelly by SMETA and ISO 14001, followed by IFS and BRCGS contributing to the implementation of four SDGs, ISO 9001 and ISO 45001 supporting two SDGs each, and finally, MSC CoC supports one SDG. The aforementioned structure of mutual overlapping is illustrated in Figure 2 and Table 2.

ISO 14001

IFS & BRCGS

ISO 9001 & 45001

MSC CoC

1 SDGs

2 SDGs

4 SDGs

12 SDGs

13 SDGs

Figure. 2. Structure of mutual interaction between SMETA and other norms and standards.

Source: Own elaboration

Thus, it is evident that standards focused on system management, both general and industry-specific, recognized as VSS, are in synergy with the SMETA standard, making it easier for an organization to meet most of the SDGs. This confirms that VSS

can be a tool that supports the achievement of the SDGs, both directly and indirectly. At the same time, SMETA standards support the organization in achieving the right level of food safety, as required by VSS.

Table 2. Links between management systems standards and norms and the SMETA 4-Pillar standard

	SMETA Requirements															
Norm Stan- dard	0. A. Universal Rights covering UNGP	0. B. Management Systems & Code Implementation	1. Freely Chosen Employ- ment	2. Freedom of Association	3. Health and Safety	4. Child Labour	5. Wages and Benefits	6. Working Hours	7. Discrimination	8. Regular Employment	8A. Sub-Contracting and Homeworking	9. No Harsh or Inhumane Treatment is Allowed	10. Other Issues	10B4. Environment 4-Pillar	10C. Business Ethics 78	11. Community Benefits
ISO 9001	Х	X	X			Х	X		X	X			Х			
ISO 14001	X	X			X		X				X			X	X	
ISO 45001	X	X	X	X	X	X	X	X	X	X	X	X	X			
BRCGS	X	X			X			X		X	X	X		X	X	
IFS	X	X			X			X		X	X	X		X	X	
MSC CoC		X												X	X	

Source: Own elaboration

CONCLUSIONS

The analyzed organization plays an important link in the seafood supply chain. For this reason, it is a subject to several different system requirements set by the market and demanding institutional customers. Quality and food safety management standards, the implementation of which has been validated by relevant certificates, play an important role in this case. These standards, as well as the SMETA standard under which the organization operates on, fall under the category of Voluntary Sustainable Standards.

The SMETA standard is used to strengthen B2B relationships and assess the extent to which an organization's current or potential suppliers meet expectations in the ethical, social and environmental areas. It is designed in the form of audit questions, with the majority of questions dealing with social aspects, followed by environmental

and ethical considerations. Achieving compliance with the SMETA standard requires an assessment of all stages of an organization's operation. Due to its characteristics, the surveyed organization belonging to the food supply chain can demonstrate compliance with sixteen out of seventeen sustainable development goals. Furthermore, the analysis revealed how SMETA compliance contributed directly to the organization's fulfillment of thirteen sustainable development goals. In addition, the implementation of SMETA promotes better compliance with various system standards for environmental management and food safety, the implementation of which also supports these goals. Indeed, the analysis of the documents makes it possible to confirm the synergistic effect between the SMETA standard and other management systems implemented by the organization. This fact contributes to the improvement of food safety and food security, both on the studied organization and on the environment and climate change, by not only benefiting the food supply chain actors but also having positive effect on a macro scale.

REFERENCES

5th Flagship Report of the United Nations Forum on Sustainability Standards, (2022), Voluntary Sustainability Standards Sustainability Agenda and Developing Countries: Opportunities and Challenges. https://unfss.org/wp-content/uploads/2022/10/UNFSS-5th-Report_14Oct2022_rev.pdf.

Baker, S., Constant, N., Nicol, P., (2023), Oceans justice: Trade-offs between Sustainable Development Goals in the Seychelles, Marine Policy, 147, 105357, https://doi.org/10.1016/j.marpol.2022.105357.

Barbancho-Maya, G., López-Toro, A.A., (2022), Determinants of quality and food safety systems adoption in the agri-food sector, *British Food Journal*, 124, 13, 219-236. https://doi.org/10.1108/BFJ-07-2021-0752.

Cameron, I., Lopez, A., Yule, A., (2021), Decarbonisation roadmap for the European food and drink manufacturing sector. Ricardo Energy & Environment, Harwell.

Carmona-Calvo, M.A., Suarez, E.M., Calvo-Mora, A. and Perianez- Cristobal, R., (2016), Sistemas degestion de la calidad: un estudio en empresas del sur de Espana y norte de Marruecos, European Research and Business Economics, 22, 8-16, doi: 10.1016/j.iedee.2015.10.001.

Codex Alimentarius (2020), General Principles of Food Hygiene, FAO/WHO.

Creswell, J.W., (2009), Research Design: Qualitative, Quantitative and Mixed Method Approaches (3rd Ed.). Los Angeles: SAGE Publications.

Creswell, J. W., (2014), Qualitative Inquiry & Research Design: Choosing among Five Approaches (4th Ed.). Thousand Oaks, CA: SAGE.

Dalglish, S.L., Khalid, H., McMahon, S.A., (2020), Document analysis in health policy research: the READ approach, *Health Policy and Planning*, 35(10), 1424–1431.

Dietz, S., Rising, J., Stoerk, T., Wagner, G., (2021), Economic impacts of tipping points in the climate system, Proceedings of the National Academy of Sciences USA, 118, 34, e2103081118.

Food Security (2006). Policy Brief, June 2006, Issue 2, pp. 1-4. https://www.fao.org/filead-min/templates/faoitaly/documents/pdf/pdf_Food_Security_Cocept_Note.pdf.

Gurzawska, A., (2020), Towards Responsible and Sustainable Supply Chains – Innovation, Multi-stakeholder Approach and Governance, *Philosophy of Management* 19, 267–295 (2020). https://doi.org/10.1007/s40926-019-00114-z.

Halkias, D., Neubert, M., (2020), Extension of theory in leadership and management studies using the multiple-case study design, *International Leadership Journal*, 12(2), 48-73.

Hasanah, J., Suripto, S., Wardianto Bagus, K., Maulana, A., (2022), The Effect of Environmental Performance, Environmental Cost, Implementation of Environmental Management System (ISO 14001) and SDGs Support on Financial Performance of Mining Company in Indonesia Stock Exchange on 2016-2020, *International Journal of Advanced Multidisciplinary Research and Studies*, 2 (3), 491-497.

Hoffmann U., Bhutani A., (2021), Voluntary Sustainability Standards Illusions of Progress and a Way Forward, Peter Lang, New York, Bern, Berlin, Bruxelles, Oxford, Wien.

Horry, R., Booth, C.A., Mahamadu, A-M., Manu, P., Georgakis, P., (2022), Environmental management systems in the architectural, engineering and construction sectors: a roadmap to aid the delivery of the sustainable development goals, *Environment, Development and Sustainability* 24, 10585–10615, https://doi.org/10.1007/s10668-021-01874-3.

https://dqs.pl/uslugi/sedex/

https://unctad.org/project/fostering-green-exports-through-voluntary-sustainability-standards-developing-countries

https://www.brcgs.com/our-standards/food-safety/

https://www.dnv.com/services/brcgs-global-standard-for-food-safety-5148

https://www.dnv.pl/assurance/systemy-zarzadzania/smeta-czym-wlasciwie-jest.html

https://www.dnv.pl/services/norma-msc-dotyczaca-rybolowstwa-5105

https://www.msc.org/pl/standardy-i-certyfikacja-msc/standard-zrownowazonego-ry-bolowstwa-msc

https://www.pfpz.pl/dekarbonizacja-dla-europejskiego-sektora-produkcji-zywnosci-i-napo-jow-raport-ricardo-dla-fooddrinkeurope-18816

https://www.sedex.com/our-services/smeta-audit/

https://www.standardsmap.org/en/home

IFS Food, Standard oceny zgodności produktu i procesu produkcyjnego w zakresie bezpieczeństwa i jakości żywności, Wersja 7. (2020), IFS. ifs-certification.com.

Iweala S., Sun Y., The many aspects of voluntary sustainability governance: Unpacking consumers' support for tea standards in China and the UK, Cleaner and Responsible Consumption, Volume 7, 2022, 100080, https://doi.org/10.1016/j.clrc.2022.100080.

Jacob-John, J., D'Souza, C., Marjoribanks, T., Singaraju, S., (2022), Sustainable Development Practices for SDGs: A Systematic Review of Food Supply Chains in Developing Economies, in: Nguyen, N., Nguyen, H.V., D'Souza, C., Strong, C. (eds), Environmental Sustainability in Emerging Markets. Approaches to Global Sustainability, Markets, and Governance. Springer, Singapore https://doi.org/10.1007/978-981-19-2408-8_10.

Jones, P, Comfort, D., (2019), "Better Retail, Better World": A commentary on British retailers and the sustainable development goals, *Journal of Public Affairs*, 19:e1910, https://doi.org/10.1002/pa.1910.

Kafetzopoulos, D.P. and Gotzamani, K.d. (2014), "Critical Factors, food quality management and organizational performance", *Food Control*, Vol. 40, 1-11, doi: 10.1016/j.foodcont.2013.11.029.

Kubasiński, S., Sławińska, M., (2021), Research on Corporate Social Responsibility (CRS) in Terms of Work Safety, *European Research Studies Journal*, XXIV, 5, 626-636

Lambert, R., Frenz, M., (2021), The economic impact for manufacturing sites operating to BRCGS certification. Project Report, https://eprints.bbk.ac.uk/id/eprint/46546/1/Final%20BRCGS%20Report%20Impact%20of%20certification.pdf.

Marques, J.C., (2019), Private regulatory capture via harmonization: An analysis of global retailer regulatory intermediaries, *Regulation & Governance*, 13, 157-176. https://doi.org/10.1111/rego.12252.

Marx, A., Depoorter, C., Vanhaecht, R., (2022), Voluntary Sustainability Standards: State of the Art and Future Research. Standards, 2, 14–31 https://doi.org/10.3390/standards2010002

Mohamed, K.S., Malayilethu, V., (2021), Fisheries ecolabelling – clearing the haze, *Current Science*, 121, 12, 1523-1524.

Osmundsen, T.C., Amundsen, V.C., Alexander, K.A., Asche, F., Bailey, J., Finstad, B. Olsen,

M.S., Hernández, K., Salgado, H., (2020), The operationalisation of sustainability: Sustainable aquaculture production as defined by certification schemes, Global Environmental Change, 60, 102025, https://doi.org/10.1016/j.gloenvcha.2019.102025.

Paunescu, C., Argatu, R. and Lungu, M., (2018), Implementation of ISO 22000 in Romanian companies: motivations, difficulties and key benefits, Amfiteatru Economic, 20, 47, 30-45.

Rincon-Ballesteros, L., Lannelongue, G., Gonzalez-Benito, J., (2021), Effective implementation of a food safety management system and its relationship with business motivations, *British Food Journal*, 123, 3, 990-1011, doi: 10.1108/BFJ-04-2020-0283.

Rincon-Ballesteros, L., Lannelongue, G., Gonzalez-Benito, J. (2019), Implementation of the BRC food safety management system in Latin American countries: motivations and barriers, Food Control, 106, 1-9, doi: 10.1016/j.foodcont.2019.106715.

Sarfaty, G.A., (2021), Translating Modern Slavery into Management Practice, Law and Social Inquiry, 45, 1027 https://ssrn.com/abstract=3514381.

Sedex Members Ethical Trade Audit (SMETA) Best Practice Guidance (Version 6.1, May 2019); https://growers.sunkist.com/wp-content/uploads/sites/4/2021/05/SMETA-4-Pillar-and-Sedex-Advance.pdf.

Simons, H., (2009), Case Study Research in Practice. SAGE, London.

Smith, W.K, Nelson, E., Johnson, J.A., Polasky, S., Milder, J.C., Gerber, J.S., West, P.C., Siebert, S., Brauman, K.A., Carlson, K.M., Arbuthnot, M., Rozza, J.P., Pennington, D.N., (2019), Voluntary sustainability standards could significantly reduce detrimental impacts of global agriculture, Proceedings of the National Academy of Sciences USA, 116(6), 2130-2137.

Surisetti, D. S., Kulkarni, S., Naveen, K. (2021), Sustainable Development Initiatives Through ISO 9001:2015, International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, 12(8), 12A8I, 1-10. http://doi.org/10.14456/ITJEMAST.2021.156

Suthavivat, P., (2019), Sustainable fresh produce business practice: a case of SWIFT Co. Ltd. Acta Hortic, 1245, 153-156. https://doi.org/10.17660/ActaHortic.2019.1245.22.

Tirado, M.C., Clarke, R., Jaykus, L.A., McQuatters-Gollop, A., Frank, J.M., (2010), Climate change and food safety: A review, Food Research International, 43, 1745-1765.

UNFSS, (2013), Voluntary Sustainability Standards. Today's Landscape of Issues and Initiatives to Achieve Public Policy Objectives, United Nations Forum on Sustainability Standards: Geneva.

EATING ANIMALS BY JONATHAN SAFRAN FOER AND ITS RECEPTION BY POLISH READERS

Irena Chawrilska

Faculty of Languages, University of Gdańsk ul. Wita Stwosza 51, 80-308 Gdansk, Poland irena.chawrilska@ug.edu.pl

8

Elżbieta Czapka

Faculty of Social Sciences, University of Gdańsk ul. Bażyńskiego 4, 80-309 Gdańsk, Poland elzbieta.czapka@ug.edu.pl

Abstract

In 2013, Jonathan Safran Foer, the author of the bestseller *Everything is Illuminated*, once again became the center of a lively discussions in academic and non-academic circles thanks to his work *Eating Animals* (published by Krytyka Polityczna Publishing House, Poland). In this work Foer presented a non-literary text addressing a socially important topic, that gains new significance from the perspective of the year 2021. In this article, provide a platform for Polish readers of *Eating Animals*, without showing favouritism towards either vegans or non-vegans. We explore its reception, based on the definition, "the reception of a literary work by a literary audience and its functioning among different reading groups" (as defined in the Dictionary of Literary Terms p.464). Although the primary connotation triggered by this definition is sociological, reception pertains to reading, understanding, and subsequently interpretating a work. This attribution aligns it to literary history, disconnecting it from sociological associations. The aim of the authors is to situate Foer's *Eating Animals* in the sphere of cultural and social research. Additionally, they seek to specify the definition of reception using this book as an example.

Key words: Book Reception, Animal Study, Sustainable Development.

The matter of text reception and the reader will always be a fundamental issue in literary research. We seek to move beyond the disputes between literary academics such as Jauss and Iser's reception aesthetics and Fish's interpretative communities. Our focus is instead on individual Polish readers of *Eating Animals*¹. Employing a method drawn from sociology, taking care not to invalidate the identifications and reflections of individual Polish readers of Foer's work, or to obscure their reception of the book with literary theories [Jauss: 267; Fish: 483]. Along with the readers of the writer's bestseller, we acknowledge the different epistemic strands as equal, without fearing interpretive anarchy. This is because readers of Foer's work in 2021 are inevitably shaped by the cultural context that defines their reception of the text.

The way Foer's book has been read in Poland a decade after its first publication, in the context of a background of thought relevant to the 2020's, will provide the American reader with new perspectives and comparisons that would not be revealed in a homogenous space. Each reader enters the reading with their own values, and never it is transparent or innocent. This authors of this paper invite their readers to reconsider the reception of Eating Animals, which is grounded in American culture. The inclusion of individual Polish readers' perspectives may introduce inspiring thoughts and a refreshing context, not only presenting the artistic and aesthetic values of the author's text Everything is Illuminated but also focusing on its ideological and cognitive function and the significance of the book for specific readers (Damrosch 5). The history of a text's varied reception could become a part of literary history in competition with its traditional version. According to Gunter Grimm, interpretation should be distinguished from reception, as the former involves an objective reference to the object characteristic of the researcher, while the latter involves the subjective opinion of the subject intended for the "normal consumer" [Grimm: 255-267]. The perspective of the ordinary reader in this paper, along with the context of the Vegan Studies Project [Wright: 8; Kubisz: 11], and sustainable development, will enable us to understand how Eating Animals has become an important text in Poland, an interpretative strategy, a way of thinking about important issues, and a key to interpreting other cultural texts.

1. MEAT CONSUMPTION, VEGAN STUDIES, SUSTAINABLE DEVELOPMENT

In an era of impending climate catastrophe [Crutzen], Anthropocene marasmus [Bińczyk], and successive attempts to balance development (Sustainable Development Goals), dietary choices are playing an increasingly important role in social life. The contemporary human diet is filled with relatively inexpensive meat on an unprecedented scale, as Jonathan Safran Foer signals in his book Eating Animals, stating

¹ In the 1960s and 1970s, research into the reception and reception of literary works was one of the main concerns of Polish literary studies, and in many respects it was ahead of world scholarship at the time. They created, so to speak, a new paradigm of it, largely shifting the centre of gravity of the interpretative process from the author's intentionality and the form of the text to the interpretative freedom of the recipient. Nowadays, reception studies exist only to a very limited extent and mostly reproduce the patterns established during the field's glory years in Poland [Jarmuszkiewicz].

that, "taking inflation into account, meat has never cost so little at any time in history as it does today" [Foer: 122]. However, current trends indicate a departure from meat consumption, which may seem marginal in the context of the entire human population, but from the perspective of the growing availability of plant-based products, there is hope that the estimated one percent of vegetarians in Poland actually constitutes a much larger group [Mamzer: 75].

The possibility of producing meat from animal stem cells, which could be a competitor and a threat to meat producers, is opening up to supporters of including meat in the 21st century diet [Lymbey and Oakeshott: 238]. In 2013, a hamburger made from beef produced *in vitro* under laboratory conditions was prepared and eaten in London; it consisted of about three-thousand tiny strips of artificial beef grown from cow stem cells and cost about \$200,000. Hatalska Foresight Institute reports in *Future of Food* that, while for some people meat from artificially grown tissues is the future, human diets may consist of bugs [*Future of Food*: 78]. We do not know if people will face any cultural pressure in their consumer choices in a few years or a few decades, or if not eating meat will involve ethical choices related to reducing animal suffering through meat products printed from artificial tissue.

Today, meat consumption continues to be a significant global problem, and the supposed solution lies in the sustainable development goals². However, incorporating sustainable development into the political agenda is not synonymous with setting binding strategies for sustainable development. The issue of meat consumption is encompassed within goal 12: responsible consumption and production. However, the transformation of socio-economic development into sustainable development, given the complexity and variability of conditions, cannot proceed without encountering occasional unrealistic accelerations and impediments. Relying on arguments alone lacks the sufficiency needed to modernise the economy in a short period of time and develop new patterns of living, working and consumer behaviour.

Eating animals has become an important social and research issue. The Increased interest in veganism, both in practical and cultural dimensions has spurred cultural-political-social research, which found research potential in the realm of veganism. In 2015, Laura Wright's monograph, The Vegan Studies Project: Food, Animals and Gender in the Age of Terror, initiated a discussion on veganism from a cultural studies perspective. Wright singled out veganism as a subject and provided it with a voice, thus creating a space to discuss the cultural contexts of veganism. In this sense, veganism is no longer just a lifestyle but also an ideology and a philosophy. The path to the Vegan Studies Project has certainly been paved by various branches of engaged

² Sustainable development itself as a development concept is a response to technological progress, the environmental crisis and the green ideas of the second half of the 1960s. As a global policy goal, the concept was adopted by almost all countries of the world at the Earth Summit in Rio de Janeiro in 1992 as Agenda 21. Sustainable development is development that meets the needs of the present without compromising future generations. In 2015, UN member states adopted the now-enacted and implemented resolution Transforming Our World: the 2030 Agenda for Sustainable Development, which was set out as a strategy for world development up to 2030.

humanities, including animal studies, ecocriticism, ecofeminism and animal advocacy movements.

Eating Animals by Jonathan Safran Foer and *The Liberation of Animals* by Singer are rarely included reading lists addressing the issue of eating animals. Ten years ago, these books were read by people interested in mass meat production and veganism. However, today, there is a growing body of literature focusing on local nuances and culture. Despite this Foer's work is still consistently referenced to in various Polish texts on veganism, veganism studies, and animal studies. There are ongoing discussions on what makes this book still relevant and how to approach Foer's work in present-day Poland from the perspective of veganism studies.

We chose a qualitative approach to study Polish people's perception of *Eating Animals*. We conducted semi-structured, in-depth interviews with individuals who had read the book. Thematic analysis was employed to analyze data. The coding process followed an abductive approach, meaning that we used the coding framework based on existing knowledge and adding new elements that appeared in the data.

The text juxtaposes the perspectives of a sociologist and a literary scholar, bridging the gap between social sciences and the humanities. It applies the same method to Foer's book as to other social phenomena, in order to describe the ongoing impact of *Eating Animals*. Nathalie Heinich statement on how artistic creation "is as much a social phenomenon as any other, so I do not understand how it can be isolated a priori from society", resonates with the authors of this study. They adopt her perspective of the sociology of art, which is dominated by the concept of "art as society" [Heinich: 124].

2. READING FOER IN POLAND

With the guidance of Jonathan Safran Foer, the Polish reader has become accustomed to tackling globally relevant topics. Foer has addressed the issue of meat production in *Eating Animals*, whilst also delving into local themes by publishing *Tree of Codes* – a book based on the English version of Bruno Schulz's short stories, and his bestseller *Everything is Illuminated*, which is set in Ukraine and revolves around the fate of Foer's Polish-Jewish ancestors. The writer's book *We are the Planet: Saving the Planet Starts at Breakfast*, named the best book of 2019 by the "Financial Times" and "The Guardian", was published in Polish in 2020. By citing data and facts about climate change, Foer continued the narrative familiar to Polish readers from *Eating Animals* that humans are turning the planet into a farm for growing animal products, with disastrous consequences.

In 2013, when the Polish translation of *Eating Animals* was published by Krytyka Polityczna publishing house, it received widespread acclaim and continues to be recognised and quoted in academic contexts [Mamzer: 57–78; Kubisz: 11–28]. It is rare for a non-fiction book to cause such a resonance, even though it does not seem to convey anything that was unknown beforehand.

3. THE PHENOMENON OF EATING ANIMALS IN POLAND

Eating Animals is considered neither fiction nor science fiction. On the one hand, the author recounts the wartime fate of his grandmother, who escaped from Poland and later instilled in her grandchildren a great respect for food. He also highlights in one chapter the surface area available to a hen in industrial farming. At the same time, the author exposes the suffering of animals by infiltrating industrial farms and visiting the so-called "humane" meat producers.

Eating Animals is not openly critical of meat consumers, instead the author advocates for conscious consumption, using a rhetorical technique to encourage the reader to choose a plant-based diet and accentuates the culpability of the meat industry. Foer's arguments against eating meat are of an economic, culinary, health and philosophical nature. Above all, he frames these arguments through a personalised narrative with which many young parents expanding their infant children's diet are trying to answer [Wypychowski].

The writer realises in Eating Animals that food satisfies many human needs. The physiological need to satisfying hunger is the most important, but food also satisfies safety needs, as access to sufficient food reflects a secure situation. Eating also has the function of satisfying the desire to belong to a certain social group, because it accompanies important life events and facilitates gatherings, food sharing and expressions of care. Spending time together at the table leads to an exchange of information and provides a positive emotional experience, enhancing the quality of life. Foer recalls that his grandmother's attitude was that, "Food was not just food to her. It was terror, dignity, gratitude, revenge, joy, humiliation, religion, history and, of course, love" (4).

Refusing someone a place at the dinner table is an extremely unpleasant form of rejection. Food accompanies the initial phases of building intimate relationships, and some foods are aphrodisiacs. Choices related to the type or quality of products eaten, as well as eating with others, may also serve a method of building and defining social status. Eating in specific locations, with certain foods, and in the company of certain individuals holds socio-cultural meaning, which depends on the culture or society itself. Some foods are considered a delicacy in some cultures, while in others, they are considered inedible or repulsive. In Foer's Eating Animals, a character states that, "Food in my house was treated as something special, something not to be wasted. No one thought of food as mere fuel. Preparing and eating meals in my home was given a lot of time and attention. It was a ritual" (8). The writer reassures his readers that every action regarding the choice of a meal constitutes an important social message that can be interpreted in many ways.

However, much has changed in Poland concerning eating animals and veganism since the publication of Eating Animals in Polish in 2013. In his unmassuming narrative, Foer does not present any alternative to industrial farming besides small farms where the farmer cares for his animals, and the slaughter process is humane. He presents his audience with a family and a potential story reminiscent of Netflix, devoid of unnecessary drama, and this approach is partially why a documentary film was made based on the book [Kapela]. There was a clear reason for creating a documentary based on Eating Animals [Eating Animals 2017]. Neither prescriptive nor radical, it offers a personal perspective of an American who has Polish roots and has dealt with topics close to Polish audiences. It is a narrative by an excellent writer who does not shy away from personal confessions, that resonates with the experiences of a significant portion of society. After all, most people have reflected on the dietary choices of a loved one, especially a child. Within the fabric of the text, the author's understanding takes center stage, and his subdued rhetoric invites the reader to engage in similar reflections.

4. METHODS

A. Study setting and participants

The study, conducted in 2021 in Poland's Pomorskie Voivodeship, utilised a qualitative design. Data were collected over six months, employing a purposive snowball sampling method to recruit the study participants. The authors looked for individuals who had read Jonathan Foer's Eating Animals and were willing to share their thoughts on the book. It was important to include both meat eaters and vegans / vegetarians among the participants. Seven people agreed to participate in the study, and five potential participants declined to be interviewed for various reasons including: "I don't want to talk about it, it's a difficult topic", "I don't remember the content of the book anymore", "I don't want to go back to it" or "I don't have time". The study ultimately included seven participants, aged between 30 and 50 with all but one having completed a university education (table 1).

Table 1. Socio-demographic characteristics of the participants.

Participant Gender		Age	Education	Diet				
1	M	40–50	university	includes meat				
2 F		40–50	university	vegetarian				
3	F	40–50	university	vegetarian				
4	F	30–40	university	vegan				
5	M	40–50	high school	vegan				
6	M	40–50	university	vegetarian, sometimes eats meet				
7	F	30–40	university	vegetarian, sometimes includes meet				

B. The interviews

Individual semi-structured in-depth interviews were employed to explore the social perception of the book *Eating Animals*. Due to the Covid-19 pandemic, the researchers conducted interviews on Zoom and MS Teams, with each lasting from 40 to 90 minutes. The interview guide included a list of topics related to the participants' per-

ception of the book. The questions addressed reasons for reading the book, emotions experienced while reading it, and the book's strengths and weaknesses. During the interviews, some participants occasionally became very emotional due to parts of the book that described the cruelty to animal occurring on farms.

C. Data analysis

The interviews were digitally recorded and transcribed verbatim. Thematic analysis was used to identify and analyse recurring themes and patterns [Braun & Clark 2006]. The researchers followed the six steps of thematic analysis: familiarization with the data, coding, generating themes, reviewing themes, defining and naming themes, and writing up the results.

D. Ethical considerations

All participants provided oral informed consent to participate in the study. The study was approved by the Ethical Advisory Board at the Faculty of Humanities, the University of Gdańsk.

5. RESULTS

A. Reasons why the participants read the book

The participants declared various reasons for reading the book. One of them said:

I am in the Political Critique Publishers' bubble. I read a lot of the stuff they publish. When the book appeared, I thought that I would buy it. And the topic interested me, made me curious. I was curious about the book's perspective. (1)

He did not intentionally seek out a book about eating animals. Some participants read the book because they were interested in the subject, even from a professional point of view. One participant, who had been vegetarian all her life and did not need motivation to stop eating meat, decided to read at least one iconic book on this subject. She wanted to "deal with this topic more theoretically" (3). Another female participant had long planned to read the book due to her interest in animal welfare. She explained:

The content of the book seemed to me to be so elementary and emotionally difficult that I put off reading it until later. Ultimately, the recommendation of friends convinced me to read it. (4)

Two study participants mentioned other books by Jonathan Safran Foer. One of them declared that the authors' previous books made her read Eating Animals:

"Everything is illuminated" I liked the book and the film based on it very much, as it was the second book about the WTC disaster. In those years, the topic of eating animals was not as widely commented as it is today. I was curious to see what Foer had come up with. At that time, I was not very interested in the subject of meat production and its impact on our planet. (7)

Several interviewees also noted that at the time the book was published, there was limited discussion about eating animals, vegetarianism and veganism in Polish society.

B. Earlier interests in the subject discussed in the book

Most of the participants declared that before reading the book they had varying degrees of interested in the subject of eating animals. One participant felt that it was "such a natural interest for every conscious person" (2) and admitted that she had always been interested in the ethical aspect of eating animals.

The interest of the research participants manifested itself in different ways. One participant discussed how her interest had evolved over time, "I've been interested in this subject for about eighteen years, although it's only really been about five years since I started to take the subject 'seriously', so not just reading newspaper articles or watching videos on social media, but also reading scientific studies and popular science books." (4)

Interest in the topics covered in the book was not always linked with a preference for a vegetarian/vegan diet. One research participant, who declared that they ate meat, spoke about how the topic of animal welfare was always present in his family. Another was interested in the origin of the products that they consumed.

Two research participants had not been particularly interested in the subject of eating animals before reading Foer's book. One of them admitted, "I mean I always think I was aware of that in my adult life, that I eat animals, yes. Whereas, I've never had the kind of reflection that would lead me to think that this fact was going to make me stop doing it." (1)

Another participant explained that, although she knew that these were important issues, she hadn't attempted to explore them, "I used to eat at the Greenway vegetarian diner as a student and saw various leaflets and posters every day over a bowl of lentil soup, but the issues were not part of my worldview, they did not concern me." (7) This participant also explained that people advocating ecological approaches, including vegetarians and vegans, seemed strange to her, even radical. She even compared them to members of a cult.

C. Emotions readers experienced while reading the book

Due to the subject matter, reading Eating animals can evoke strong emotions, and the research participants reacted in different ways to its content. One participant, who had read the book some time ago, recalled feeling compelled by the author to adopt a certain position:

First there was some curiosity. Just the usual kind of curiosity connected with reading a book which was some kind of reportage, the kind of narration I could expect. A bit like I associate with the propaganda, ideological dimension. You know, stories about how killing animals is wrong and so on. I also don't like when somebody speaks to me in such a language. If somebody tries

to convince me that something is cool, I say "ok". But if someone tells me that something is bad and that I mustn't do it then I immediately harden up. (1)

Another participant initially felt as though she was being manipulated, and it was only after further reading that her attitude changed. She explained why she perceived the message of the first part of the book in this way:

Well, the beginning of the book made such an average impression on me... an exalted gentleman from America writes about his personal struggles of some sort. At first I didn't know what it was about. I knew I would read the book anyway, but my first impression was that I was afraid someone would try to play on my emotions. Especially when the recipe for the wedding dog came up. So the beginning was on the one hand shock and disbelief and on the other hand, I felt a bit manipulated. As if I had been hit between the eyes at the beginning... Many times I wanted to stop reading the book when he was describing all these practices in slaughterhouses. You knew it was like that, but when you read about it, it's terrible. You think about animals, but also about people. To what point have we reached. We are like a virus on this planet. (3)

Another participant (5) had read books with similar themes and did not experience particularly strong emotions while reading Eating Animals, but was positively surprised by the literary value of the book. One participant admitted that she did not have an "emotional-personal attitude to this book, as well as to the topic of vegetarianism, veganism and eating animals in general" (2). She explained that the ethical issues were important to her, and that she approached the book on a rational rather than an emotional level.

Other research participants talked about experiencing extremely strong emotions while reading the book. Descriptions of the practices used against animals in industrial livestock farms made them want to interrupt or stop reading the book. This is illustrated by the words of one of the participants:

I stopped many times, just like when I was watching the documentary based on Eating Animals. The description of how the farm looks and how the chickens are killed, it's horrible, the sight of the big vat with the chickens being killed in it and their droppings accompanied me for a long time. This book disturbed me, it also disturbed Foer. (7)

Statements by research participants indicate that reading Foer's book was not always a pleasurable experience.

D. Strong and weak points of the book

The participants were asked about their favorite aspects of Foer's book, and what themes seemed particularly important to them. Their responses varied as they considered both the message of the book and its literary value. Moreover, the content of the book was interpreted differently.

One of the participants expressed a strong preference for the beginning of the book, in contrast to the rest of the book where the author describes practices used on live-stock farms:

The way of telling the story and creating this axis at the beginning was cool, that it used to be different, that there was no food, that his grandmother overfed him because she associated food with safety and so on. The psychologisation was so good. And suddenly there comes this boom. Maybe this is how the book should have been written. Maybe it is some kind of poetic license. But of all the things I liked, it was the beginning. (1)

Another participant admitted that the book somehow forced her to make a decision about eating meat. This message seemed the most important to her:

The most important thesis was that it is impossible to eat meat ethically. So if I eat meat, I have to accept that it is unethical. I guess that I know this, but someone had to tell me directly and force me to confront it and make a decision. (2)

Meanwhile, the participant who had abstained from eating meat for almost her entire life, interpreted the author's message differently. According to her, the book had, "no such radical theme of protesting eating meat. An annihilation of this whole business of eating meat. It was about striving for people to eat ethical meat." (3) This absence of a radical approach to eating meat appeared to be the book's greatest merit in her eyes.

Another participant appreciated the "light pen combined with a handful of well-re-searched data" (4), but only in the case of the original version of the book. She read the translation sporadically and without much enthusiasm.

It was also noted that Foer's book could serve an educational function if used skill-fully. One participant said:

It is a deeply educational book and should be read with very young people, to make them aware, to show them the documentary. There are not many such narratives; we have either many books of fiction or popular science, and Foer's proposal is unique in this respect (7).

Most of the interviewed participants did not offer critical comments about the book. One woman admitted that, although she did not rave about the book "from beginning to end" (2), the book was well written and the message was not simplistic and naive. Another participant (6) emphasized that it was the content, not the books form, that was important to him and hence, he had no critical reflections concerning the book itself.

Only one research participant made it clear that the narrative style of the book did not convince him. He felt that the book was too ideological and explained:

It rather scared me and so on. But I really dislike this form of ideological writing. At that moment, the book became ideological, showing how bad it is. This is how I perceived it - how bad you are, that you are doing this. It discouraged me. (1)

E. The book influence on participants' attitudes towards eating animals

When a book addresses issues related to eating animals, the question of its influence on readers' attitudes towards this topic cannot be overlooked. Three participants declared that the book reinforced their negative attitude towards killing and eating animals (3,4,5). Another participant admitted that she began to make more conscious food choices stating, "[the book] was an important step for me on the road of mental change, because I can never eat too much meat." (7)

A participant who included meat in his diet talked about how the book made him even more critical of global food production:

I didn't become a vegetarian, but the book makes me more aware of the scale on which animals are treated inhumanely...I feel more intensely against the inhumane killing of farm animals. (6)

Only one participant in the study admitted that the book they had read had no significant effect on their attitude towards eating meat:

Well, rather not. On the Likert scale, I would wonder whether to say 'rather not' or 'definitely not'. That comes from the fact, as I told you earlier, that I'm so intracontrolled. It would have to be such a process going on in me. I think it would be interesting to think about who this book is written for. Is the writer writing a bit for himself, to show off his own stories? He's talking about the group, the environment, the social world of vegans. Is it actually written with the intention to encourage others to change their habits. (1)

The participant indicated that that he was uncertain to whom the book was addressed and whether the author's intention was to convince readers to stop eating meat.

F. Is this book worth reading?

With the exception of one participant, everybody found Foer's book worth reading and emphasised both its literary value and its message. Two participants particularly highlighted that the book challenged people's ideas about animal husbandry by revealing what happens in slaughterhouses. One of them took up the theme of slaughterhouse workers who experience what happens in slaughterhouses on a daily basis. Although they work in slaughterhouses and are therefore perpetrators of animal suffering, in a way, they are also victims of industrial farming:

People need to know where that pink cute little chop comes from. What it looks like. I also think in terms of the people who work there. I have always wondered about who goes to work in a slaughterhouse. Who goes to work in a butchery. What type of people they are, and how long they work there. They should work for a year and that's it. It absolutely rapes the human soul. (3)

I think that there is still not enough, let's call it ugly, awareness raising or confronting people with what happens in these slaughterhouses. So yes, the book is worth reading for at least these three reasons. (2)

Another participant said that the book enlightens and shows the importance of "producing meat in an ethical way" (6). One participant recommended Foer's book especially for those who were beginning to take an interest in the subject of animal husbandry, ethics and nutrition (4).

Many people pointed to the book's features as evidence of its literary value. There was an opinion that the book "balances reliable knowledge - which is somewhat lacking now - and a less reportage-like form" (2). (2). The book was also considered to be worth reading not only for its factual value, but also due to its language and "a mature and nuanced description of how to reach the presented conclusions, as well as their consequences for the author and his environment" (5).

One participant drew attention to the personal nature of the book:

It's worth reading because it's personal, the author's perspective is very evident in the book, it's not a popular science essay; it's the story of a seeker who really wants to learn something, not for popularity (I hope), but out of conviction...' (7)

The participant added that the literary formula of Foer's book effectively kept it from becoming outdated.

Only one research participant was not willing to recommend the book to others because they found it mediocre:

In my opinion it wasn't a super book. Such an average book from Krytyka Polityczna. Neither super nor hopeless... Would I recommend it? I don't necessarily think I would recommend it. (1)

6. BETWEEN SOCIOLOGY AND LITERARY STUDIES – DIALOGUE ABOUT EATING ANIMALS

The results of the qualitative research conducted show that Foer's book is perceived differently depending on the participants' previous experiences of the subject matter covered in the book. Not all respondents' opinions align with those of the critics cited in the first part of the article. One respondent felt that the content presented in the book was ideologized and that Foer's text is considered to be the personal story of a person seeking justification for a vegetarian diet, as mentioned in the first part of the article.

Respondents cited various reasons that led them to read Foer's book, and an interest in animal welfare was not necessarily the key one. Were the respondents likely to become vegans, a stance Hsiunga considers detrimental to the animal rights movement? This controversial position stems from the belief commonly attributed to vegans, where converting to veganism is seen as a way to stop industrial animal farming. However, according to Hsiung, it is not enough to end the fight for animal rights there, which is an approach taken by vegans. They consider that choosing a vegan diet is the morally right decision, and this step, according to Hsiung, should

only be the beginning of a process of change [Hsiung: 2]. Undoubtedly, Krytyka Polityczna, which published the American writer's book in Poland, as well as his earlier books, played a significant role for the respondents. In 21st century Poland, Krytyka Polityczna has been a litmus test of social change, creating the online opinion journal KrytykaPolityczna.pl, a publishing house and social and cultural centers, and inspiring the addressing of important social issues.

Foer's popularity was certainly enhanced by the way he built his story, basing it on his Jewish roots and traditions cultivated by his grandmother, whose respect for food originating in Polish culture she tried to pass on to her grandchildren. The cultural dimension of food rooted in Polish traditions undoubtedly emotionally binds the Polish reader to the book by the American writer. Furthermore, *Eating Animals* in Poland was preceded by *Everything is Illuminated*, which was interesting to the Polish reader because of the writer's Polish-Jewish roots and the narrative built around events taking place in Ukraine. In literary circles, another factor in favor of Foer's work is his 2010 book *Tree of Codes*, a tribute and literal monument to the work of Bruno Schulz, whose *The Street of Crocodiles* turned out to be the American author's favourite reading.

The content of the book made a strong impression on the participants in the study, although this was not always due to strong emotions triggered by the descriptions of brutal practices used against animals on livestock farms. Again, the literary value and the manner in which the narrative was conducted were convincing enough to encourage continued reading. The vast majority of respondents gave the book a positive rating because of the importance and topicality of the subject matter, its literary and educational value, and the personal threads present.

The respondents appreciated the story spun by Foer. The personal narrative of the writer, combined with the abstractness of the cited figures related to industrial meat production and the portrayal of animal suffering up close, from the perspective of a witness to the events taking place on farms or in slaughterhouses, lends credence to the story and makes the book resistant to the passage of time. It represents the voice of the vegan subject that studies on veganism are calling for. Foer's text equips the vegan or "veganizing" subject with the tools to describe their condition so that they can overcome the impasse of power and knowledge relations constructing knowledge about meat and plant-based diets, and develop a critical approach to the question of the public perception of veganism. The images proposed in Eating Animals have the potential to inspire the quest for an improved socio-political-cultural system at the individual level. In the new humanities discourse, great importance is ascribed to the agency of the subject at the individual level. Domańska advocates that, "I am inclined towards realistic micro-utopias that can be realised on a local scale, limited in time and space, as valid for a specific time, for the needs of a specific community in order to support the well-being of its members" (51).

The well-being of the members necessitates the inclusion of non-human subjects, challenging the anthropocentric perspective and necessitating the developing of new strategies for coexistence of human and non-human subjects. Foer introduces the vegan experience in his book, and his book also demands a vegan optic. At this point, the disconnect becomes apparent between the potential of the text, the theoretical framework that forms emerging vegan studies, the humanities of engagement, and the results of qualitative research into the reception of Foer's book in Poland. It may seem disappointing to conclude that, in most cases, the book had no impact on the attitudes of research participants towards eating animals. The responses of the participants indicate that reading the book either reinforced their current views or, in only one case, made them take a stance. The examination of the reception of the book by Polish readers, as revealed by the proposed study, highlights a disparity of discourses created within the framework of the new humanities and the reception of readers who do not belong to the group of representatives of the "veganised academy" [Kubisz]. Social practices can be revealed here, which can be characterised to a significant extent by an asymmetry of power and status. On the one hand, there is a milieu of humanist intelligentsia with firmly established views, using a value system constituted by certain categories. On the other hand, there are Foer's readers, who are not academically educated in these topics and are only beginning to ponder the ethics of dietary choices and the problem of speciesism.

Undoubtedly, however, Eating Animals resonates socially and represents a narrative that addresses current global issues expressed through the Sustainable Development Goals. The growing popularity of plant-based diets should be seen as the popularisation of a lifestyle that is oriented towards adherence to the concepts of sustainability and sustainable management of natural resources, which is sometimes associated with slow life thinking. Foer's book serves an example of a text that fits within the literature for sustainable development, which includes artistic texts that relate at the level of content and fit to the goals and objectives of the 2030 Agenda. Sustainability, from a textual perspective within literary research is not a fixed or uniform concept, but a field of interdiscursive resonances that may not always be at the foreground, but clearly contains the radical potential of literary art, both in terms of cultural criticism and aesthetic experimentation. Foer's experiment conducted over a decade ago is still valid and relevant from a humanist and social perspective despite the emergence of artificial meat. In the context of progressive climate change, it has assumed a renewed significance as an ethical choice on which the fate of the planet also depends.

Eating animals has now become an unavoidable part of socio-cultural reflection, present in various types of texts, from journalistic to academic inquiries, especially in discourses built around the objectives of sustainable development, the new humanities, vegan studies or the Anthropocene. Foer's book has been embraced by the

interpretative community of Polish culture consumers³, as evidenced by the reception presented in the article and referred to in recent journalistic and academic texts. *Eating Animals*, is one of the books that has initiated discussion on industrial meat production in Poland, and has become a key tool for reading and writing other texts on the subject, building discourses and interpretative strategies. The reception of *Eating Animals* signifies its integration into Polish discourses, appearing in Polish magazines and books, becoming a part of resonating narrations, and serving as a tool that can be used to construct our own discourse related to eating animals.

REFERENCES

Bińczyk, E., (2018), Epoka człowieka. Retoryka i marazm antropocenu, Wydawnictwo Naukowe PWN.

Braun, V. and Clarke, V., (2006), "Using thematic analysis in psychology". Qualitative Research in Psychology, 3 (2), 77–101.

Crutzen, P.J. and Stoermer, E.F., (2000), "The Anthrpocene". Global Change Newsletter, 41.

Crutzen, P.J., (2002), "Geology of Mankind", Nature, 415.

Damrosch, D., (2003), What Is World Literature, Princeton University Press.

Domańska, E., (2017), "Sprawiedliwość epistemiczna w humanistyce zaangażowanej", *Teksty Drugie*, 1.

Fish, S. (1976), "Interpreting the Variorum", Critical Inquiry, no 1.

Foer, J.S., Tree of Codes.

Foer, J.S.. Wszystko jest iluminacją.

Foer, J.S., (2013), Zjadanie zwierząt, przeł. Dominika Dymińska, Wydawnictwo Krytyki Politycznej.

Grimm, G., (1996), Recepcja a interpretacja. Współczesna teoria badań literackich za granicą, przeł. K. Jachimczak, red. H. Markiewicz, t. 4, cz. 1, Kraków, 255–267.

Hsiung, W., (2022), Boycott veganism. http://www.images.pythagoreancrank.com/boycott_veganism.pdf. Dostęp 02.01.2022.

Infuture Hatalska Foresight Institute. Future of Food. 2017.

Jarmuszkiewicz, A. (2019), "Recepcja literacka – jak może być rozumiana we współczesnym literaturoznawstwie", *Pamiętnik Literacki*, 1, 140–148.

Jarmuszkiewicz, A. (2014), Współczesne badania nad recepcją literacką w kontekście literatury światowej oraz pamięci kulturowej, in Mapy świata, mapy ciała. Geografia i cielesność w literaturze, red. A. Jastrzębska, Wydawnictwo Libron, 15–32.

Jauss, H.R., (1999), Estetyka recepcji i komunikacja literacka. Teoria literatury i metodologia badań literackich, przeł. B. Przybyłowska, red. D. Ulicka, Wydawnictwo Uniwersytetu Warszawskiego, 297–268.

Kapela, J., (2019), "Wykluczymy hodowlę przemysłowa, ale nadal będziemy jeść mięso", Kryty-

³ It is necessary to take into account the complexity of this category and to refrain at this point from identifying Polish culture with national culture, to replace the monolith of nationality with multiculturalism, because transcultural situations make national culture and literature an open concept. Local tendencies are always accompanied by global ones, and national culture today must be a hybrid, in which texts that are locally rooted but wander translocally, often being a conglomerate of multinational discourses, are relevant. A catalog of texts relevant to a particular interpretive community should not necessarily be referred to as a canon, since the important role of a given cultural text in an interpretive community depends on the trends prevailing in a given period of time, and the boundaries between different discourses are fluid.

ka Polityczna, 07.08.2019, https://krytykapolityczna.pl/kraj/rozmowa-o-zjadaniu-zwierzat/. Dostęp 02.01.2022.

Kubisz, M., (2019), "Veganisation of the Academy and the new Humanities: Veganism in the Context of Literary and Cultural Studies". *E(r)rgo. Theory–Literature–Culture. Discourses of veg(etari)anism*, 38 (1), 11–28.

Lymbey, P., and Oakeshott, I., (2015), Farmageddon. Rzeczywisty koszt taniego mięsa, Vivante.

Mamzer, H., (2019), "Popularization of Non-meat Diets in the Context of Thorstein Veblen's Theory Of Conspicous Consumption", *E(r)rgo. Theory–Literature–Culture. Discourses of veg(etari)anism*, 38 (1), 57–78.

Paloff, B.,(2010), Czy fraza "Polish literature" oznacza literaturę polską. Polonistyka bez granic, t. 1, red. Ryszard Nycz, Władysław Miodunka, Tomasz Kunz, Universitas.

"Recepcja", (2002), Słownik terminów literackich, red. Janusz Sławiński. Wyd. 4, Zakład Narodowy im. Ossolińskich, 464.

Singer, P., (2018), Wyzwolenie zwierząt, Wydawnictwo Marginesy.

Wright, L., (2015), The Vegan Studies Project. Food, Animals and Gender in the Age of Terror, The University of Georgia Press.

Wypychowski, J.,(2014), "Rozkosz (nie)wiedzy". Czas Kultury, 30.01.2014, https://czaskultury.pl/czytanki/rozkosz-niewiedzy/. Dostęp 02.01.2022.

Zjadanie zwierząt,(2017), Reżyseria Christopher Dillon Quinn, Handsomecharlie Films / Heretic Films.

ENERGY TRANSITION IN SLOVAKIA – DESTINY IN/AND CHANGE

Andrea Figulová

Comenius University in Bratislava, Faculty of Social and Economic Sciences,
Institute of European Studies and International Relations,
Mlynské luhy 4, 821 05 Bratislava, Slovak Republic
andrea.figulova@fses.uniba.sk

&

Ivana Gondášová

Slovak Academy of Sciences, Institute of Economic Research, Šancová 56, 811 05 Bratislava, Slovak Republic ivana.gondasova@savba.sk

Abstract

The aim of this contribution is to discuss the Slovak position in energy transition processes. The need to understand what is particularly visualized under this term and how it is connected to domestic and international policies that primarily drove this change, as well as public support. This article analyzes the main attributes contributing to Slovakia's energy transition in order to achieve the energy and climate targets. The focus on renewable energy sources aims to bring a sustainability into this transition, thus we describe the challenges such transformation brings.

Key words: EU Energy and Climate Policy, Slovakia, Energy Transition, National Energy and Climate Plan

INTRODUCTION

The "Man on the Moon" moment occurred when Ursula von der Leyen introduced the 2019 European Green Deal, marking a significant step in the energy transition processes in the European Union. These processes vary enormously within the EU countries, covering different drivers, motivation, objectives and then governance politics. Intervening variables such as the Covid 19 crisis and the War in Ukraine have unexpectedly affected the decarbonization process. Even though EU's pathway towards energy transition has been present for several years in various documents and policies (e.g. Green paper 2000, 2006, 2013, Paris agreement 2015, European Green Deal 2019, etc.). Slovakia has remained deeply dependent on fossil fuel imports and has been passive in advancing a low-carbon transition, on that account. For instance, in 2004 the share of energy from RES was only 0,06%. [Eurostat 2023b] In addition, the adoption of climate change laws does not usually happen voluntarily. The full embrace of energy transition based on zero-carbon energy sources is often hindered by various barriers such as technological, economical, and regulatory causes. However, when compared to other Visegrad 4 member states [e.g. Kochanek 2021, 2022; Mrozowska 2021], Slovakia has a stronger pro-EU attitude and has experienced growth in green energy production. Hence, this article aims to describe the Slovak energy transition path and evaluate its main pillars. Therefore, we ask: What are the main attributes that contribute to the energy transition in Slovakia and the fulfilment of the energy & climate targets? Furthermore, this article aims to analyze the prospects while taking into account the current geopolitical situation, highlighting the potential, challenges and obstacles of energy transition in Slovakia. Lastly, this data-oriented scientific work provides a basis for further research on the described challenges and a deeper understanding of the obstacles regarding the energy transition. The connotation of energy transition represents the driver and opportunity that is bringing various interpretations not only among academics [e.g. Sovacool and Geels 2016; Smil 2016; Turnheim and Sovacool 2020] but also politicians and the public. Rotmans et al. [2001] highlights hwo energy transition is a social transformation process in which systems change structurally over an extended period of time. According to Smil [2016], it is a fundamental process behind the evolution of human societies, that drives and is driven by technical, economic and social changes. Carley and Konisky [2020] straightforwardly explained that energy transition indicates transformation from one prevailing source to a different one. In its current context, it is moved towards a "low carbon energy resources such as wind, solar and natural gas" (p.569). The current energy geopolitical turmoil (2022 -23) and former policy decisions (e.g. European Green Deal, Repower EU) bring about new perspectives. As Gatto [2022] points out, energy transition shall be understood as a social determinant with an impact on all forthcoming changes in connection to transformation. Szulecki et al [2023] delves into the details, noting how the energy transition goal is to reach a carbon neutral energy system with low emissions, that also addresses a questions

about who determines and finances it. Siddi [2023] reinforces the view that (this) energy transition redesigns energy geopolitics in "more decentralised forms of energy production and a new competition to secure critical raw material" (p.76). Westphal [2020] similarly argues based on IRENA's 2019 report, that it is driven by "renewable expansion" (p. 407). In Brendler's [2022] contribution to this topic, she is concerned more with societal parts of the energy transition in a comparative manner and its implementation, considering various types of actors. Thus, her understanding of energy transition is connected to regulation and policy involvement. A similar argument that "the energy transition is driven by policies rather than by technology improvements" (p.5) or cost competitiveness is by Blazquez et al. [2019]. This is where the authors of the article find mutual agreement on this issue. However, the aim of this article is not to provide the reader with an overwhelming literature review, but rather a sample overview of the current state of rapidly growing body of work dedicated to both energy transition and connected topics such as energy justice or energy democracy. We focus on and explain the case study of Slovakia in a long-term perspective on energy transition with a focus on "storytelling" of renewable energy sources that can be concluded by explaining obstacles and challenges that could be the subject of further research in the three described domains.

1. ENERGY TRANSITION IN SLOVAKIA

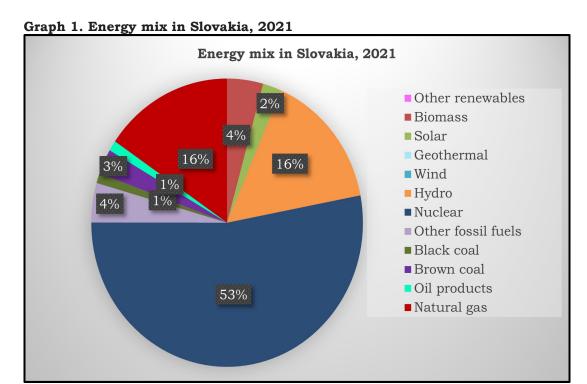
Generally, Slovakia is more open to discussion and adopts a stronger pro-EU attitude than Poland or Hungary, although it frequently sides with other Visegrad Group countries in attenuating EU energy and climate policy [Kochanek 2021]. Therefore, the adoption of climate change laws typically does not occur voluntarily. Despite this, Slovakia also rarely refuses to comply with EU commitments [Esser et al. 2018]. When compared with countries that belong to the V4 group, Slovakia has the most dynamic growth of energy generation from RES. [Kochanek 2021]

Taking into account the energy mix in Slovakia (see Graph 1) it is evident, that the most dominant position within the mix belongs to nuclear energy (53%). Subsequently, with a share of 16%, there are two renewable sources, namely hydropower and biomass. The other RES have a marginal position within the mix, such as solar (2%), other renewables (0,34%), and wind (0,02%). [OKTE 2021]. From the high carbon footprint sources, the biggest share of 4% belongs to other fossil fuels (e.g., natural gas, oil) followed by brown coal 3%, black coal 1% and oil products 1%

Slovakia has embarked upon the path of energy transition over the past few decades, as a result of the EU's binding climate and energy legislation¹ towards an economy with net zero greenhouse gas emissions. This is undoubtedly a positive sign, considering energy intensity in 2021 was 57% higher greater than the EU average, thus placing Slovakia at the top of the energy-intensive economies in the EU. [Eurostat

¹ The climate and energy legislation is recorded in documents such as Climate & energy package 2020, climate & energy framework 2030 and net zero energy policy 2050.

2023a] Slovakia's energy transition is centred on maximizing the energy mix from the perspective of energy safety to achieve the highest possible energy efficiency and secure comprehensive environmental protection [Furmanczuk 2018]. These national goals are outlined in the "Greener Slovakia: Strategy of the Environmental Policy of the Slovak Republic until 2030" [Ministry of Environment SR 2019a] and "Low-Carbon Development Strategy of the Slovak Republic until 2030 with a View to 2050" [Ministry of Environment SR 2019b], which set the legal framework for Slovakia's energy transition. Similarly, the Energy Policy of the Slovak Republic evaluates the key pillars of Slovak energy policy, namely energy security, energy efficiency, competitiveness and sustainable energy being in accordance with the European Union Energy Policy. [Ministry of Economy SR 2014]



Source: OKTE, 2021.

In order to achieve the objectives and actions for the transition to a sustainable energy system, each member state was obliged to adopt national energy and climate plans (NECPs), covering the period of energy transition between 2021 and 2030. The long-term objectives of Slovakia's energy transition (see Figure 1) include a reduction of net greenhouse gas emissions by at least 55% compared to 1990 levels by 2030², an increase in the share of RES in gross energy consumption to 24% by 2030, and a 32,5% reduction of primary energy consumption in 2030 to increase energy efficiency. [Ministry of Economy SR 2019] The Slovak NECP³ includes a variety of measures to

 $^{^2}$ The reduction of net greenhouse gas emissions by at least 55% is a part of "Fit for 55 package". (European Council, n.d.)

³ Slovakia's final NECP was approved on 11 December 2019 by the Slovak Government and submitted to the European Commission on 20th December 2019. [IEA 2022]

achieve "a competitive low-carbon energy industry sector ensuring the secure and efficient supply of all forms of energy at affordable prices and taking customer protection and sustainable development into account" [Ministry of Economy SR 2019: Executive summary, para. 1].

Below we examine the energy transition in Slovakia based on its three main objectives, namely an enhancement of green energy sources, reduction of GHG emissions and improvement of energy efficiency.

Figure 1. Slovak national climate & energy targets.

	National targets and contributions	Latest available data	2020	2030	Assessment of 2030 ambition level
GHG	Binding target for greenhouse gas emissions compared to 2005 under the Effort Sharing Regulation (ESR) (%)	-5	13	-12	Ambitious (national target of - 20%)
	National target/contribution for renewable energy: Share of energy from renewable sources in gross final consumption of energy (%)	11.9	14	19.2	Unambitious (24% is the result of the RES formula)
SE S	National contribution for energy efficiency: Primary energy consumption (Mtoe) Final energy consumption (Mtoe)	15.8 11.1	16.4 9.0	15.7 10.3	Low ambition
	Level of electricity interconnectivity (%)	43	59	52	N.A.

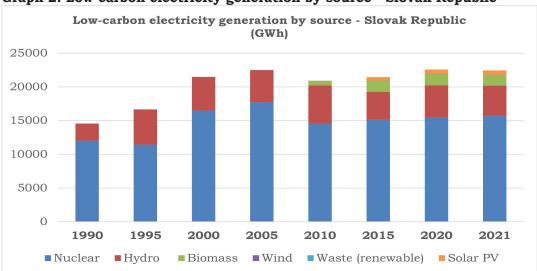
Source: European Commission [2020].

1.1. Low-carbon energy sources in Slovakia

The share of energy derived from renewable energy sources in Slovakia has been steadily growing, reaching a value of 17,35% in 2020, a contrast to 6% announced in 2004. Similarly, Slovakia has successfully fulfilled its 2020 target of a 14% increase in the share of RES, by remarkably exceeding the target, achieving 16,9%. [Eurostat 2023b] Since 2005 onwards, both, renewable energy generation and renewable energy consumption experienced extensive growth tendencies, reaching 8,3% and 7,2% respectively. [BP 2022]

As of 2021, the largest share of low-carbon energy production comes from nuclear power, followed by hydroelectricity, biomass, solar power and wind power. (See Graph 1) Nuclear energy has been the most dominant source of electricity generation over the past three decades. Similarly, hydro power has remained a substantial source of electricity generation, reaching its peak in 2010, followed by a subsequent downward trend. As Graph 1 indicates, wind power as well as power generation from waste are

marginal. However, there is potential for a gradual increase in electricity generation from biomass and solar energy. In both cases, the tendency over the past decade has been for rising production, from 640 GWh in 2010 to 1563 GHW increase in biomass, and from 17 GWh to 667 GWh for solar photovoltaics.



Graph 2. Low-carbon electricity generation by source - Slovak Republic

Source: IEA [2022]

In the following section, we analyze each low-carbon source of energy in Slovakia with an emphasis on providing a more comprehensive understanding of how the individual sources contribute to Slovakia's energy transition and its future potential application.

1.2. Nuclear energy

Since 2022, nuclear energy activities are labelled as "low carbon activities" [European Commission 2022a] as well as "transitional activities" aimed to "facilitate the transition away from more harmful energy sources e.g., coal and towards a mostly renewables-based future" [European Commission 2022b: What have we adopted today? section]. Undoubtedly, the most convincing argument is that the energy generating phase of nuclear energy emits almost no greenhouse gases, making it a significant contributor to the goals of climate change mitigation. Several EU member states' individuals NECP plans rely on nuclear energy together with renewable energy to achieve the 2050 decarbonization goal outlined in Regulation (EU) 2021/1119. This is also the case of Slovak energy policy. Taking into account the Slovak energy mix, nuclear energy has the leading position as almost 60% of the country's electricity is generated in nuclear power plants. [Eurostat 2022] Similarly, Slovakia has the second highest share of nuclear energy in its electricity generation within the EU and has the largest low-carbon source of electricity. [IEA 2019] The four operating nuclear power plants⁴

⁴ There are four units of WWER-440/213 type in operation, including two units at the Jaslovské Bo-

produced more electricity than ever before in their history, thanks to investments in increasing their unit efficiency, the installed capacity of Slovak nuclear power plants exceeded 2,000 megawatts last year. Slovakia's largest electricity producer, primarily based on energy from nuclear power plants, supplied up to 94% of electricity to the grid without carbon dioxide emissions. [Slovenské elektrárne 2022] Furthermore, the new Mochovce 3 power plant, that was recently connected to the grid, will be cabale of covering up to 13% of the demand in the country, increasing the production of green electricity from 52% to 65% [Ministry of Economy SR 2022]. As a result, Slovakia will become the leader in the production of electricity from nuclear power at the EU wide level. In addition, Mochovce 4 block is planned for commissioning in the second half of 2024, further increasing the generation of green electricity even more. [SME, 9.9.2022] Therefore, nuclear energy is perceived as a stabilizing pillar of the Slovak energy system, allowing for a possibility to reach zero emissions and become self-sufficient in electricity supply as early as 2023. The significant growth of nuclear energy will further compensate for the shift away from coal [Kochanek 2022], and natural gas, taking into account the REPower EU as a new policy focused on energy independence from Russian oil and gas supplies well before 2030, in light of Russia's invasion of Ukraine.

The long history of nuclear energy in Slovakia⁵ has resulted in an experienced workforce and highly developed expertise in nuclear engineering. This is the key reason why the government is more inclined to keep nuclear power as part of the energy mix, as the region has both human capital and an industrial base. [IEA 2019] However, in the long term, the EU isn't inclined to be too dependent on nuclear energy. [European Commission 2023] It's important to not overlook the negative aspects of nuclear energy, such as the high cost of radioactive waste management, the problematic search for sites for permanent storage of radioactive waste, the risk of nuclear accidents, etc. Similarly, while the generation of electricity from nuclear power is considered by the EU taxonomy as "green" we should not mistakenly approach nuclear energy as free of greenhouse gas emissions. Even though direct emissions of carbon dioxide are not produced by nuclear power reactors [EIA n.d.], it is estimated that the entire life cycle of nuclear power plants produces a range of 3.7 to 110 grams of CO2 equivalent per kilowatt-hour (kWh). [IPCC 2014]

1.3. Hydropower

Hydropower is the most widely used renewable energy source, whose history dates into 1912⁶. [Krištof et al. 2010] The success of hydropower in Slovakia is attributed

hunice site and two units at the Mochovce site. There are also two units with WWER-440/V213 type reactors that were under constructions in the Mochovce site - Mochovce 3 is in operation since February 2023, and Mochovce 4 is planned to start operating 23 months after the Mochovce 3. [SME, 9.9. 2022]

⁵ The era of nuclear energy in Slovakia started in 1958 in the former Czechoslovakia with the construction of the research and development nuclear power plant A1 in Jaslovské Bohunice. The power plant was in operation for 5 years. (1972-1977).

⁶ In 1912, the first hydro power plant called Rakovec located on the river Hnilec was commissioned.

to its rivers, namely Dunaj, Váh, Orava, Hron, Hnilec, and other smaller rivers. In Slovakia, almost a fifth of all electricity is produced using water energy. (See Graph 1) This is primarily due to the two most powerful hydropower plants, namely pumping station Čierny Váh and waterworks Gabčíkovo. These hydropower plant, offer operational flexibility and potential for quick power changes, allowing them to meet the daily load's fluctuating energy needs and are well-equipped to handle power system emergencies. [Zbojkovský et al. 2012] The document "The Concept of using hydropower potential in Slovakia till 2030" clearly defines Slovakia's space in the field of hydropower, namely "to ensure the increase in the use of hydropower potential of watercourses of the Slovak Republic for electricity generation from RES in accordance with the objectives set out in the Energy Security Strategy and other relevant strategic documents of the EU and Slovakia." [Ministry of Environment SR 2017: Úvod, para.1]

In line with the requirements of environmental sustainability and the principles of sustainable development, hydropower and subsequently its electricity generation significantly contributed to the reduction of greenhouse gas emissions in Slovakia. Furthermore, it reinforced the aims of reducing the dependence on fossil fuel imports, which is particularly relevant in the case of Slovakia being almost fully dependent on fossil fuel imports from the Russian Federation. However, since its peak in 2015, when hydropower generation reached nearly 5700 GWh per year, there has been a downfall tendency, with production falling to 4450 GWh in 2021. [BP 2022] According to Gejuš et al. [2017] hydropower is the most promising renewable energy source and further contributed the most towards the Slovak target to achieve a 14% share of energy from RES. Considering that the actual utilized hydropower potential of the Slovak Republic is at 57.5% [Slovenské Elektrárne n.d.], there is still significant space to increase the potential, which will further contribute to the increase of

RES and help reach 2030 and 2050 targets, respectively.

1.4. Biomass

In 2020, 40,1% of Slovak land area was covered by forests (World Bank, n.d.) underscoring the importance of biomass as a low-carbon energy source. While in 2005, the electricity generation from biofuels equalled 9 GWh, it reached the value of 1563 GWh in 2021. [BP 2022] According to Slovakia's low-carbon strategy: "biomass has the largest energy potential among RES in Slovakia, with the theoretical potential of 120 PJ." [Ministry of Environment SR 2019b: 23] The government's renewable energy strategy has been centered on the use of biomass, as a low-carbon alternative to fossil fuels, primarily in the heating sector where it has largely replaced coal, the previously main source of power. In contrast to wind and photovoltaic (solar) power plants, biomass is a predictable and controllable energy source. As a result, it not only contributes to decarbonization but diversification too, increasing Slovakia's energy self-sufficiency [Ministry of environment SR 2019b]

Even though, the expansion of biofuel as a renewable source contributes significantly to the lowering of emissions and decarbonization, the growth of bioenergy projects in Slovakia has driven the demand for wood biomass, leading to widespread logging and a loss of biodiversity among other negative effects [Zámkovský et al. 2018]. Until 2017, there were no sustainability requirements for the majority of bioenergy sources. hence it was difficult to ensure that biomass consumption stayed within bounds that did not harm the environment. However, as of 2017 "The wood biomass sustainability criteria in Slovakia" guide biomass use in order to eliminate deforestation and protection of biodiversity" [Seferova 2020]. Th biomass consumption increased green energy consumption at households, placing Slovakia at the top among EU countries. Biomass consumption for heating and cooling increased from 37,000 terajoules (TJ) to 56,000 TJ between 2018 and 2019. [Statistical Office of Slovak Republic 2020] Significant state support enables the efficient use of biomass, making it likely to remain the most important source for green energy consumption at Slovak households in the future.

1.5. Solar energy

The most common source of green energy generation in Slovakia for private use is solar energy, specifically solar panels and collectors. The expansion of solar energy was low for many years leading up to 20107, with PV installations referenced only marginally as part of a wider energy strategy. State obstacles stemmed from technological, financial, and regulatory sources. However, the introduction of state subsidies in 2010, marked a sizeable increase in electricity generation and consumption from solar energy, along with a surge in the amount of installed photovoltaic (PV) power. Both generation and consumption of electricity from solar energy together with installed PV power showed an uninterrupted upward trajectory from 2010. [BP 2022 While biomass has the highest technical potential due to environmental factors, solar energy boasts the largest overall potential among Slovakia's RES. [SAPI 2018 Supported by the "Green for homes II" subsidies, financial assistance for solar panels, heat pumps, and solar collectors in 2023, solar energy's potential can significantly grow in following years. The demands for the installation of solar panels on rooftops and the supply of PV power plants is constantly rising. However, solar energy currently, accounts for just about 1.8% of the electricity used in Slovakia. [Rynska 2022| Significant development of solar energy is hindered by the high payment by the network access cost in addition to expensive connection fees. The instability of power systems caused by the properties of solar energy was a problem for technical advancement. Thus, solar panel installation on rooftops was limited to off-grid systems for a period.

Concerning the 2030 targets, solar energy is destined to expand further as a solar park near the active nuclear power plant Jaslovské Bohunice is under construction,

⁷ Up to 2010, the electricity generation and consumption from solar energy was at 0. (BP,2022)

scheduled for completion in 2025. [SME, 30.11.2021] This 105-hectare plant will produce more than a tenth of Slovakia's current solar power plant output, or 48 MGW. Similarly, The Renewable Energy Sources Act (Zákon č. 309/2009 Z. z.) had a significant revision on January 1, 2021, aimed at promoting renewable energy sources and high-efficiency cogeneration options. The introduced guidelines include a new feed-in premium tariff that provides a premium tariff and auctions for solar projects above 100 kW. [Rynska 2022]

1.6. Wind energy

In general, wind energy is underdeveloped in a large part of the Central and Easter European region. [IEA 2019] Consequently, the production of low-carbon electricity from wind power remains rather low, contributing marginally to the share of energy generated from RES. Even though, both the generation and consumption of electricity from wind power experienced gradual growth between 2003 and 2006-2007⁸. Since then both displayed a decreasing tendency, resulting in a 50% reduction⁹. Hence, the growth rate per annum from 2011-2021 was negative, signifying an overall decrease of -2,2% in the share of electricity generation from wind power and -2,7% in the share of consumption of electricity from wind power. [BP 2022]

However, the potential of wind power in Slovakia is high. The theoretical technical potential of wind energy in Slovakia was calculated at the level of approximately 168,000 MW, which represents 420,000 GWh. [SAPI 2022]. Furthermore, approximately 20% of Slovakia's territory contains the naturally suitable conditions for wind power. In contrast, the first and second modernized units of AE Mochovce collectively generate only 2% of the aforementioned electricity. However, the development of wind energy is hindered by several barriers. Among these the most significant are legislative, administrative, regulation and technical barriers. [SAPI 2022] Taking into account the abovementioned considerations, wind energy can play a significant role in ensuring Slovakia's energy security in future and further contribute to the development of clean energy and achievement of the goals set for 2030.

1.7. Hydrogen

In Slovakia, interest in hydrogen as a source of green energy started to grow primarily after the implementation of the National Hydrogen Strategy in 2021. [Sinay et al. 2021] The focus is on the production of clean hydrogen, primarily using electricity produced by nuclear power and hydropower plants maintaining a low carbon footprint. Furthermore, the aim is to transition from the currently produced grey

 $^{^8}$ The peak recorded in 2006 referred to value of 0,008 TWh for wind generation and in 2007 to 0,00008 EJ for wind consumption which are still values very close to zero.

⁹ Wind generation in 2006 (the peak) was 0,008 TWh while the wind generation in 2021was 0,004 TWh. Wind consumption in 2007 (the peak) was 0,00008 EJ while the wind consumption in 2021 was 0,00005 EJ.

hydrogen, to blue, green and pink¹⁰. Implementation of hydrogen into the energy system will further contribute to the decarbonization of numerous sectors in Slovakia, including the transport, industry, heating and others. [NVAS n.d.] The outlook for hydrogen is set to be promising. According to the Action Plan for the Implementation of the National Hydrogen Strategy, Slovakia should generate 45 thousand tons of hydrogen yearly, from low-carbon energy sources such as the surplus energy generated by nuclear power plants and biomass [NVAS, 9.9.2022]. Moreover, in 2022, Slovakia carried out a pilot project aimed at implementing hydrogen in the existing natural gas pipeline, with a positive result claiming that the mixture of the hydrogen with natural gas distributed via the existing pipeline infrastructure is safe and effective, further widening the future potential of hydrogen. [TREND 12.08, 2022]

Currently, the two main producers of hydrogen in Slovakia are Duslo Šala and Fortischem Nováky. However, the hydrogen they produce is solely consumed by their own needs. The future role of hydrogen in Slovakia could significantly contribute to the decarbonization of numerous sectors such as industry, heating, cooling and feedstock for industry processes, with the biggest potential in the transport industry. [NVAS n.d.] Long-distance transport could benefit highly from the usage of hydrogen. On that account, already two hydrogen refueling stations are operating in Slovakia.

1.8. Geothermal

Geothermal power is a very promising source of renewable energy in Slovakia, due to the region's hydro-geothermal characteristics, Slovakia has extremely favourable conditions due to its high thermal gradient, which indicates the rise in temperature towards the depth of the earth, is 38 degrees Celsius per kilometer, whereas the global average is roughly eight degrees lower [PW energy n.d.]. Therefore, geothermal energy is a feasible option for environmentally friendly electricity and heating in Slovakia. However, the development of geothermal power in Slovakia is at a stalemate, as several legislative challenges hinder its widespread adoption. For example, geothermal wells are subject to comparable legal restrictions as oil extraction. As a result, the generation of energy from geothermal in 2021 reached 0,3%. [BP 2022] Nevertheless, the future of geothermal is expected to change. In March 2023, the Slovak Innovation and Energy Agency announced that the first call for new geothermal resources will be in 2024 and further, geothermal wells will receive support from European funds. [TREND 02.03.2023] Financing geothermal projects is one of the biggest obstacles to the development of this type of energy, therefore such moves will undoubtedly support the future of geothermal energy expansion.

¹⁰ The primary source of blue hydrogen production is natural gas. Green hydrogen is produced by electrolyzing water with clean electricity generated from surplus renewable energy sources, such as solar or wind energy. Nuclear energy is used for the electrolysis that produces pink hydrogen. Blue, green and pink hydrogen are all low carbon types of hydrogen.

1.9. Reduction of the carbon dioxide emissions from energy

A period of abrupt decarbonization in the energy sector occurred in Slovakia between the 1990sand 2000s¹¹, caused by the changing structure of the economy, as well as improvements in technology. According to the graph (see Graph 3) the carbon dioxide emissions from energy have decreased from 58,5 million tons of carbon dioxide in 1985, to the lowest level recorded so far in 2020, with 27,8 million tons of carbon dioxide, representing a reduction of more than 50%. Even though the Slovak economy has greatly reduced its carbon footprint, further decarbonization is still necessary. When compared to other V4 countries in the region, Slovakia's climate targets have greatly expanded, particularly in terms of reducing CO2 emissions. [Kochanek 2021]

Carbon Dioxide Emissions from Energy 1965-2021
(Million tonnes of carbon dioxide)

56,8 58,5 54,8

49,0

39,7

31,1

30,3 27,8

1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020 2021

Graph 3. Carbon dioxide Emissions from Energy 1965-2021

Source: BP Statistical review 2022

Despite the advancements made so far, additional decarbonization is required to achieve 2030 decarbonization goals, which call for a 55% reduction in greenhouse gases from 1990 levels. By 2030, an additional 6.3 million tons of CO2 equivalent (approximately 15% of the current gross emissions) must be avoided. [Ministry of Finance SR 2022] According to the latest data, Slovakia is "close to achieving the EU-wide "Fit for 55" target to reduce emissions by 55% (6.3 MtCO2e) in 2030 compared to the 1990 levels." [Ministry of Finance SR 2022: 5]

Furthermore, the significant cut in emissions over the past thirty years occurred as a result of a switch from coal to gas, and a shutdown of large pollution-intensive industrial businesses. Many of these improvements were driven by Slovakia's EU membership. [Mindekova et al. 2022] However, the power and heating sector in Slovakia is still a large producer of emissions due to prominent coal usage. On that account, Slovakia has taken a resolute stance regarding coal mining, with plans to slowly phase

 $^{^{11}}$ Meanwhile the value of CO2 emissions from energy in 1990 was 54,8 million tons of CO2, in 2020 it was 27,8 million tons which is the lowest value since 1965.

out the generation of heat and electricity from coal by 2023¹² [European Commission, n.d.] Based on the study proposed by think thank Globsec: "The planned closure of Novaky coal power plant in 2023 is roughly the GHG reduction equivalent of replacing diesel/petrol cars by 2030." [Hubatka, Theisen 2021: 4] Similarly, a study devoted to decarbonization and transition within the V4 countries highlighted how the "Nováky power plant is the third largest producer of CO2 within Slovak operations in the EU ETS system." [Mindekova et al. 2020: 25] However, the social impact of closing coal plants in Slovakia, threatens approximately 4000 jobs. To mitigate this impact, Slovakia plans to transformation Novaky and Vojany from coal to biomass-producing hydrogen. The coal region in Slovakia has been granted an investment of 459 million EUR to support the climate transition in the most vulnerable regions and will create new job opportunities for the coal industry employees [European Commission 2022c]. These EU funds together with state subsidies are highly necessary for the full implementation of these transformation processes. [Mindekova et al. 2022]

1.10. Enhancement of energy efficiency

Throughout the past years, Slovakia has achieved one of the highest reductions in energy intensity in the EU. Slovakia has successfully improved its energy intensity by 50.8% between 2000 and 2015, showing significant progress in this area [Ministry of Economy SR 2019]. This positive development is the result of effective restructuring of the industry, the introduction of energy-saving manufacturing techniques, progress in the thermal and technical quality of buildings, and substitution with less energy-intensive equipment. Nevertheless, when considering constant prices, the Slovak Republic has the seventh-highest energy intensity among the 28 EU member states [Ministry of Economy SR 2019]. This is mainly the result of the industrial structure of the Slovak Republic, which favours energy-intensive industries. This means that in the future, energy efficiency policies and funding sources will place a greater emphasis on the industry sector and related services, such as energy. In order to boost improved energy efficiency in Slovakia. The European Commission has approved EU financial aid, exceeding 1.1 billion EUR for Slovakia. These funds aim to enhance energy efficiency and decarbonize companies subject to the EU Emission Trading System (ETS) [European Commission 2022d].

2. CHALLENGES TO FUTURE SLOVAK ENERGY TRANSITION

The above-mentioned attributes of the energy transition and a significant reduction of greenhouse gases, provide Slovakia with a strong support to reach the 2030 targets and boost the energy transition. However, given Russia's invasion of Ukraine, there is a risk that the Slovak leadership gives priority to energy security and prolongs the usage of coal to substitute Russian gas. Consequently, reducing the short-term

 $^{^{12}}$ According to the Action Plan that the Slovak Government authorized on July 3, 2019, by passing Resolution No. 336/2019, support for energy generation from hard coal and lignite shall be eliminated.

impacts of decarbonization (Mišík & Nosko 2023) Nonetheless, taking into account the primary aim of the REPower EU plan, which is to become "independent from Russian fossil fuels well before 2030" ensuing decentralization of power generation would not only aid in lowering the costs, but would also contribute to the protection of energy security and lessen the reliance on imports of fossil fuels, particularly those from the Russian Federation. [Esser et al. 2018]. Slovakia must navigate a new path where energy transition could be the solution that addresses energy security and decarbonization. The country is one of the most energy-intensive economies within the EU member states, having various high-carbon manufacturing sectors. Therefore, the government often prioritizes protecting energy security over achieving low-carbon goals. (Furmanczuk, 2018). The most significant obstacles hindering the energy transition through the enhancement of zero-carbon energy sources stem from state barriers such as technological, economical, and regulatory causes. Furthermore, the aspirations for the development of RES are oftentimes hampered by ineffective governmental regulation (Rynska 2022) such as the example of geothermal energy potential.

Another challenge in advancing not only energy transition lies in solving not only technical issues such as transmission systems, new storage and grid technologies. but also addressing the issue of high electricity costs, which are among the highest in the EU. To further advance decarbonization by tapping into Slovakia's RES potential, most notably in solar power, the key factors to consider include geographical locations and "undiscovered" domestic sources such as liquid and gaseous energy resources.

In general, climate change is not a high-priority topic in Slovak politics, nor does it receive attention among the public or media. Even though, according to the survey (Klimatická Iniciativa, 2021) 72% of Slovaks think that RES should be the top energy priority of the state. However, the surveys also highlighted how people are concerned that the implementation of energy savings will not prevent rising household energy costs. On the other hand, topical political leadership has been missing. Legislative Proposal of Declaration of State Climate Emergency in Slovak Parliament was not supported in 2022, despite the petition "Climate needs you" having been signed by more than 128 000 people. However, in March 2023 the government brought a proposal of long-time expected Climate Law, even as the Slovak republic is scheduled for a snap election in September 2023. Notably the Slovak Presidential Office stands out as a unique example of promoting the topic. It undertook a policy to become the first climate-neutral public institution in Slovakia by 2030 and has committed to serve as an inspiration for other public institutions with the Polity of Green Stove (see more https://www.zelenapecat.sk.) Nevertheless, sustained political support of the energy transition will be needed after the upcoming election.

CONLUSION

This article identified the three main attributes of energy transition in Slovakia, namely the enhancement of green energy sources, the reduction of GHG emissions and the improvement of energy efficiency. Currently, the most dominant low carbon energy source is nuclear energy, covering a share of 53% of the energy mix [OKTE 2021] It also has the biggest potential among the RES, striving to cover up to 62% share of the energy mix, thus turning Slovakia the biggest producer of low carbon energy from nuclear power plants in the EU. With this in mind we predict that this is going to be Slovakia's destiny in the energy transition.

By 2023, Slovakia's energy mix will have greatly improved, and the proportion of fossil fuels in the mix will have decreased by more than 5%. [Mindekova et al 2022] The commencement of the Mochovce 3 power plant, the initiation of the approval procedures for Mochovce 4 and the shutdown of Novaky power station, as well as the phase-out of Vojany, all significantly contribute to the goal of transitioning Slovakia into an economy with low and possibly zero greenhouse gas emissions, in the future. Although the article highlights how Slovakia's energy transition is still relatively slow, there has been gradual progress towards the energy transition since 2005. During this time, the generation and consumption of energy from RES have been steadily growing, together with substantial improvements in energy efficiency. The process of reduction of GHG emissions started earlier and has been on a decline since 1985. [BP 2022]. As Blasquez et all [2029] argue that energy transition should be driven by policies, with Mišík and Nosko [2023] noting that "the role of policy choices and the degree of government involvement remained crucial" (p. 2). The future of Slovakia energy transition, according to Werner and Lazaro (2023) depends on the successful implementation of sustainable energy and climate policies, as well as political and public support.

This research was funded by the Slovak Research and Development Agency Grant no. APVV-20-0012.

REFERENCES

Blazquez, J., Fuentes-Bracamontes, R. and Manzano, B., (2019), A road map to navigate the energy transition. Oxford Institute for Energy Studies.

Brendler, V., (2022), Who shapes the energy transition? National regulatory styles and societal involvement in renewable energy policy. Z Politikwiss https://doi.org/10.1007/s41358-022-00326-2.

British Petroleum (BP), (2022), Statistical Review of World Energy, 71st edition. [online].

Carley, S., Konisky, D.M., (2020), The justice and equity implications of the clean energy transition, *Nature Energy* 5, 569–577 https://doi.org/10.1038/s41560-020-0641-6.

Esser, S., Schwartzkopff, J., Schulz, S., (2018), The Climate & Energy Snapshot: Slovakia. The Political Economy of the low-carbon transition. Briefing paper, E3G. [online] Available at: https://www.e3g.org/wp-content/uploads/Climate_energy_snapshot_Slovakia_updated.pdf [Accessed on 6 March 2023]

European Commission, (2020), Assessment of the final national energy and climate plan of Slovakia. [online] Available at: https://energy.ec.europa.eu/system/files/2021-01/staff_working_document_assessment_necp_slovakia_en_0.pdf [Accessed on 5 March 2023].

European Commission, (2022a), COMMISSION DELEGATED REGULATION (EU) 2022/1214 [online] Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-%3A32022R1214.

European Commission, (2022b), EU Taxonomy. [online] Available at: https://finance.ec.europa.eu/system/files/2022-02/sustainable-finance-taxonomy-complementary-climate-delegated-act-factsheet_en.pdf.

European Commission, (2022c), EU Cohesion Policy: €459 million for a just climate transition in Slovakia. [online] Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7086 [Accessed on 8 March 2023].

European Commission, (2022d), State aid: Commission approves €1.1 billion Slovakian aid schemes partially funded under Recovery and Resilience Facility to help industry decarbonise production processes and become less energy-intensive. [online] Available at: https://ec.europa.eu/commission/presscorner/detail/da/ip_22_6015 [Accessed on 9 March 2023].

European Commission, (2023), Uvádzame na pravú mieru: energetická kríza. [online] Available at: https://slovakia.representation.ec.europa.eu/news/uvadzame-na-pravu-mieru-energeticka-kriza-2023-01-24_sk.

European Commission, (n.d.), Supporting a just climate transition in Slovakia. [online] Available at: https://reform-support.ec.europa.eu/supporting-just-climate-transition-slovakia_en [Accessed on 8 March 2023].

European Council, (n.d.), Fit for 55. [online] Available at: https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/ [Accessed on 7 March 2023].

Eurostat, (2022), Nuclear energy statistics. [online] Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Nuclear_energy_statistics#Nuclear_heat_and_gross_electricity_production.

Eurostat, (2023a), Energy intensity. [online] Available at: https://ec.europa.eu/eurostat/databrowser/view/nrg_ind_ei/default/table?lang=en [Accessed on 7 March 2023].

Eurostat, (2023b), Share of energy from renewable sources. [online] Available at: https://ec.europa.eu/eurostat/databrowser/view/NRG_IND_REN/default/table [Accessed on 6 March 2023].

Furmanczuk, Z., (2018), Climate and energy policy in Slovakia. Slovak Renewable Energy Agency. [online] Available at: https://eko-unia.org.pl/wp-content/uploads/2018/06/mini-report-1_-Slovakia.pdf [Accessed on 8 March 2023].

Gatto, A., (2022), The energy futures we want: a research and policy agenda for energy transitions, Energy Res. Social Sci., 89.

Gejuš, M., Aschbachner, C., Sablik, J., (2017), Analysis of hydropower potential utilization of watercourses in Slovakia. Research Papers Faculty of Materials Science and Technology, 25(41), https://www.mtf.stuba.sk/buxus/docs/doc/casopis_Vedecke_prace/41/4_vp41_pr-frdMM.pdf.

Hubatka, S., Theisen, N., (2021), Slovakia Low Carbon Economy Pathways: Achieving More by 2030. [online] Available at: https://www.globsec.org/what-we-do/commentaries/slovakia-low-carbon-economy-pathways-achieving-more-2030 [Accessed on 7 March 2023].

Intergovernmental Panel on Climate Change (IPCC), (2014), Climate Change 2014. Mitigation of climate change. [online] Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_full.pdf.

International Energy Agency (IEA), (2022), Slovak National Energy and Climate Plan. [online] Available at: https://www.iea.org/policies/7963-slovak-national-energy-and-climate-plan [Accessed on 12 March 2023].

International Energy Agency (IEA), (2019), Nuclear Power in a Clean Energy system. [online] Available at: https://iea.blob.core.windows.net/assets/ad5a93ce-3a7f-461d-a441-8a05b7601887/Nuclear_Power_in_a_Clean_Energy_System.pdf.

International Energy Agency, (n.d.), Slovak Republic. [online] Available at: https://www.iea.org/countries/slovak-republic.

Klimatická Iniciatíva, (2022), Prieskum verejnej mienky: "Podporujeme obnoviteľné zdroje a úspory energie, ale sme skeptickí k tomu, či to naše domácnosti ochráni pred zvýšením nákladov za energie [online] Available at https://klimatickainiciativa.sk/prieskum-verejnej-mienky-podporujeme-obnovitelne-zdroje-a-uspory-energie-ale-sme-skepticki-k-to-mu-ci-to-nase-domacnosti-ochrani-pred-zvysenim-nakladov-za-energie/[Accessed on 8 March 2023].

Kochanek, E., (2021), The Energy Transition in the Visegrad Group Countries. Energies, 14. https://doi.org/10.3390/en14082212.

Kochanek, E., (2022), The Role of Hydrogen in the Visegrad Group Approach to Energy Transition. Energies, 15 (7235). https://doi.org/10.3390/en15197235.

Krištof, V., Kušnír, S., Katin, M., Csányi, Ľ., Marci, M., (2010), Hydro power plants in Slovak Republic. Intensive Programme "Renewable Energy Sources" [online] Available at: https://dspace5.zcu.cz/bitstream/11025/22541/1/Kristof.pdf [Accessed on 5 March 2023].

Mindekova, T., Bart, I., Csernus, D., Kassenberg, A., Gavalcová, A., Oravcová, V., (2022), Decarbonization and Just Transition in V4: Experiences of the Visegrad countries. [online] Available at: https://www.sfpa.sk/wp-content/uploads/2021/08/Decarbonization-and-Just-Transition-in-the-V4-Experiences-of-the-Visegrad-countries-second-editing-FINAL-xxx.pdf.

Ministry of Economy of the Slovak Republic, (2019), Integrated National Energy and Climate Plan for 2021 to 2030. [online] Available at: https://energy.ec.europa.eu/system/files/2020-03/sk final necp main en 0.pdf [Accessed on 8 March 2023].

Ministry of Economy of the Slovak Republic, 9.9.2022, Ministerstvo hospodárstva Slovenskej republiky available at https://www.facebook.com/photo.php?fbid=396543315972919&set =a.154935723467014&type=3 [accessed on 7 March 2023].

Ministry of Economy of the Slovak Republic, (2014), Energy Policy of the Slovak Republic. [online] Available at: https://www.economy.gov.sk/uploads/files/47NgRIPQ.pdf [Accessed on 7 March 2023].

Ministry of Environment of the Slovak Republic, (2017), Koncepcia využitia hydroenergetického potenciálu vodných tokov SR do roku 2030. [online] Available at: https://www.minzp.sk/files/sekcia-vod/vlastny-material-pdf-387-kb.pdf.

Ministry of Environment of the Slovak Republic, (2019a), Greener Slovakia: Strategy of the Environmental Policy of the Slovak Republic until 2030. [online] Available at: https://www.minzp.sk/files/iep/greener_slovakia-strategy_of_the_environmental_policy_of_the_slovak_republic_until_2030.pdf [Accessed on 7 March 2023].

Ministry of Environment of the Slovak Republic, (2019b), Low-Carbon Development Strategy of the Slovak Republic until 2030 with a View to 2050. [online] Available at: https://www.minzp.sk/files/oblasti/politika-zmeny-klimy/low-carbon-development-strategy-slovak-republic.pdf [Accessed on 7 March 2023].

Ministry of Finance of the Slovak Republic, (2022), Decarbonization of the Slovak economy by 2030. [online] Available at: https://www.mfsr.sk/files/archiv/35/Decarbonization-of-the-Slovak-economy-by-2030_study-062022.pdf [Accessed on 8 March 2023].

Mišík, M., Nosko, A., (2023), Post-pandemic lessons for EU energy and climate policy after the Russian invasion of Ukraine: Introduction to a special issue on EU green recovery in the post-Covid-19 period. Energy Policy, 177. https://doi.org/10.1016/j.enpol.2023.113546.

Mrozowska, S.; Wendt, J.A.; Tomaszewski, K., (2021), The Challenges of Poland's Energy Transition. Energies 14, 8165. https://doi.org/10.3390/en14238165.

Národná vodíková asociácia Slovenska (NVAS), (n.d.), Potential of hydrogen in Slovakia. [online] Available at: https://projects2014-2020.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1626088257.pdf [Accessed on 9 March 2023].

Národná vodíková asociácia Slovenska (NVAS), (2022), MH: Slovakia should produce 45,000 tons of emission-free hydrogen annually by 2030. [online] Available at: https://nvas.sk/en/mh-sr-by-do-2030-mala-vyrabat-rocne-45-000-ton-bezemisneho-vodika/ [Accessed on 13 March 2023].

OKTE, (n.d.), Národný energetický mix. [online] Available at: https://www.okte.sk/sk/zaruky-povodu/statistiky/narodny-energeticky-mix/ [Accessed on 7 March 2023].

PW energy, (n.d.), Využime potenciál geotermálnej energie. [online] Available at: https://pwenergy.sk [Accessed on 8 March 2023].

Regulation, (EU), 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (European Climate Law'). http://data.europa.eu/eli/reg/2021/1119/oj.

Resolution of the Government on Slovak Republic No 336/2019 on the Action Plan for the Transformation of the Upper Nitra Coal Region. (2019) Available at: https://rokovania.gov.sk/RVL/Resolution/17818/1 [Accessed on 8 March 2023].

Rotmans, J., Kemp R., van Asselt, M., Geels, F. W., Verbong, G., Molendijk, K. and van Notten, P., (2001), Transitions & Transition Management. The case for a low emission energy supply. ICIS working paper: I01-E001. Maastricht.

Rynska, E., (2022), Review of PV Solar Energy Development 2011-2021 in central European Countries. Energies, 15, 8307. https://doi.org/10.3390/en15218307.

Siddi, M., (2023), The geopolitics of the energy transition: New resources and technologies, pú-73 -85 in Berghofer J.(2023) The Implications of Emerging Technologies in the Euro-Atlantic Space.

Sinay, J., Weiterschütz, J., Jesný M., Blaškovitš, P., Sulík, R., (2021), Národná vodíková stratégia. Pripravený na budúcnosť. [online] Available at: https://www.mhsr.sk/nvs?fbclid=I-wAR3-tEmpvAEpEGRAs6fHpI9Tb8GqQ75Kaq2tyRXpqb59FtquuXckGHLU8IE [Accessed on 8 March 2023].

Slovenská asociácia fotovoltického priemyslu a OZE (SAPI), (2022), Štúdia SAPI: Vysoký potenciál rozvoja veternej energetiky ničí podnikateľské prostredie. [online] Available at: https://www.sapi.sk/clanok/studia-sapi-vysoky-potencial-rozvoja-veternej-energetiky-nici-podnikatelske-prostredie [Accessed on 7 March 2023].

Slovenská asociácia fotovoltického priemyslu a OZE (SAPI), (2018), Možnosti využitia obnoviteľných zdrojov energie na Slovensku a ich vplyv na elektrizačnú sústavu SR. [online] Available at: https://www.sapi.sk/files/prezentacia-studia-WEC.pdf.

Slovenské elektrárne, (2022), More than 64% of electricity in Slovakia in 2021 was produced by Slovenske elektrarne. [online] Available at: https://www.seas.sk/en/news/more-than-64-of-electricity-in-slovakia-in-2021-was-produced-by-slovenske-elektrarne/ [Accessed on 6 March 2023].

Slovenske elektrárne, (n.d.), Vodné elektrárne. [online] Available at: https://www.seas.sk/o-nas/nase-elektrarne/vodne-elektrarne/ [Accessed on 7 March 2023].

SME, (2021), Slovakia's largest solar power plant to be built in the west. 30.11.2021 [online] Available at: https://spectator.sme.sk/c/22793777/slovakias-largest-solar-power-plant-to-be-built-in-the-west.html [Accessed on 10 March 2023].

SME, INDEX, (2021), V Jaslovských Bohuniciach by mala vyrásť najväčšia slnečná elektráreň. 20.11.2021 [online] Available at: https://index.sme.sk/c/22793611/v-jaslovskych-bohuniciach-by-mala-vyrast-najvacsia-slnecna-elektraren.html [Accessed on 8 March 2023].

SME, INDEX, (2022), Do reaktora tretieho bloku Mochoviec zavážajú jadrové palivo. 9.9.2022. [online] Available at: https://index.sme.sk/c/23004465/do-reaktora-tretieho-bloku-elektrarne-mochovce-zacali-zavazat-jadrove-palivo.html [Accessed on 10 March 2023].

Smil, V., (2016), Examining energy transitions: A dozen insights based on performance, *Energy Research and Social Science*, 22, 194-197.

Sovacool, B., & Geels, F., (2016), Further reflections on the temporality of energy transitions: a response to critics, *Energy Research & Social Science*, 22, 232-237.

Stanova Seferova, V., (2020), The wood biomass sustainability criteria in Slovakia. European Network for Rural Development. [online] Available at: https://enrd.ec.europa.eu/sites/default/files/enrd_publications/bioeconomy_case_study-the_wood_biomass_sustainability_criteria_in_slovakia-v03.pdf [Accessed on 8 March 2023].

Statistical Office of the Slovak Republic, (2020), Energy 2019. [online] Available at: https://slovak.statistics.sk/wps/wcm/connect/8aa72f3f-0e47-4193-a59f-b93705730d20/Energeti-ka_2019.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-8aa72f3f-0e47-4193-a59f-b93705730d20-nq4DUvC [Accessed on 15 March 2023].

Szulecki,K., Neerland,M.,Tomter, H., et al., (2023), Ageism, welfare, and the energy transition: a comparative analysis of the energy practices of the elderly in Poland and Norway, 01 March 2023, PREPRINT (Version 1) available at Research Square [https://doi.org/10.21203/rs.3.rs-2616260/v1].

TREND, (2022), Skúšobné primiešavanie vodíka do zemného plynu pokračuje bez problémov. [online] Available at: https://www.trend.sk/spravy/skusobne-primiesavanie-vodika-zemne-ho-plynu-pokracuje-bez-problemov [Accessed on 8 March 2023].

TREND, (2023), Eurofondy na geotermálne vrty budú k dispozícii až v roku 2024. [online] Available at: https://www.trend.sk/spravy/geotermalne-vrty-budu-musiet-pockat-podporu-eurofondov-dostanu-roku-2024 [Accessed on 6 March 2023].

Turnheim B., Sovacool, K.B. (2020), Exploring the role of failure in socio-technical transitions research, *Environ. Innov. Soc. Trans.* 37, 267-289.

U.S. Energy Information Administration (n.d.) Nuclear explained. [online] Available at: https://www.eia.gov/energyexplained/nuclear/nuclear-power-and-the-environment.php.

Werner, D., Lazaro, L.L.B., (2023), The policy dimension of energy transition: The Brazilian case in promoting renewable energies (2000–2022). Energy Policy, 175. https://doi.org/10.1016/j.enpol.2023.113480.

Westphal, K., (2020), German–Russian gas relations in face of the energy transition. Russian Journal of Economics 6(4): 406-423. https://doi.org/10.32609/j.ruje.6.55478.

World Bank, (n.d.), Forest area (% of land area) - Slovak Republic. Dataset [online] Available at: https://data.worldbank.org/indicator/AG.LND.FRST.ZS?locations=SK [Accessed on 6 March 2023].

Zákon č. 309/2009 Z. z. Zákon o podpore obnoviteľných zdrojov energie a vysoko účinnej kombinovanej výroby a o zmene a doplnení niektorých zákonov. (2009) [online] Available at: https://www.slov-lex.sk/static/pdf/2009/309/ZZ_2009_309_20090901.pdf [Accessed on 10 March 2023].

Zámkovsky, J., Mojzis, M., Nemcova, T., Melichar, J., (2018), The road to biomass-sustainability criteria within EU-funded programmes. In Cahill, T. (ed.) A Recipe for Success – Cookbook on public participation with experience from Visegrad 4 and Eastern Partnership countries. CEE Bankwatch Network, Prague, 25-28.

Zbojkovský, J., Hocko, P., Pavlík, M., Király, J., (2012), Operation of hydropower plants in Slovakia. Intensive Programme "Renewable Energy Sources" [online] Available at: https://core.ac.uk/reader/295580990.

REGIONAL CONSIDERATIONS IN THE NATIONAL ENERGY-MIX TRANSFORMATION

Igor Mitroczuk

Department of Economics, Koźmiński Academy ul. Jagiellońska 57, 03-301 Warszawa igorm@kozminski.edu.pl

&

Barbara Kijewska

Faculty of Social Science, University of Gdańsk ul. Bażyńskiego 4, 80-309 Gdańsk, Poland barbara.kijewska@ug.edu.pl

Abstract

The article is a concise overview of the national transformation of the energy-mix, with a focus on of the Pomeranian region in Poland (the main location of the energy sources discussed), on the basis of economics and social aspects. For the first time, Polish society, especially the inhabitants of Pomerania, are encountering a situation in which many investments in the power industry utilizing new energy technologies, unfamiliar to the general public, are being publicly considered. Among them, there are technologies that evoke fear and arouse controversies, notably; nuclear energy and offshore wind farms. These two future options for the desired Polish energy-mix are discussed as an alternative to the one described in the national energy policy document PEP 2040 (Monitor Polski, PEP 2040). These alternatives are compared with the regional and national challenges of the UE legislation and their highly ambitions targets. First, a concise overview of the literature on energy-mix transformation and the social aspects of the energy transition is presented. Second, it attempts to show the economics of the choices presented last year by two important institutions: the PSEW, concerning the development of new possible sites for offshore wind farms in the Baltic Sea, and the nuclear experts of the Ministry of Climate and Environment, regarding a potential increase in nuclear energy as planned according to PEP 2040. The analysis is based on cost calculations, including both LCOE (levelized cost of energy) as well as the external costs analysis - predefined in the previous work published by the Institute of Environmental Protection [Mitroczuk ed. 2022]. Lastly, the article discusses multiple social considerations relevant to a successful energy transition.

Key words: Energy-Mix Transformation, Climate Change, Renewable Energy Sources, External Costs of Energy Production, Social Cost

1. LITERATURE REVIEW

Energy-mix transformation, as a research subject is broadly described in scientific literature. The fundamental consideration is that climate change is caused by anthropogenic sources and that is compelling the world to pursue decarbonisation. Decarbonisation is not only possible but also highly needed, especially in the way we produce energy. There is substantial evidence to support those efforts globally [Fisher 2013; UNGA Paris Agreement 2015] and on the regional level [Hansen et al. 2013; Fisher 2013; Wewerinke-Singh 2021; Popkiewicz 2022, Tatarewicz 2022]. A way forward in this process is the need to decarbonise the energy-mix [IRENA 2016; Fofrich et al. 2020; Wimbadi et al. 2020; Darby, Gerretsen 2020]. Climate change is the backbone of the United Nations documents [IPCC 2018; UNFCCC 2020; UNFCCC 2021] and underpins the efforts of the European Union to decarbonise [EC 2014; EU 2019; Minas 2020; EU 2022a; EU 2022b]. Moreover, advice from the International Energy Agency is evident and presented in the World Energy Outlook report [IEA 2020]. There is growing body of literature that emphasizes that human rights, as well as the social dimensions of the energy-mix transformation, are essential [Center for Global Development 2016; Olsson et al. 2020; Wewerinke-Singh 2021].

Fossil fuels powered sources are the most evident adversary in the way the energy-mix transformation is designed. The speed and the level of penetration of the energy-mix with low-carbon energy technologies, including those of renewable energy sources (RES) are discussed in numerous publications worldwide [Valentine et al. 2019; Lederer et al. 2019; PIE 2019; Deloitte 2020; Keles, Yilmaz 2020; Blondeel et al. 2021; MacKinsey & Company 2021; Jonek-Kowalska 2022; Torres, Petrakopoulou 2022; Chorowski 2022]. The most paramount consideration in discussions concerning the economics of the energy-mix transformation is the efficiency of RES (renewable energy sources). There is extensive evidence suggests that it did increase over the last decades, and that the LCOE is declining, sometimes at a rapid rate [Lazard 2020; Infield, Freris 2020; Christophers 2022; Banks 2022].

Specific energy-mix models that can be highly effective in facilitating climate transformation and decarbonisation of the energy-mix are elaborated upon. One example could be the simultaneous use of natural gas and RES, as proposed in the Polish Energy Programme [Monitor Polski 2020]. These solutions are described as having substantial potential in some parts of the world including the United States and China [Pless et al. 2016; Xu et al. 2017; EIA 2020a; EIA 2020b; EIA 2020c]. Additionally, there is extensive literature on the role of distributed or decentralised energy production. That is viewed as a possible solution to the grid investment problems and challenges outlined in PEP 2040. [Lund et al. 2019; Burger et al. 2019a; Burger et al., 2019b; Nyangon, Byrne 2022; Banks 2022].

Negative externalities accompanying energy production are vital in the important discussion on the energy-mix composition. A significant proportion of fossil fuels in the Polish energy-mix is considered a primary problem for society both now and in

the near future. However, this discussion is of utmost importance not only for Poland but also to the future of the planet and is also covered by the growing body of literature. Many economists have advocated environmental Pigouvian taxes as a means to rectify the situation, analysed from the perspective of the common good for society. Pigouvian taxes are intended to serve as the the primary environmental policy instrument, forcing power generation units to internalise the high social costs of using fossil fuels, that cause both GHG emissions and the release of many harmful substances, including PM2,5 and PM10 [Pearce 1991; Goulder 1995; Koeppl et al. 1996; Speck 2006; Anderson 2019]. According to numerous researchers, the challenge of precisely measuring the total social cost of using fossil fuels makes the Pigou tax, a policy instrument, based on the best available estimates, a crucial signal for the need to internalise the social costs of the climate change processes. Energy companies pay taxes, levied upon them to raise their private costs up to the level necessary to internalise the negative externality. This phenomenon is one of the most important pillars of modern environmental economics [Preiss et al. 2008; Pindyck 2013; Pindyck 2019; Andersson 2019]. Although this subject is not covered in this article, there is extensive literature that proves that Pigou taxes, when used with care, do not have a detrimental influence on employment or GDP growth – a subject of utmost importance to our regional and national discussion on the energy-mix solutions to be adopted in Poland in the near future [Metcalf, Stock 2020a; Metcalf, Stock 2020b]. It is also essential to address the issue of the high cost associated with the energy-mix transformation away from fossil fuels to RES. It does not mean only investment expenses necessary to change the base of the energy system. Significant costs are also associated with the so-called network cost of RES. If not accounted for, these costs would put RES in an even more favourable position to fossil fuels, solely based on the declining LCOE. Those costs are also identified in a considerable number of publications [Mai et al. 2013; D'haeseleer 2013; Fraunhofer 2015; ARE 2016; Al Matin et al. 2019; Burger et al. 2019b; Karkour et al. 2020; Pillai et al. 2021; Falvo et al. 2021; Veronese et al. 2021; Yang et al. 2022].

The review of literature on social and energy issues encompasses several aspects such as 1) just transition, understood as access to safe (renewable, zero-emission) and affordable power while eliminating energy poverty, and which also results in compensation for communities affected by restructuring [Biernat-Jarka, Trębska, Jarka 2021] [Karpinska, Śmiech 202], 2) social acceptance for energy investments [Mrozowska 2016] and 3) health issues [Vasev 2017].

2. PURPOSE AND METHODOLOGY

According to economics theory, the energy-mix transformation, as outlined in the Polish Energy Policy 2040 [Monitor Polski 2020], entails a change away from fossil fuels to RES and gas sources as a temporary solution – a vital base of the whole energy-mix. This shift will lead to improved air and environmental quality, as well as

the potential creation of many new businesses in the energy and industry sectors, providing services to the power industry, including the creation of millions of new jobs [Europe 2017]. Today coal serves as the base of the energy system, yet it is not socially desirable because it causes emissions harmful to the environment as well as air pollution that leads to many lethal diseases. The social marginal cost of using solar energy is lower than the private cost, while the social marginal cost of using coal surpasses the private cost. As such, there is a capacity for a net gain in the energy-mix transformation process [Anderson 2019].

Economics theory plays a vital role in shaping the desired direction for the transformation of the energy-mix. That transformation aims to eliminate expensive energy sources, assessed from a social perspective and develop effective and cheap renewable sources, measured through a comparison of social costs. Another the evolution of energy prices from various sources as measured over time should be a key aspect of the discussion [Lazard 2020]. The evaluation of energy recourses in terms of technology and economics is based on the LCOE analysis. The LCOE equates to the cost of producing a kilowatt hour (KWh) using a given source of energy. In general, LCOE is calculated as the summation of the total costs incurred by the company divided by the total energy produced during the lifetime of its operations. The costs include: (1) the initial investment, (2) operation and maintenance (O&M) costs, (3) the fuel and consumable costs. The total MWh (megawatt hours) of energy produced in that plant can be adjusted by taking into account the proper degradation rate of the power plant [Papapetrou 2022]. Considering this data, the PV energy prices in the United States have decreased by approximately 15% since a decade ago [Lazard 2020]. It can be assumed that the process of falling RES prices could continue in the future. Therefore the decisions made today to shape the energy-mix of a country in the medium and long term should take this into account.

Let us also consider the results of the comprehensive renewables-oriented energy transformation. A report on the economic benefits generated by the use of renewable energy was prepared by IRENA. This study establishes that the benefits of doubling the share of RES in the global energy-mix would increase global GDP by 0.6 and 1.1% by 2030. Morover, this doubling of the renewables' share in the global energy-mix would world result in a 24.4 m increase in employment in that sector [IRENA 2016]. This article analyses, two alternative options for the development of the future energy-mix in Poland from 2020–2050. Both are juxtaposed to the one outlined in governmental documents [Monitor Polski 2020]. It is evident that some new directions shown in last year's government plan [KPRM 2022] are not sufficient enough to achieve the goals set by the EU's Fit For 55 package. Furthermore, it appears that social expectations regarding the future of the country and the quality of life, to which quality of air is vital, are changing rapidly. Heating and cooking in residential buildings constitute an important source of emissions of greenhouse gases and air pollutants, accounting for 84% of total household energy consumption. Air pollution is one

of the greatest threats to health, it can lead to strokes, heart diseases, lung cancer, as well as chronic and acute respiratory diseases, including asthma. A recent report of the European Public Health Alliance [Korteland et al. 2022] states that Poland has the highest coal consumption in comparison to other the countries in the region. Coal boilers account for 30% of total household energy consumption and constitute 64% of all social health costs in the country.

That is why the status quo -represented by the governmental plan for 2040, is compared to an alternative view described as a methodology in the previous publication [Mitroczuk, ed. 2022]. This methodology is used to evaluate two alternative scenarios presented recently by the PSEW [PSEW 2022], as well as by nuclear experts of the Ministry of Climate and Environment [PAP 2022], which are not mutually exclusive. The first scenario presents new possibilities and areas of the Baltic Sea for wind farms. These surpass what was planned on the basis of PEP2040: proposing not 11 but 33 GW of offshore wind farms, which could be built on the Baltic Sea, providing a substantial proportion of the energy-mix. The other scenario envisions a significantly bigger ratio of nuclear energy in the total energy-mix for the year 2040, exceeding the 6-7 GW proposed in PEP 2040. The total costs (private and social) associated withpursuing such energy-mix models are calculated assuming that the cost relations are as they were when PEP 2040 was prepared (2018). The second analysis, expecting the possible further decline of the RES sources LCOE over the next decade to come, is based on LAZARD calculations of the previous ten years. A conservative position is taken that there could be only half of the changes, already observed in the previous decennium [Lazard 2020].

The whole exercise consists of simple cost calculations combining the LCOE as well as the estimations of external costs (based on the cited literature). The details of simplifying assumptions can be found in the earlier publication by the Institute of Environmental Protection [Mitroczuk, ed. 2022]. The estimates of social costs were calculated by adding external expenses of emissions that are borne by society as a whole. Those costs are associated with the negative effects of fossil fuels on health, the environment, and the climate. They are at the level of 35 EUR/MWh (2008) and 55 EUR/MWh (2030) for hard coal CHP and 15 EUR/MWh (2008) to 22 EUR/MWh (2030) for a gas turbine [Preiss et al. 2008]. Other research puts them at comparable levels of 40 EUR/MWh (2012) for coal and 20 EUR/MWh (2012) for gas [D'haeseleer 2013]. The simple excel model that we use puts them at a moderate level of 50 EUR/MWh for hard coal and 20 EUR/MWh for gas-powered sources.

In the analysis of the nuclear-intensive solution for the future energy-mix of Poland, the issue of nuclear security is also important. Even though Polish society approves of governmental plans to incorporate nuclear energy in the mix, the possible costs of nuclear disasters belong to social expenses – they are included here as proposed by D'haeseleer in his report to the EC, where the environmental costs for nuclear energy

are put at the level of EUR 7/MWh, including possible accidents [D'haeseleer 2013], adjusted by data from OECD countries [Karkour et al. 2020].

The same is true for the RES network costs. A full catalogue of costs for the grid resulting from the extensive (high penetration ratio of RES in the energy-mix) is taken into account, that is the balancing, network, and profile costs of RES. Those values are added to the LCOE as presented in Figure 1. This analysis is limited to six main energy sources that together constitute 95% of the 2040 energy mix, according to the national strategy PEP 2040. It follows the cost of (1) hard coal power plants - ASC PC. It then tracks (2) natural gas power generation or CCGT, described in the policy as an intermediary and medium-term substitute for coal, indispensable to guarantee the stability of the system, coupled with a growing share of renewable sources and (3) nuclear energy as the necessary base of the future energy mix. The analysis is limited to the three most important renewable sources: (1) on-shore wind (LEW), (2) off-shore wind (MFW), and (3) photovoltaics (PV), the last source being successfully developed by individual prosumers at a record speed, an 1100% increase in the number of Polish prosumers from just 4,000 in 2015 to 0.5 million in 2021 and 1 million expected by 2030 [Kurtyka 2021]. The process was enabled by initially generous financial support from the government and a growing social consciousness of environmental and energy issues.

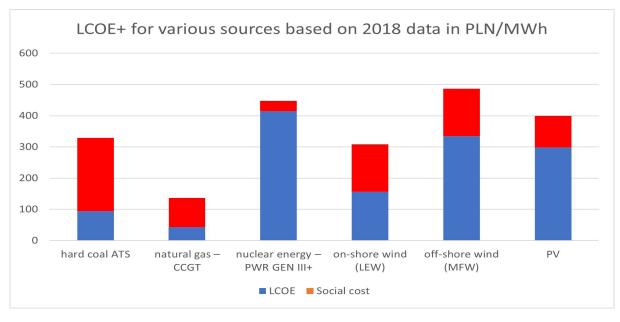


Figure 1. LCOE and the social costs (LCOE+) for various sources in PLN for MWh for 2018

Source: own calculations on the basis of PEP 2040 (LCOE) and the cited literature (social costs)

Further, the assumption is that the LCOE of producing energy from sources will evolve in the direction proved over the previous decade, but at a smaller pace (1/2 of) the change observed during the period 2009 - 2019 [Lazard 2020]. Therefore, it is assumed that solar energy will be 44.5% cheaper in 2030 and wind energy 35% less

expensive, gas use in CCGT will be 13% less costly, followed by only a small decline in coal costs (due to better technologies that will allow for better efficiency of the source and excluding ETS costs) – 1.5% cheaper than now. The prediction is that the only source that will increase in the LCOE is nuclear energy due to even stricter security considerations and regulations as well as new and more expensive technologies being utilised. The results are shown in Figure 2 below. The social costs are the same as in Figure 1, as they are already put on the levels cited in the available literature, based on 2008 – 2030 estimates. The competitive advantage of RES sources is further built up in relation to fossil fuels, which comes as no surprise. Those figures could be used to prepare an analysis for the future energy-mix instead of using historical data for 2018.

LCOE+ of various sorces based on 2030 prognosis in PLN/MWh 600 500 400 300 200 100 PV off-shore wind hard coal ATS natural gas nuclear energy on-shore wind CCGT PWR GEN III+ (LEW) (MFW) ■ LCOE ■ social costs

Figure 2. LCOE and the social costs (LCOE+) for various sources in PLN for MWh for 2030

Source: own calculations on the basis of Lazard 2020 (LCOE) and the cited literature (social costs)

Having analysed the cost side of the economics of producing energy from various energy sources in social terms (LCOE+), attention can be paid to the issue of a possible new shape of the future energy-mix of Poland. It is done on the basis of the 2018 cost data only to show the potential of the transformation as compared with the PEP 2040 scenario. Further decreases in RES costs for 2030 would only make that comparison more evident. Two scenarios mentioned previously are looked into – the first – a strong Baltic Sea offshore wind energy cluster and the second – a solid base of nuclear energy, according to the vision of nuclear department experts of the Ministry of Climate and Environment. The two alternative scenarios of the future energy-mix are put together and the total costs of creating and running such an energy-mix are compared with the one presented in PEP 2040.

3. RESULTS AND DISCUSSION

Poland's Energy Policy until 2040 presents a vision of the transformation of the energy sector on the path to climate neutrality, in line with the European Union recommendations, while respecting national circumstances. Those are mostly connected with the use of coal as an energy source. It is related to the fact that Poland has the largest hard coal deposits in the European Union. Poles like to call coal "black gold" and treat it as a national energy security guarantee. According to the plan, coal use will be reduced considerably but not to nil. The scale of the reduction is from 95% in the early nineties, 74% in 2019, to mere 56% in the electricity generation energy-mix in 2030. That means that by the year 2040, 16 GWh of coal-fired capacity will be withdrawn and substituted with gas and RES.

There are two major challenges for the economy and society. The first one is the need to stop the energy poverty growth rate in Poland, which is already one of the highest rates in the EU. According to the data provided by the Structural Research Institute on the basis of Main Statistical Office 2021 data, 11% of households in Poland are regarded as affected by energy poverty [IBS 2023]. The analysis of renewable energy policy and the EU ETS shows that the policy of providing numerous industries with exemptions leads to a situation in which individual households bear most of the costs associated with those policies. The analysis also shows that low-income households are the most affected by energy price increases because they spend a large share of their income on electricity [Cludius 2015]. In Poland, households spend a larger proportion of the budget on energy. Another analysis shows that introducing changes of EU Fit-for-55 package would increase spending on energy by 50% and on transport by 44% for one-fifth of the poorest households in the EU. In the case of Poland, that increase would be at the level of 108% [PIE 2021]. Regular public opinion polls show that support for nuclear energy in Polish society is highly dependent on international events. The Fukushima disaster in March 2011 and Germany's decision to close down nuclear power plants resulted in a decline in support – until 2014 opponents predominated [CBOS 2016]. However, currently during the war in Ukraine, with the increasing importance of energy independence from the Russian aggressor, as many as 86% of Poles support the construction of nuclear power plants in Poland, moreover, over 70% of respondents would give their consent to building such a power plant near their place of residence [MKiŚ 2022]. Support for the construction of new wind farms has also increased. More than two-thirds of the respondents (69%) would back the construction of an onshore wind farm in their area [PWEA 2021].

Research revealed [Mrozowska, Kijewska 2016] that attitudes towards nuclear power are complex and do not relate merely to the question of technology acceptance, which does not usually raise major controversies. The factors that determine the perception of nuclear power as important include: (1) the level of trust, (2) the political-economic context, and (3) the location, national and destination target dimensions of the investment; in particular, the level of trust in state institutions, government and politi-

cians (the Minister responsible for the programme), the law regulating and inspection institutions (PAA, the Ministry of Economy, scientists) and market institutions (investors: PGE EJ1, technology providers: AREVA, Candu, and others). Studies [Mrozowska, Kijewska 2014] conducted in the community residing in the municipality of the potential location indicate that the inhabitants need to define their position on this investment, but they do not express the need to participate in strategic decisions. Opponents are largely not against the "technology" but the methods of implementing it: protracted decision-making; the lack of clear, immediate and direct information from the top (government) to the bottom (municipality) increases distrust towards the investment. There is noticeable solidarity with the local government that feels disregarded in many decisions and has no possibility to take pre-emptive action. As a consequence, local authorities feel overlooked at many stages of the decision-making process. This intensifies the distrust of the local community towards the central authority. At the same time, the inhabitants are subject to pressure from external pro- or anti-nuclear interest groups (environmental organisations, lobbying organisations).

The other challenge is to limit social unrest during the process of restructuring the coal mining sector in Poland, which plays an extensive social role, providing employment to nearly 80,000 people, concentrated in mining regions of the country. Additionally, many coal-powered plants will have to be closed as they are already old, fully utilised in technical terms, and highly inefficient [Gawlikowska-Fyk 2021]. Almost ¾ of the coal-burning potential is more than 30 years old and approaching the limit of technical viability – the average age of power plants in Poland is 47 years [Kurtyka 2021] and URE is planning the retirement of 11 GW of coal facilities by 2034 [Wysokie Napięcie 2022]. Also when considering companies that supply the coal industry in Poland 7/10 of jobs are located in Upper Silesia and some 17 thousand employees would be redundant when coal mines in the region are closed down [IBS 2023].

The majority of Polish citizens (over 90%) agree that we should limit greenhouse gas (GHG) emissions, and 60% agree that we should act today, rather than in some undefined future [MKiŚ 2020].

The closure of coal units will be accompanied by massive investments in both on-shore and off-shore wind farms, PV – small and large units, as well as a new source – nuclear energy. Effective and fully disposable gas power generation is planned to supplement and provide a reserve for RES, as a transitional source of energy. That would be scaled down with the increased use of large-scale energy storage and a better grid management system. The total installed capacity of RES will amount to approximately 23–25 GW in 2030, providing up to 32% of electricity in 2030. Investments in the development of offshore wind farms – a 5.9 GW wind farm will be installed in 2030 and an 8–11 GW wind farm in 2040. The first nuclear unit with a capacity of 1–1.6 GW is scheduled for 2033 in the Pomeranian region, and the whole Polish nuclear programme means the construction of between 6 and 9 GW units by

2043. The PEP 2040 programme assumes that – with the growing demand and major electrification of the power system – as much as 200 TWh of electro-energy will be needed in 2040 [Monitor Polski 2020].

The aim of the analysis is to show two things. First is a demonstration that the alternative energy-mix based on LCOE+ modelling would be cheaper for society than the one described in PEP 2040. Indeed both scenarios presented in Figure 3 and Figure 4 below yield a total cost for society that is about 20% lower than the one in PEP 2040. Second, two alternatives are evinced: one assuming the enlarged proportion of wind energy both on-shore as well as off-shore, as suggested by PSEW. The other one is based on the broad use of nuclear energy – with a 30% share of it in the total energy-mix. In both cases, disposable gas units are built into the model as a base. All that could be complemented by PVs and biomass, hydro/geothermal energy, which is well described in the CAKE analysis [Tatarewicz et al. 2022]. Both energy-mixes are more or less at the same level of total LCOE+ for society to build. Which one is better is a separate discussion beyond the scope of that article. The discussion would require further analysis of models utilised in Europe and their consequences in terms of economic and social costs.

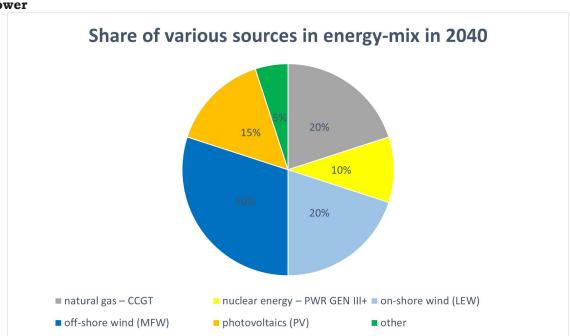


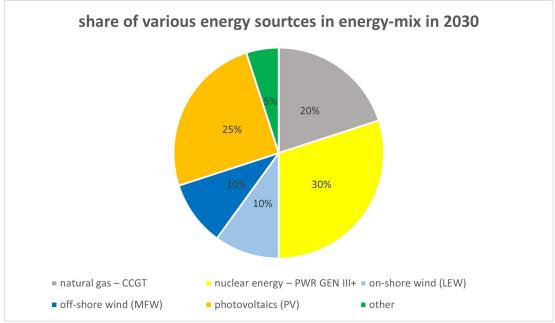
Figure 3. Share of various sources in energy-mix in 2040 with high penetration of wind power

Source: own calculations on the basis of PSEW and model of [Mitroczuk ed. 2022]

Another important element of the energy puzzle to be analysed is the one about the use of a distributed rather than centralised energy system. Both scenarios presented below are based on petrification of the model that Poland has been following for decades – of centralised large power units producing energy and the necessary grid development to distribute electro-energy produced in them to the places where it is

needed. Some research may prove that could be replaced by the distributed energy system [Nyangon, Byrne 2022; Banks 2022]. That view is also presented in Poland by the influential Institute of Eco-Development and its head – Andrzej Kassenberg, which provides an alternative model to the traditional development path of the Polish energy-mix [Kassenberg 2020].

Figure 4. Share of various sources in energy-mix in 2040 with high penetration of nuclear power



Source: own calculations on the basis of PSEW and model of [Mitroczuk ed. 2022]

CONCLUSIONS

Considering the total costs of a given energy-mix for society as a whole, one has to include both the LCOE as well as social costs. The abbreviation LCOE+ should be used as it suggests going beyond the standard cost calculations, to include costs associated with the negative externalities of energy production. They are the costs borne by society and not always internalised by entrepreneurs as should be with the EU ETS scheme in place. The first result demonstrates that the alternatives of the future energy-mix discussed above are cheaper than the PEP 2040 scenario. Both have 20% lower overall costs for society.

The second result is that the inclusion of even a moderate rate of the falling RES LCOE over the next decade can only improve the competitive advantage of RES in the future in relation to fossil fuels. The long-term decisions that need to be taken now should include those considerations as well. They will have a long-lasting, over a couple of decades into the future, important influence on national energy security as well as the competitiveness of the national economy. Another important dimension is the social one. Only those solutions that are desired by the public as well as the public is willing to pay for, could be implemented successfully. The increase in awareness of

climate threats, and the presence of climate and energy issues in the public debate (e.g. Paris Agreement, European Green Deal, Polish Offshore Wind Sector Deal etc.) in recent years has led to the change in public opinion. Poles understand and accept the need for energy transformation – moving away from coal in favour of more ecological methods of energy production. The gradual abandonment of coal-based energy is supported by nearly three-quarters of the respondents (74%) [CBOS 2021].

This analysis shows that negative externalities like deterioration of human health due to worsening air quality associated with burning fossil fuels should be taken into account in energy-mix decisions. One of the reasons is that the full economic cost reasoning should not avoid including social costs. The second is the growing pressure from the EU and society as a whole that will inevitably force that change. Moreover, what is stressed here is that both scenarios presented above are in line with the goals of the Fit-for-55 package of the EU, including the revision of the RES directive [Chojnacki 2021].

What shape will the Polish energy-mix decisions take is to be seen. It is not only influenced by the decisions made in the EU but also strongly depends on political processes in the country. The war in Ukraine and its consequences for the world energy market have added a new perspective to energy security, and when energy security is so important, it would be hard to imagine the future Polish energy-mix without nuclear energy. The study has also shown that such inclusion could be limited to composing a mix relatively cheap in the LCOE+ sense.

Further analysis is needed to examine the distributed energy generation model. That would entail more bottom-up prosumer initiatives, not only limited to the individual households that will try to avoid the trap of energy poverty. That would also mean that the industry will look for new opportunities to lower the carbon footprint, in line with the new non-financial reporting directive [EU 2022c]. Rapidly growing electro-energy and heat-energy prices, accompanied by possible blackouts, can only support that option. Moreover, energy efficiency, which is not discussed above, will grow in importance – the cheapest energy is the energy you don't utilise. The EU energy transformation strategy assumes a compromise between environmental, economic and social goals. Therefore, building a sustainable economy is to be accompanied by counteracting energy poverty so that the poorest do not bear the costs of the transformation. Apart from the price, social calculations include health and political issues, taking into account the type and origin of energy sources. There is no doubt that social support for the success of the transformation will depend on good communica tion and financial support for the transition.

REFERENCES

Literature and legal acts

Al Matin, M.A., Takeda, S., Tanaka, Y., Sakurai, S., Tezuka, T., (2019), LCOE analysis for grid-connected pv systems of utility scale across selected ASEAN countries. ERIA Discussion Paper Series, 305. Eria.org.

Anderson, D.A., (2019), Environmental Economics and Natural Resource Management. Routledge, New York.

Andersson, J.J., (2019), Carbon taxes and CO2 emissions: Sweden as a case study. American Economic Journal: Economic Policy 11: 4. https://www.aeaweb.org/articles?id=10.1257/pol.20170144 [accessed 06.01.2023].

ARE, (2016), aktualizacja analizy porównawczej kosztów wytwarzania energii elektrycznej w elektrowniach jądrowych, węglowych i gazowych oraz odnawialnych źródłach energii, https://www.gov.pl/web/klimat/publikacje-jadrowe-raporty-analizy-opracowania [accessed 21.01.2023].

Biernat-Jarka, A., Trębska, P., Jarka, S., (2021), "The role of renewable energy sources in alleviating energy poverty in households in Poland". Energies 14 (10). https://doi.org/10.3390/en14102957.

Blondeel, M., Bradshaw, M.J., Bridge, G., Kuzemko, C, (2021), The geopolitics of energy system transformation: A review. Geography Compass 15, 7.

Burger, S.P., Jenkins, J.D., Huntington, S.C., Perez-Arriaga, I.J., (2019a), Why distributed? A critical review of the trade-offs between centralized and decentralized resources. IEEE Power and Energy Magazine 17, 2. https://ieeexplore.ieee.org/abstract/document/8643507 [accessed 30.11.2022].

Burger, S.P., Jenkins, J.D., Batlle, C., Perez-Arriaga, I.J., (2019b), Restructuring revisited, part 2: coordination in electricity distribution systems. The Energy Journal 40, 3. https://www.iaee.org/en/publications/ejarticle.aspx?id=3353 [accessed 30.11.2022].

CBOS, (2016), "Polacy o źródłach energii, polityce energetycznej i stanie środowiska". 2016.

CBOS, (2021), "Transformacja energetyczna – oczekiwania i postulaty". 2021.

Center for Global Development, (2016), Energy Access Targets Working Group, 'More Than a Lightbulb: Five Recommendations to Make Modern Energy Access Meaningful for People and Prosperity'. www.cgdev.org/node/3124016 [accessed 09.12.2022].

Chorowski, M., (2022), Dekarbonizacja polskiej energetyki – szansa na sukces czy pewna porażka? Kongres Obywatelski, https://www.kongresobywatelski.pl/idee-dla-polski-kategoria/dekarbonizacja-polskiej-energetyki-szansa-na-sukces-czy-pewna-porazka-2/ [accessed 11.01.2023].

Christophers, B., (2022), Taking renewables to market: Prospects for the after-subsidy energy transition. The 2021 Antipode RGS-IBG Lecture, 54, 5. https://doi.org/10.1111/anti.12847 [accessed 18.11.2022].

Chojnacki, I., (2021), Kolejny unijny cel w górę. Energii z OZE ma być znacznie więcej. w wnp. pl https://www-wnp-pl.cdn.ampproject.org/c/s/www.wnp.pl/energetyka/kolejny-unijny-cel-w-gore-energii-z-oze-ma-byc-znacznie-wiecej,483828.amp [accessed 20.12.2022].

Cludius, J.M., (2015), Distributional effects of energy and climate policy. PhD thesis, Doctor of Philosophy, UNSW Business School, UNSW Australia.

Darby, M., Gerretsen, I., (2020), Which countries have a net zero carbon goal? https://www.climatechangenews.com/2019/06/14/countries-net-zero-climate-goal [accessed 08.12.2022].

Deloitte, (2020), Dekarbonizacja najszybsza w sektorze energetycznym, Inwestycje w odnawialne źródła energii oraz ponowne wykorzystanie odpadów będą kluczowe dla firm w ich strategiach energetycznych, informacja prasowa 17 grudnia 2020 r. https://www2.deloitte.com/pl/pl/pages/press-releases/articles/dekarbonizacja-najszybsza-w-sektorze-energetycznym. html [accessed 11.11.2022].

Derski, S., (2022), Wysokie Napięcie, Ceny prądu na 2023 rok pobiły kolejne rekordy. Dokłada się susza, available on-line: https://wysokienapiecie.pl/74116-ceny-pradu-na-2023-rok-po-

bily-kolejne-rekordy/ [access: 10.12.2022].

D'haeseleer, W., (2013), Synthesis of the Economics of Nuclear Energy, Study for the European Commission, DG Energy, November 27th, 2013.

EC European Commission, (2014), A policy framework for climate and energy in the period from 2020 to 2030. https://www.eea.europa.eu/policy-documents/com-2014-15-final [accessed 10.11.2022].

EIA, (2021a), Annual electric power industry report, Form EIA-861 detailed data files. U.S. Energy Information Administration (EIA). https://www.eia.gov/electricity/data/eia861/ [accessed 08.11.2022].

EIA, (2021b), Annual energy outlook 2021—With projections to 2050. U.S. Energy Information Administration (EIA). https://www.eia.gov/outlooks/aeo/pdf/00%20AEO2021%20 Chart%20Library.pdf [accessed 10.11.2022].

EIA, (2021c), Electric power plants, capacity, generation, fuel consumption, sales, prices and customers. U.S. Energy Information Administration (EIA). https://www.eia.gov/electricity/data.php [accessed 03.11.2022].

Europe, S.P., (2017), Solar PV jobs and value added in Europe, https://www.solarpowere-urope.org/wp-content/uploads/2018/08/Solar-PV-Jobs-Value-Added-in-Europe-November-2017 [accessed 23.11.2022].

Falvo, M.C., Quaglia, F., Luzi, L., Perfetti, S., Carlini, E.M., Caprabianca, M., (2021), Assessment of alternative reserve procurement strategies for the Italian Power System. In 2021 AEIT International Annual Conference, IEEE Terna. Piano di Sviluppo, 2019. Available from https://www.terna.it/it/sistema-elettrico/rete/piano-sviluppo-rete. [accessed 08.11.2022].

Fisher, S., (2013), Low carbon resilient development in the least developed countries. IIED Issue Paper. IIED, London.

Fofrich, R., Tong, D., Calvin, K., De Boer, H.S., Emmerling, J., Fricko, O., Fujimori, S., Luderer, G., Rogelj, J., Davis, S.J., (2020), Early retirement of power plants in climate mitigation scenarios. Environmental Research Letters 15, 9. https://iopscience.iop.org/article/10.1088/1748-9326/ab96d3/meta [accessed 20.12.2022].

Forum Energii, 2022. Struktura wytwarzania energii elektrycznej, on the basis of ENTSO-E Transparency Platform, available on-line: https://forumetr.forum-energii.eu/ [accessed 20.12.2022]

Fraunhofer, I.S.E., Energiewende, (2015), Current and future cost of photovoltaics. long-term scenarios for market development, system prices and looe of utility-scale pv systems. Agora Energiewende 82.

Gawlikowska-Fyk, A., (2021), Forum Energii, Po 2025 r. węgiel będzie wychodził z polskiego systemu energetycznego falami https://www.forum-energii.eu/pl/blog/luka-weglowa-2025 [accessed 09.11.2022].

Goulder, L.H., (1995), Environmental taxation and the double dividend: a reader's guide. International tax and public finance 2, 2: 157–183. https://link.springer.com/article/10.1007/BF00877495 [accessed 08.12.2022].

Hansen, J., Kharecha, P., Sato, M., Masson-Delmotte, V., Ackerman, F., Beerling, D.J., Hearty, P.J., Hoegh-Guldberg, O., Hsu, S.L., Parmesan, C., Rockstrom, J., (2013), Assessing "dangerous climate change": Required reduction of carbon emissions to protect young people, future generations and nature. PLoS ONE, 8, 12. https://doi.org/10.1371/journal.pone.0081648 [accessed 08.11.2022].

IBS, (2023), Jak pogodzić cele społeczne i środowiskowe? Prezentacja wyników badań dotyczących polityki klimatycznej w Polsce, 12 stycznia 2023

IEA, (2020), World Energy Outlook 2020. https://www.iea.org/reports/world-energy-outlook-2020 [accessed 08.11.2022].

Infield, D., Freris, L., (2020). Renewable energy in power systems. John Wiley & Sons, Hoboken, NJ.

IPCC (International Panel on Climate Change), (2018), Rogelj, J., Shindell, D., Jiang, K., Fifita, S., Forster, P., Ginzburg, V., Handa, C., Kheshgi, H., Kobayashi, S., Kriegler, E. and Mundaca, L., Global Warming of 1.5° C. An IPCC Special Report on the impacts of global warming of 1.5° C above pre-industrial levels and related global greenhouse gas emission pathways, in

the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Sustainable Development, and Efforts to Eradicate Poverty. V. Masson-Delmotte et al. (Eds.). Cambridge University Press, Geneva.

IRENA, (2016), Renewable energy benefits: Measuring the economics, IRENA 2016.

Jeszke, R., Biznes Alert, (2021), "Wahania cen uprawnień do emisji CO2 utrudniają inwestycje na rzecz ich redukcji" availabe on-line: https://biznesalert.pl/ceny-uprawien-do-emisji-co2-eu-ets-system-handlu-emisjami-wegiel-energetyka/ [accessed 10.12.2022].

Jonek-Kowalska, I., (2022), Towards the reduction of CO2 emissions. Paths of pro-ecological transformation of energy mixes in European countries with an above-average share of coal in energy consumption. Resources Policy 77, 102701.

Karpinska, L., Śmiech, S., (2021), "Breaking the cycle of energy poverty. Will Poland make it?" Energy Economics 94. https://doi.org/10.1016/j.eneco.2020.105063.

Korteland, Marisa, Sander de Bruyn, Joukje de Vries, e Pien van Berkel, (2022), "Health-related social costs of air pollution due to residential heating and cooking in the EU27 and UK". Delft. https://cedelft.eu/publications/health-related-social-costs-of-air-pollution-due-to-residential-heating-and-cooking/.

Karkour, S., Ichisugi, Y., Abeynayaka, A., Itsubo, N., (2020), "External-Cost Estimation of Electricity Generation in G20 Countries: Case Study Using a Global Life-Cycle Impact-Assessment Method" available on-line: https://mdpi-res.com/d_attachment/sustainability/sustainability-12-02002/article_deploy/sustainability-12-02002.pdf?version=1583420042 [accessed 23.12.2022].

Kassenberg, A., Demokracja energetyczna i oddolne budowanie bezpieczeństwa energetycznego niedostrzeżone w KPEiK, (2020), Teraz Środowisko, https://www.teraz-srodowisko.pl/aktualnosci/Kassenberg-demokracja-energetyczna-Polska-KPEiK-8807.html [accessed 29.01.2023]

Keles, D., Yilmaz, H.Ü., (2020), Decarbonisation through coal phase-out in Germany and Europe — impact on Emissions, electricity prices and power production A national phase-out leads to a significant reduction of domestic carbon emissions. Energy Policy 141, 111472. https://doi.org/10.1016/j.enpol.2020.111472 [accessed 18.11.2022].

Kennedy, S.F., Stock, R., (2021), Alternative energy capital of the world? Fix, risk, and solar energy in Los Angeles' urban periphery. Environment and Planning E: Nature and Space, https://journals.sagepub.com/doi/abs/10.1177/25148486211054334 [accessed 19.11.2022]

Koeppl, A., Kratena, K., Pichl, C., Schebeck, F., Schleicher, S., Wueger, M., (1996), Macroeconomic and sectoral effects of energy taxation in Austria. Environmental and Resource Economics 8, 4: 417–430. https://link.springer.com/article/10.1007/BF00357411 [accessed 19.11.2022].

KPRM, (2022), Założenia do aktualizacji Polityki Energetycznej Polski do 2040 r. (PEP2040) – wzmocnienie bezpieczeństwa i niezależności energetycznej, KPRM. https://www.gov.pl/web/premier/zalozenia-do-aktualizacji-polityki-energetycznej-polski-do-2040-r-pep2040--wzmocnienie-bezpieczenstwa-i-niezaleznosci-energetycznej [accessed 09.11.2022].

Kurtyka, M., Energetyka rozproszona jako element polskiej transformacji energetycznej, available on-line: https://doi.org/10.7494/er.2021.5-6.7 [accessed 14.12.2022].

Lazard, Lazard's Levelized Cost of Energy Analysis—Version 14.0, 2020, p. 8 Retrieved from https://www.lazard.com/media/451419/lazards-levelized-cost-of-energy-version-140.pdf [accessed 30.01.2023].

Lederer, M., Wallbott, L., Urban, F., (2019), Green transformations and state bureaucracy. In R. Fouquet (Ed.), Handbook on Green Growth. Edward Elgar, Cheltenham, UK.

Lund, P.D., Byrne, J., Haas, R., Flynn, D., (2019), Advances in energy systems: The large-scale renewable energy integration challenge. John Wiley & Sons, Hoboken, NJ.

Mackinsey & Company, (2021), Neutralna emisyjnie Polska 2050, https://www.mckinsey.com/pl/our-insights/carbon-neutral-poland-2050 [accessed 11.11.2022].

Mai, T., Han, M.M., Baldwin, S.F., Wiser, R.H., Brinkman, G.L., Denholm, P., Arent, D., Porro, G., Sandor, D., Hostick, D., Milligan, D., Demeo, E.D., Bazilian, M., (2013), Renewable electricity futures for the United States. IEEE Transactions on Sustainable Energy 5, 2.

Metcalf, G.E., Stock, J.H., (2020a), May. Measuring the macroeconomic impact of carbon taxes. In AEA papers and Proceedings 110, 101–106. https://www.aeaweb.org/articles?id=10.1257/pandp.20201081 [accessed 18.11.2022].

METCALF, G.E., STOCK, J.H., (2020b), The macroeconomic impact of Europe's carbon taxes No. w27488 National Bureau of Economic Research. https://www.nber.org/papers/w27488 [accessed 18.11.2022].

Minas, S., (2020), EU climate law sans frontières: The extension of the 2030 Framework to the Energy Community contracting parties, Review of European, Comparative and International Environmental Law Volume 29, Issue 2, Special Issue: Assessing the EU 2030 Climate and Energy Policy Framework https://doi.org/10.1111/reel.1235 2 [accessed 08.11.2022].

MKiŚ, Ministerstwo Klimatu i Środowiska, (2020), Badanie świadomości i zachowań ekologicznych mieszkańców Polski, MKiŚ, październik 2020.

MKiŚ, Ministerstwo Klimatu i Środowiska. Badania poparcia dla budowy elektrowni jądrowej, 2022.12.15, https://www.gov.pl/web/klimat/rekordowe-poparcie--86-polakow-za-budowa-elektrowni-jadrowych-w-polsce [accessed 08.01.2023].

Mrozowska, S., (2016), Social Science and Energy Issues. Kraków: Libron.

Mrozowska, S., Kijewska, B., (2014), "Social determinants of nuclear technology implementation in Poland". European Journal of Transformation Studies 2(2): 7–18. https://www.journal-transformation.org/docs/issues/EJTS_2014_Vol_2_No_2/EJTS_2014_Vol_2_No_2.pdf.

Mrozowska, S., Kijewska, B., (2016), "Public understanding of nuclear energy. Polish case study". In Social science and energy issues, org. Sylwia Mrozowska. Kraków: Wydawnictwo LIBRON, 69–86.

Nyangon, J., Byrne, J., (2022), Estimating the impacts of natural gas power generation growth on solar electricity development: PJM's evolving resource mix and ramping capability, Wiley Interdisciplinary Reviews: Energy and Environment, e454.

Olsson, A., Hildingsson, R., Khan, J., (2020), The green economy and the Nordic welfare state: Reconceptualizing green economy narratives from a Nordic perspective (No. 3104). Miljö-och energisystem, LTH, Lunds universitet https://lup.lub.lu.se/search/publication/8b1dc459-6c48-44bb-a013-732d296a4925 [accessed 19.11.2022].

PAP Biznes i finanse, (2022), Nie będzie specjalnego podatku na budowę elektrowni atomowych https://pap-mediaroom.pl/biznes-i-finanse/nie-bedzie-specjalnego-podatku-na-budowe-elektrowni-atomowych [accessed 30.01.2022]

Papapetrou, M., Kosmadakis, G., (2022), Salinity Gradient Heat Engines, Woodhead Publishing Series in Energy.

Pearce, D., (1991), The role of carbon taxes in adjusting to global warming. The Economic Journal 101, 407: 938–948. https://www.jstor.org/stable/2233865 [accessed 10.12.2022].

PIE, (2019), Dywersyfikacja polskiego miksu energetycznego już nie tylko konieczna, ale i możliwa, PIE https://pie.net.pl/dywersyfikacja-polskiego-miksu-energetycznego-juz-nie-tylko-konieczna-ale-i-mozliwa/ [accessed 11.11.2022].

PIE, (2021), Impact on Households of the Inclusion of Transport and Residential Buildings in the EU ETS, https://pie.net.pl/wp-content/uploads/2021/06/PIE-Raport_ETS.pdf [accessed 10.11.2022].

Pillai, G., Allison, M., Tun, T.P., Jyothi, C.H.K., Babu, E.K., (2021), Facilitating higher photovoltaic penetration in residential distribution networks using demand side management and active voltage control. Engineering Reports 3, 10, e12410. https://doi.org/10.1002/eng2.12410 [accessed 19.11.2022].

Pindyck, R.S., (2013), Climate change policy: what do the models tell us? Journal of Economic Literature 51, 3: 860–872. https://www.aeaweb.org/articles?id=10.1257/jel.51.3.860 [accessed 10.11.2022]

Pindyck, R.S., (2019), The social cost of carbon revisited. Journal of Environmental Economics and Management, 94. https://www.sciencedirect.com/science/article/pii/S0095069617307131 [accessed 10.11.2022]

Pless, J., Arent, D.J., Logan, J., Cochran, J., Zinaman, O., (2016), Quantifying the value of investing in distributed natural gas and renewable electricity systems as complements: Applications of discounted cash flow and real options analysis with stochastic inputs. Energy Pol-

icy 97, 378–390. https://www.sciencedirect.com/science/article/pii/S0301421516303548 [accessed 19.11.2022].

Popkiewicz, M., (2022), Zrozumieć transformację energetyczną Od depresji do wizji albo jak wykopywać się z dziury, w której jesteśmy, Wydawnictwo Sonia Draga, Warszawa.

Preiss, P.H., Friedrich, R., Blesl, M., Wissel, S., Mayer-Spohn, O., Klotz, V., (2008), Social Costs of Innovative Electricity Generation Technologies in the Present and in 2030. Universität Stuttgart, IER, Stuttgart.

Speck, S., (2006), The use of economic instruments in Nordic and Baltic environmental policy 2001–2005. Nordic Council of Ministers.

PSEW, Nowy potencjał Bałtyku: 33 GW mocy i 20 nowych obszarów pod MFW (RAPORT), 2022, http://psew.pl/nowy-potencjal-baltyku-33-gw-mocy-i-20-nowych-obszarow-pod-mfw-raport/ [accessed 30.01.2023]

PSEW, Polacy chcą farm wiatrowych tam gdzie mieszkają, 27.10.2021, http://psew.pl/polacy-chca-farm-wiatrowych-tam-gdzie-mieszkają/ [accessed 2.02.2023]

Tanaka, Y., Chapman, A., Sakurai, S., Tezuka, T., (2017), Feed-in tariff pricing and social burden in Japan: evaluating international learning through a policy transfer approach. Social Sciences 6, 4: 127.

Tatarewicz, I., Lewarski, M., Skwierz, S., Pyrka, M., Boratyński, J., Jeszke, R., Witajewski-Baltvilks, J., Sekula, M., (2022), Poland net-zero 2050 transformation of the Polish and EU energy sector until 2050. Centre for Climate and Energy Analyses. https://climatecake.ios.edu.pl/download/98/ [accessed 22.12.2022].

Torres, J.F., Petrakopoulou, F., (2022), A Closer Look at the Environmental Impact of Solar and Wind Energy Global Challenges 6, 8.

UNFCCC, (2020), Commitments to net zero double in less than a year - Press release https://unfccc.int/news/commitments-to-net-zero-double-in-less-than-a-year [accessed 09.11.2022].

UNFCCC, (2021), Glasgow climate pact. https://unfccc.int/sites/default/files/resource/cop26_auv_2f_cover_decision.pdf [accessed 10.11.2022].

UNGA, (2015), Transforming Our World: the 2030 Agenda for Sustainable Developmen, UN Doc A/RES/70/1 (21 October 2015).

Vasev, N., (2017), "Governing energy while neglecting health – The case of Poland". Health Policy 121 (11). https://doi.org/10.1016/j.healthpol.2017.09.008.

Valentine, S.V., Brown, M.A., Sovacool, B.K., (2019), Empowering the great energy transition policy for a low-carbon future. Columbia University Press, New York.

Veronese, E., Manzolini, G., Moser, D., (2021), Improving the traditional levelized cost of electricity approach by including the integration costs in the techno-economic evaluation of future photovoltaic plants. Special Issue: Progress in Alternative Fuels and Energies International Journal of Energy Research 45, 6. https://doi.org/10.1002/er.6456 [accessed 10.11.2022].

Wealer, B., Bauer, S., Coeke, L., Von Hirschhausen, C.H., Kemfert, C., (2019), Economics of Nuclear Power Plant Investment, DIW Berlin Discussion Papers 1833.

WEWERINKE-SINGH, M., (2021), Review of European, Comparative and International Environmental Law, Special Issue: Human Rights and the Climate Change Crisis, 31,1 https://doi.org/10.1111/reel.12412 [accessed 10.11.2022].

Williams, J.H., Jones, R.A., Haley, B., Kwok, G., Hargreaves, J., Farbes, J., Torn, M.S., (2021), Carbon-neutral pathways for the United States. AGU Advances 2, 1.

Wimbadi, R.W., Djalante, R., (2020), From decarbonization to low carbon development and transition: A systematic literature review of the conceptualization of moving toward net-zero carbon dioxide emission (1995–2019). Journal of Cleaner Production, 256. https://doi.org/10.1016/j.jclepro.2020.120307 [accessed 10.11.2022].

Wysokie Napięcie, (2022), Modernizacja elektrowni węglowych leży odłogiem, https://wysokienapiecie.pl/76933-modernizacja-elektrowni-weglowych-lezy-odlogiem/ [accessed 11.11.2022].

Xu, J., Luo, N., Li, M., Xie, H., (2017), A novel paradigm-oriented approach towards NG-RE hybrid power generation. Energy Conversion and Management 145, 220–232. https://www.

sciencedirect.com/science/article/pii/S0196890417302881 [accessed 10.11.2022].

Yang, J., Dong, Z.Y., Wen, F., Sioshansi, R., Hesamzadeh, M., Chen, O., Zhou, Y., (2022), Special Issue: Enhancing hosting capability for renewable energy generation in active distribution networks. IET Renewable Power Generation 16, 4. https://doi.org/10.1049/rpg2.12434 [accessed 19.11.2022].

Legal acts

EU, (2019), The European Green Deal. https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1%26format=PDF [accessed 09.11.2022].

EU, (2022a), EU Solar Energy Strategy COM (2022)221.

EU, (2022b), REPowerEU Communication COM (2022)230 final.

EU, (2022c), Corporate sustainability reporting, https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en [accessed 30.01.2022]

Monitor Polski, PEP, (2040), Obwieszczenie Ministra Klimatu i Środowiska z dnia 2 marca 2021 r. w sprawie polityki energetycznej państwa do 2040 r., Dziennik Urzędowy Rzeczypospolitej Polskiej Warszawa, dnia 10 marca 2021 r., poz. 264.

UNGA, (2015), Paris Agreement.

THE MOBILITY CHOICES IN POLAND: IS THERE A CHANCE TO TRANSITION FROM OWNED CARS TO A SHARED ONES?

Agnieszka Szmelter-Jarosz

University of Gdansk, Departent of Logistics, ul. Armii Krajowej 119/121, 81-824 Sopot, Poland agnieszka.szmelter-jarosz@ug.edu.pl

8

Beata Chmiel

University of Gdansk, Doctoral School of Humanities and Social Sciences, ul. Wita Stwosza 63, 80-308 Gdansk, beata.chmiel@phdstud.edu.pl

&

Hamed Nozari

Iran University of Science and Technology, Faculty of Industrial Engineering,
Tehran 1684613114, Iran,
ham.nozari.eng@iauctb.ac.ir

Abstract

Car-oriented mobility produces externalities that disrupt the quality of life, especially for urban residents. New national and EU-funded projects are dedicated on improving sustainable mobility and raising the ecofriendliness of transport. In our paper, we aim to answer if Poland has a chance to foster ecofriendliness in drivers and mobility users. The survey results (n=3094) illustrate how intergenerational differences between mobility users depends on their place of living. We conclude that in large cities, opportunities for changing the mobility patterns are higher. In order for the local authorities to achieve succeed, they should prioritize promoting private and shared micromobility.

Key words: Urban Mobility, Micromobility, Car Culture, Mobility Choices, Mobility Patterns, Sustainable Mobility

INTRODUCTION

For decades, the car symbolized various features and characteristics, occupying a central place in societies' interests. Car culture and car-oriented mobility choices have already reached their peak period – this is the sentence most frequently appearing in the literature on this topic. On the other hand, at no other time in the past has sustainable development been discussed so much in transport and mobility. The car has now become a symbol of the brown economy, air pollution and civilization diseases. However, in developed countries, car culture remains strong. How can we address this, and compromise comfort, convenience and an eco-friendly lifestyle? In our study, we aim to explore if there is a chance of transition from a car-oriented society into one that prioritizes sustainable mobility. We analyze current mobility data in Poland and data from the survey conducted in November 2022.

The transportation landscape in Poland is a mix of contradictory and inconsistent information. The issue of transport exclusion is visible, especially in the countryside and areas of cities in need of revitalization. The highest levels of transport exclusion are recorded in small commune cities where public transportation is in poor shape or non-existent and mobility is mainly car-based. In small and medium sized cities, the situation is better but still not sufficient enough – they experience some slow changes but still focus on car mobility. In these areas, the negative externalities of transportation is reduced with the congestion and air pollution being limited. On the other hand, the number of cars for per 1000 residents is the highest in Central and Eastern Europe, and continues to grow each year. Moreover, local authorities and the European Commission are promoting sustainable mobility, especially through the use of bikes and e-scooters, while also building the framework for multimodal mobility patterns.

The other situation can be observed in large cities across Poland. According to the TomTom congestion analyses conducted for 12 Polish cities in 2022, the average travel time per 10 km by car is the highest in Wroclaw (25 min), Lodz (22 min) and Krakow (22 min). In these cities, the time spent in traffic during rush hour is at least 208 hours (8,67 days) per year, translating to over one week lost per year for individuals commuting to work or school by car daily. This also exacerbates more problems associated with the air pollution from traffic According to European Air Quality Index provided by European Environmental Agency, the air quality in those cities is poor or very poor, especially in rush hours every day, even in summer. The solution for these cities would be transitioning from car-oriented mobility to multimodal mobility or as a utopian idea, zero-emission mobility.

Therefore, there is a question: is Polish society prepared for changes in mobility and ready stop to development of car culture? Have we witnessed a peak in car usage, or will it occur in the future? Is there a potential for a shift from car ownership to co-sharing in big cities? We estimated the relationships between mobility variables within Polish society, including urban residents, to answer these questions.

In order to achieve our research goal, we divided the paper's content into several sections. The remainder of the paper is as follows. Firstly, we provide a literature review to provide context in people's mobility in Poland. Subsequently, the methodology and characteristics of the respondents is shown, to present the opinions of the Polish society about car usage. At the end, they are discussed, and final conclusions are drawn.

1. LITERATURE REVIEW

1.1. Car culture and its intergenerational inheritance

The world's most popular mode of transport is the private car. It is a material possession that bears economic status and is also characterized with symbolic significance [Arcimowicz, 2019]. The number of private cars per resident in Poland is increasing, a trend explained by the poor quality of public transportation and the the intent to demonstrate social status. Although cars are gradually being removed from city centres in many European cities, the use of public transportation is still perceived as socially stigmatizing [Heinonen i in., 2021]. The purchase of a private car defines economic success in society, while public transport is associated with the poorer percentage of the population.

Car ownership is perceived as a symbol of freedom defined as unrestricted mobility [Arcimowicz, 2019]. For instance, timetables don't impose time constraints, allowing them to freely manage their time [Leśniak-Moczuk, 2020]. The car is plays a vital role for the functioning of families. The modern family often owns more than one car. However, if a family owns one car it is most often managed by the man [Arcimowicz, 2019]. Consequently, the car reinforces traditional stereotypes of the male role in the family. The car can also be considered as part of a masculinized culture in which a 'road ethos' is important [Falkowski, 2010]. Among young people, subcultures associated with pleasure driving are also noticeable [Carrabine & Longhurst, 2002].

Car culture is associated with the USA and its sprawling suburbs. Despite the smaller scale of suburbanization, car culture is also noticeable in Europe. This is fostered by suburbanization, a lack of investment in suburb infrastructure development, and advertising campaigns that to emphasize the non-material values of cars [Jóźwiak, 2017]. Modern cities have developed in a car-centric way, generating additional problems between mobility users, especially among car drivers, cyclists and pedestrians [Kallenbach, 2020]. This conflict mainly relates to space, a limited resource in in cities [Zając i in., 2014].

1.2. Carsharing and changing the car-oriented mobility patterns

The sharing economy can be defined as the concept where resources are shared, usually with the support of modern technologies [McLean, 2015]. In fact, this sharing economy fits aligns with the principles of sustainable development. Mainly due to its

circular, multi-user utilization of recourses [Hendel, 2020; Waśkiewicz, 2022]. Sharing itself can be viewed as the initial stage of the post-growth era [Waśkiewicz, 2022]. However, its woth noting that sharing can be a specific marketing strategy and business model [Vith i in., 2019]. The success of companies such as Uber or Airbnb exemplify this. One of the more popular examples of sharing is the carsharing concept, where cars are shared among different users [Kawa & Nesterowicz, 2022; Münzel i in., 2020]. Although this service is relatively new in Poland, such systems are already in operation in Western European cities [Pomianowski, 2018]. The development of carsharing (see Figure 1) depends on the city's conditions and the development of other forms of mobility, such as bikesharing or micromobility [Garus i in., 2022].

Business-to-consumer
The company provides a fleet of vehicles for private use, for a short period of time, usually in the pay-for-use form

Business-to-business
The company provides a fleet of vehicles for use by another organisation (private or public)

Peer-to-peer
The car owner shares his vehicle with another person via an online platform

Cooperative
The community uses a limited fleet of vehicles, journeys start and end at the same point, projects are most often subsidised by the government

Figure 1. Carsharing business model

Source: own elaboration based on [Nansubuga & Kowalkowski, 2021].

Carsharing encompasses multiple business models and combines different sales channels including; B2C, B2B, P2P and at the same time, their cooperation. In the business-to-consumer model, a company provides several cars to the market, which individual users utilize. Payment is typically made on a per-use basis (pay-for-use formula) and the journeys themselves are round-trip, allowing the vehicle to be left anywhere other than where the starting point. The same principles apply for the business-to-business model. The type of user is different, as the offer is aimed at private and public organizations, and payments are made though a monthly subscription. In the peer-to-peer model where private vehicle owners share their vehicle via an online platform or mobile app. The final model is cooperation, which closely resembles non-commercial sharing. However, the fleet of vehicles is limited to a specific fleet, usually requiring for the start and end point for the journey to be the same. Co-operative projects are often co-financed by the local government.

A single shared car can replace up to twenty private cars [Jochem i in., 2020]. This has measurable benefits for cities struggling with congestion and air pollution. Carsharing users are more concerned about the environment than users of services such as Uber [Mouratidis, 2022]. Also, they predominately reside in densely populated (urban) areas, and are prosperous and relatively young [Garus i in., 2022]. However, relying on shared vehicles without developing public transport and micromobility may not be sufficient enough to achieve a satisfactory level of urban transport sustainability [Ramos i in., 2020]. Urban transport planning should be approached in a holistic form, taking into account multiple forms of mobility and user behaviour.

Therefore, following the literature review, we have formulated the research questions as follows:

RQ1: Is there currently a peak car phenomenon observed in Poland, or will it occur in future?

RQ2: Are Polish people ready to change their mobility choices from owned cars to sharing, especially in large cities?

2. METHODOLOGY

The study investigates the capacity of the Polish population to transition from car ownership into more eco-friendly transport modes, including carsharing. In order to asses this, and determine if there is a difference between the residents of large, small or medium cities, we employed a random sampling method. This approach enables us to compare the subsamples for different places of living (countryside, small and medium cities, and large cities). The survey was conducted in November 2022 with a sample size of of 3094 people. The descriptive statistics of the sample are presented in Table 1. The sample stratification was based on three layers: gender, age and place of living. As shown in Table 1, two-thirds of respondents did not have children 0-15 y.o. in their household. These individuals usually indicated higher personal incomes and exhibited certain characteristics more frequently than those individuals living with children, like living in a big city, being in a relationship, or being single.

Table 1. Descriptive statistics of the surveyed group

Category	Share of respondents
Generation (age groups)	Baby Boomers (born 1946-1962) 25,44% X (born 1963-1980) 30,09% Y (born 1981-1999) 37,23% Z (born after 1999) 7,24%
Gender	Female 52,91% Male 46,93% Other 0,16%

Category	Share of respondents
Employment	Unemployed 12,54% Full-time workers 51,78% Part-time workers 8,05% Pensioners 21,20% Students 6,43%
Place of living	Small or medium city (small up to 20k residents, medium 20-100k residents) 32,68% Big city 29,44% Countryside 37,88%
Housing status	Own flat (without mortgage) 50,97% Own flat (with mortgage) 12,44% Owned by family (parents, grandparents etc.) 21,82% Rented flat 12,48% Commune-owned flat 1,68% Student dormitory 0,61%
Personal status	Married 51,68% Single 19,43% In a relationship 18,58% Divorced 5,53% Widowed 4,78%
Size of household	1 person 12,77% 2 persons 35,88% 3-5 persons 45,57% More than 5 persons 5,78%
Children 0-15 in household	No 67,10% Yes 32,90%
Income per person	Up to 500 PLN/month 5,14% 501-1000 PLN/month 9,82% 1001-1500 PLN/month 13,02% 1501-2000 PLN/month 17,36% 2001-3000 PLN/month 27,15% 3001-5000 PLN/month 20,17% More than 5000 PLN/month 7,34%

3. RESULTS

3.1. Using the transport modes

Firstly, we examined the transport mode choices in general, and considered the subgroups living in various locations. Generally (see Table 2), the majority of respondents use a car (over 56%). The second most popular mode of transport is walking, while the third option was taking a bus. This was anticipated since buses are the only form of PT available in all categories of residential areas of living including the countryside, small and medium city, large city. However, as mentioned earlier, transport exclusion is visible especially in the countryside. Of course, there are interregional differences as well as disparities between suburbs and regular rural regions which are formally

classified as a countryside. In the traditional countryside (not a suburb), in most cases, there are only 2 or 3 buses a day, if any, and they only operate during workdays or throughout the school year to facilitate the possibility for children to go to school by bus. Moreover, they are usually financed by local authorities due to the high costs associated to ticket revenues.

Almost 1/10 of respondents use bicycles as the primary mode of transportation with the exception of for the car and PT. The other modes are relatively rare, below 1% or slightly more than 1%, such as fast rail or metro (which are available only in a few Polish cities). Regardless, PT or sustainable transport accounts for nearly 44% of the first choice for all respondents, regardless of their place of residence.

Table 2. The main transport mode (general results for sample)

Transport means	No. of respondents	Share (in %)	
Bike	250	8,08016	
Car	1734	56,04396	
On foot	439	14,18875	
Fast rail/ metro	35	1,13122	
Carsharing	13	0,42017	
Regional rail	52	1,68067	
Motorbike	14	0,45249	
Bus	401	12,96057	
Tram/ trolleybus	118	3,81383	
Taxi	29	0,93730	
Owned e-scooter	5	0,16160	
Shared e-scooter	4	0,12928	

Source: own preparation (n=3094)

However, mobility services are not available in all types of cities, most notable the smallest ones (with populations up to 50 thousand residents). As shown in Table 3, there are significant differences between the first mode choice of transportation between subgroups living in different living categories. Naturally, in the countryside, the proportion of car users is much higher when compared to large cities, which provide more opportunities to abandon the car and utilize shared mobility or PT instead. In addition, there are more bike users in the countryside and smaller cities, for two reasons. Firstly, they opt to choose a car or bike since PT within one city is usually unavailable. Residents in small cities typically have lower personal incomes and pay more attention to fuel savings. Secondly, in small cities, nearly everything is within walking distance (up to 20 minutes on foot), this leads to a higher share of walking and bike usage. In that sense, they can be considered as: 20-minute cities. The significant differences acress the different types of residential living were also confirmed by carrying out the chi-square test (test value: 403,66, df=22, p=0.000). Therefore, it was justified to later analyze only the subgroup of largew city residents, who face higher traffic externalities and have more opportunities to change their mobility choices.

Table 3. The differences between residents of countryside, small and medium cities and big cities in their first mode choice

Sum	1011	100%	1172	100%	911	100%
E- Shared scooter e-scooter	2	0,20%	0	0,00%	2	0,22%
E-scooter	4	0,20%	0	0,00%	5	0,55%
Taxi	11	1,09%	9	0,51%	12	10,65 1,32% (
Tram/ Taxi trolley	11	1,09%	10	0,85%	26	
Bus	104	1,68% 0,20% 10,29% 1,09% 1,09%	107	9,13% 0,85% 0,51%	190	0,88% 0,22% 20,86%
Motor bike	7	0,20%	10	2,30% 0,85%	2	0,22%
Carsha Regional Motor ring rail bike	17	1,68%	27	2,30%	8	0,88%
Carsha ring	5	0,49%	4	0,34%	4	2,52% 0,44%
Fast rail/ metro	∞	0,79%	4	0,34%	23	
Car On foot	215	21,27%	94	8,02%	130	14,27%
Car	552	54,60%	962	67,92%	386	42,37%
Bike	82	8,11%	114	9,73%	54	5,93%
Place of living	Small or medium sized city	Share in % 8,11% 54,60% 21,27%	Countryside	Share in % 9,73% 67,92% 8,02%	Big city	Share in % 5,93% 42,37% 14,27%

Source: survey (n=3094)

Next, the respondents' opinions were analyzed, with regards to their preferences for purchasing a car or their general perception of cars. As presented in Figure 2, respondents affirmed that when considering the purchase of a new car, they would pay attention to its ecofriendliness.

F I w ould buy a car, it should be eco-friendly

700

600

500

2

300

200

100

1 2 3 4 5 6 7 8 9 10

Significance (1-I completely disagree, 10-I completely agree)

Figure 2. Answers for the question, if the respondent would pay attention to car's ecofriendliness while buying a car

Source: own preparation (n=3094).

In general, they confirm that cars should be eco-friendly (see Figure 3)

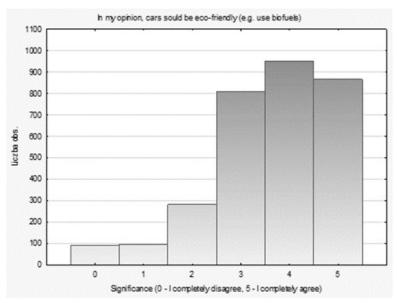


Figure 3. Answers for the question, if generally cars should be eco-friendly

Source: own preparation (n=3094).

On the other hand, we are aware of the prevailing characteristics of the car fleet in Poland, which usually compromises of old, diesel vehicles that are not eco-friendly, generating high emissions that often fail to meet EURO standards. With this in mind, is the ecofriendliness of Polish people presented in our study a myth? Do we still face the growing car culture and are not able to transition towards more sustainable mobility? To answer this, we estimated the correlation between the characteristics of people's mode choices and their opinions regarding the ecofriendliness of cars. The correlation analysis (see Table 4) showed that:

- The younger the generation, the less eco-friendly they tend to be are less likely are to look for an eco-friendly car. However, the most eco-friendly opinions were presented by the oldest cohort (Baby Boomers, aged 59 or more) and generation Z (aged 22 or less). The lower ecofriendliness was displayed by generation Y (aged 23-42)
- Larger households are genrally less eco-friendly regarding car-related opinions.
 This is highly correlated with having children with bigger households usually includinh children, or elderly with limited mobility possibilities who depend on younger family members.
- When there are children at home, the ecofriendliness of a car is less important.
 Usually, parents present less eco-friendly mobility choices because of their travel needs, higher levels of exhaustion and the need to take more things while travelling with children.
- The higher levels of income, are linked with an increased focus on ecofriendliness while purchasing a car and in the general opinions about cars. Academic literature supports this, suggesting that financial stability encourages a more eco-friendly lifestyle and ideas.
- The more flexibility and freedom are in the respondent's life (typically BB and Z), the more eco-friendly the respondent tends to be. Often the youngest cohorts (generation Z), present the most flexible approach to mobility. They usually have no children, are just embarking on their professional career, have no loans, live with their parents, or rent a room or flat with friends. As such, so their lifestyle and life stage allow for flexible use of time and resources.
- Having a driver's license is inversely correlated with seeking for an eco-friendly car. Drivers do not usually consider this as an essential factor. This confirms their limited orientation towards ecofriendliness, with them focusing on using the car.
 The same mentality we observed among motorbikes users.
- However, car users indicated they would pay attention to the car's ecofriendliness
 when purchasing a new model. However a deeper screening, is needed to determine whether their motivation is based on their want to be eco-friendly or their
 desire to generate savings while driving the car,
- People using PT and bikes or those who often walk, indicated that if they looked for a car, they would pay attention to its ecofriendliness. This also confirms their

approach to mobility, where their focus is on mobility itself rather than the need to use a car.

• Surprisingly, bus users indicated that they would ignore ecofriendliness in purchasing process while buying a car, but strongly belive that cars should be eco-friendly.

In addition, to clarify and support the obtained results, we estimate that (see Table 5):

- Larger households have a longer the travel time per day often due to commuting to children's school or driving with the partner or spouse to work with one car.
- Having children is correlated with longer daily travel time as previously mentioned
- Bigger residential areas have greater quantities of people using PT due to its availability.
- Larger households, ten to use PT less because of shared commuting every day to school and work, in addition to having children.
- Higher income levels, correlate with increased frequency of PT usage. While this is contrary to exciting knowledge. It is important to keep in mind, that typically, higher income per person was linked with living in larger cities being single or in a relationship but without children, reaffirming previous results.

Table 4. Correlation coefficients – respondents' characteristics vs. opinions about car ecofriendliness (bolded are significant)

	If I would buy a car, it should be eco-friendly	In my opinion, car should be eco-friendly (e.g. use biofuels)
Generation	-0,0590	-0,1678
No. of persons in household	-0,0350	-0,0423
Children 0-15 in a household	-0,0637	-0,0231
Income level (per person)	0,0551	0,0852
Mindset – I prefer freedom and flexibility than stable but boring work.	0,0621	0,0648
Having driving license	-0,0497	0,0050
Main_mode_tram/trolley	0,0892	0,0144
Main_mode_fast_rail/metro	0,0594	0,0198
Main_mode_regional_rail	0,0831	-0,0033
Main_mode_motorbike	0,0053	-0,0362
Main_mode_bike	0,1028	0,0161
Main_mode_on foot	0,0703	0,0393
Main_mode_bus	-0,0421	0,0508
Main_mode_car	0,1241	0,0138

Source: own preparation (n=3094)

Table 5. Correlation coefficients – travel times and using PT vs. respondents characteristics

	Ch	aracteristic o	of responde	nt
Category/variable	Size of the place of living	No. of persons in the household	Children 0-15	Income level
Travel time	0,0339	0,0385	0,0408	0,0092
Frequency of using public transport	0,3240	-0,0945	-0,0914	0,0635

Source: own preparation (n=3094)

As well, as shown in Table 6, further research results revealed that:

- The benefits of using a car are recognized mainly by respondents having children or living in bigger households. For them, the car is not also a means of transport but something more it serves as a tool that helps to achieve goals, save time and complete all planned activities,
- Residents in large cities perceive the car not as the only way to achieve their mobility goals, such as meeting friends and family or going to a pub. They do not perceive owning a car as a means to demonstrate their freedom, express themselves or be happy. Instead, they more frequently expressed that they could live without a car. A stark contrast to the opinions presented by the group of members from larger households and parents,
- Respondents with higher personal income levels did not perceive cars as giving
 unlimited mobility possibilities. Instead, they regard it as a facilitator for meetings
 with friends and family and an object offering freedom and independence. They
 also pay attention to comfort, unlike parents and those living in larger households,
 who place a greater emphasis savings but are not willing to resign from their car.

Additionally, partial correlations were estimated to assess opinions and attitudes of Polish people. As shown in Appendix (see Table A1), the willingness to resign from using the car was limited. The results are as follows:

- Using PT is associated with a longer travel time compared to other means of transport. Using PT denies the usually indicated benefits of car like independence and freedom. PT users also do not want cars to be more durable and express more favourable felling's towards using the sharing economy solutions.
- Respondents who argue that cars should be more environmentally friendly indicated that, all of the above mentioned benefits of driving a car are true, but primarily view cars as a tool to achieve other goals. They are also willing to replace the car with sharing economy solutions. Similar opinions were observed among individuals who want cars to be more durable and efficient in the long-term.
- Car enthusiasts generally were optimistic towards all of the mentioned benefits, recognizing the significant benefits they gain from using a car

• Positive attitudes towards shared mobility were not influenced by the respondents travel time, nor their preferences of a car as the best mode of transport. However, within the entire surveyed group, it was visible that they are optimistic about the shared economy of carsharing. This implies that they are not willing to abandon car usage but can resign from owning a car.

In the case of big city residents who are car enthusiasts (see Table 7), they expressed approval for the concept of carsharing. The idea of carsharing services provided by PT operators was also positively favoured among them. These individuals indicated they would use such a solution. They also expressed that their willingness to give up driving their own cars in favour of shared cars provided by the PT operator. In addition, when discussing bike-sharing services, surprisingly, car enthusiasts living in big cities viewed them as a good idea to implemented in their city.

Table 6. Correlation coefficients – opinions about cars in the whole surveyed sample (bolded are significant)

	Cha	aracteristic o	f responde	nt
Category/variable	Size of the place of living	No. of persons in the household	Children 0-15	Income level
The car gives unlimited travel possibilities	-0,0173	0,0551	0,0616	-0,0455
The car makes it easier to get together with family and friends than any other means of transport	-0,1410	0,0885	0,0588	0,0455
The car is just a means of transport for me, nothing more	-0,0094	-0,0611	-0,0620	0,0147
I prefer to travel by car than any other means of transport	-0,1321	0,1210	0,1002	0,0171
Thanks to the car, you can get to the desired place much faster than by other means of transport	-0,0993	0,0463	0,0247	0,0130
The car supports self-realization, the achievement of one's own goals	-0,1032	0,0883	0,0762	0,0153
The car facilitates the use of entertainment (cinema, theatre, pub)	-0,1523	0,1046	0,1028	0,0159
The car is associated with freedom and independence	-0,0688	0,0625	0,0430	0,0590
I would like to travel cheaply by car, even at the expense of comfort and quality	-0,1070	0,0976	0,0549	-0,0624
Owning a car contributes to a higher level of happiness	-0,1119	0,1452	0,1274	-0,0245
Your car reflects your standard of living and material status	-0,0138	0,1135	0,1234	-0,0276
I like the concept of carsharing or car rental	0,0177	0,0115	0,0401	0,0302
You can live without a car	0,1421	-0,0949	-0,0976	0,0248

Source: own preparation (n=3094)

Table 7. Correlations coefficients – willingness to use the car, car enthusiasm, willingness to use sharing economy among the big cities residents

Variable/opinion	Generation	Income	Household size	Children 0-15
The car gives unlimited travel possibilities	0,0021	-0,0071	0,0108	0,0186
The car makes it easier to get together with family and friends than any other means of transport	-0,0327	0,0641	0,0344	0,0206
The car is just a means of transport for me, nothing more	-0,1555	0,0564	-0,0743	-0,0881
I prefer to travel by car than any other means of transport	0,0443	-0,0048	0,1355	0,0849
Thanks to the car, you can get to the desired place much faster than by other means of trans- port	-0,0576	-0,0190	-0,0187	-0,0218
The car supports self-realization, the achievement of one's own goals	0,0373	0,0151	0,0430	0,0668
The car facilitates the use of entertainment (cinema, theatre, pub)	0,0193	0,0350	0,0522	0,0945
The car is associated with freedom and independence	0,0215	0,0388	0,0211	0,0366
I would like to travel cheaply by car, even at the expense of com- fort and quality	0,0200	-0,0210	0,0679	0,0391
Owning a car contributes to a higher level of happiness	0,0952	-0,0329	0,1072	0,1246
Your car reflects your standard of living and material status	0,0576	-0,0486	0,1024	0,1506
I like the concept of carsharing or car rental	0,0443	0,0720	0,0212	0,0791
You can live without a car	-0,0867	-0,0243	-0,0775	-0,0701
If a public carrier offered a car by the hour as one of the means of transport, I would use such a solution	0,0762	-0,0253	0,0932	0,1384
I believe that the introduction of bicycles rented by the minute is a good idea	-0,0766	0,0744	-0,0631	-0,0416
If the public transport offer included a car rented for minutes, I would give up driving my own car	0,0182	-0,0200	0,0679	0,0955

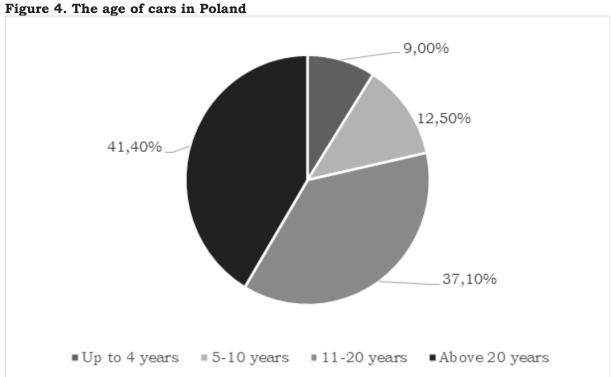
Source: own preparation (n=911)

5. DISCUSSION AND CONCLUSION

The results we elaborated allowed to answer the research questions as presented below.

RQ1: Is there currently a peak car phenomenon observed in Poland, or will it occur in future?

In our assessment, taking into consideration the survey data, we are currently experiencing the peak of car usage. Residents of big cities are open to use alternative solutions but are not willing to resign from using cars as main mode of transport. Moreover, the statistical data confirms the level of car enthusiasm in Poland. The results of the statistics show how Poland is more car-oriented every year. In the CEE region, it has the highest number of cars per 1000 residents, a number that is growing yearly. Moreover almost half of the city's emissions are generated by traffic. Although, the mean age of cars in Poland decreases every year, it is over 20 years old. Even if we assume that at least 10% of those cars included are not used in practice, the car age in Poland is still relatively high, exceeding 10 years (see also Figure 4). With this in mind, the motorization ratios are still the highest in CEE region (see Figure 5). Considering the history of motorization in developed countries, this ratio will not grow as much in the future; instead, we are witnessing the highest focus on car mobility. However, we might expect changes in the car fleet's in the future, namely the average age of car size is expected to decline.



| Source: Yearbook of Automotive Industry 2022/2023, page 28, Polish Automotive Industry Association, Warsaw 2023

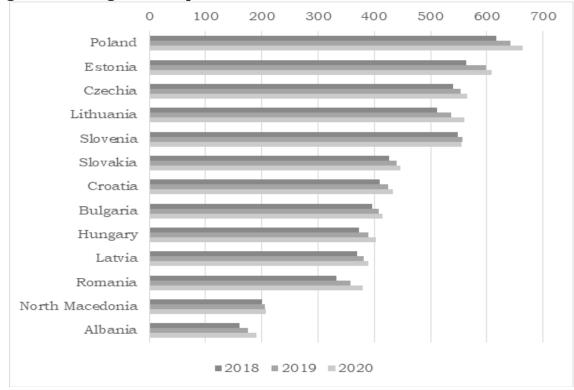


Figure 5. CEE region - cars per 1000 inhabitants

Source: Eurostat.

RQ2: Are Polish people ready to change their mobility choices from owned cars to sharing, especially in large cities?

Certainly, there is a strong car orientation among the Polish people. They recognize the benefits of using a car and are willing to change in favour of more sustainable usage of cars, in the form of carsharing. However, they are not willing to abandon the ownership of cars. For now, using the bike and other micromobility solutions, including the shared one, is strongly related to living in a big city where those solutions are available. However, car enthusiasm and orientation will still support the car culture in the following years, and the development of shared mobility will be slow. Poland's carsharing market is estimated at 1 million users and is still growing. Data presented in Figure 6 and Figure 7 illustrates the most prominent market players and cities with the highest number of shared cars. To further discuss the results and draw recommendations, we also compared the carsharing fleet size with the congestion levels (see Table 8). The results show that there is no correlation between the car fleet size, congestion level and population density (checked by the tau Kendall and rho Spearman test, the p-value was higher than 0,05). Consequently, the congestion level is not correlated with the city's population size, and the fleet size does not impact congestion levels, due to low mobility choices for the residents. Therefore, future research is needed to to simulate these changes if e.g. 10% or 20% of car users will move to carsharing. Despite this pessimistic data regarding car usage and the car-centric approach in Polish society, in our opinion, the results of this study

how shared economy solutions and micromobility, provide hope for the changes in mobility choices and modal splits (see Figure 8). Although there is still a large interest in carsharing services, both non-commercial and commercial, the use of micromobility is still high, considering that not all mobility service providers operate in large cities. Nearly 10% of the surveyed group living in large cities declared they use shared micromobility (bearing in mind that bikes are the most popular transport mode among micromobility users in general, with most users owning a bicycle). Within this group, Lime services (kick-scooter sharing) which are available in the vast majority of Polish cities had the highest usage in the group of shared micromobility service providers.

0% 30% 5% 10% 15% 20% 25% 35% 40% 45% Panek Car Sharing 43% Traficar 41% EasyShare 29% CityBee 23% 4mobility 18% Vozilla 17% GreenGoo 15% 14% Turo Other car sharing provider

Figure 6. The biggest carsharing providers in Poland in 2022

Source: Statista

0 500 1 000 1 500 2 000 2 500 Warszawa 1 920 Gdańsk 870 Kraków 650 Poznań 380 Wrocław 340 Łódź 250 Szczecin 240 Gdynia 190 Katowice 120 Sopot 70 Lublin 40 Białystok 30 Bydgoszcz 30 Chorzów 30 Sosnowiec 20

Figure 7. The biggest carsharing fleet in Poland in 2022 by city

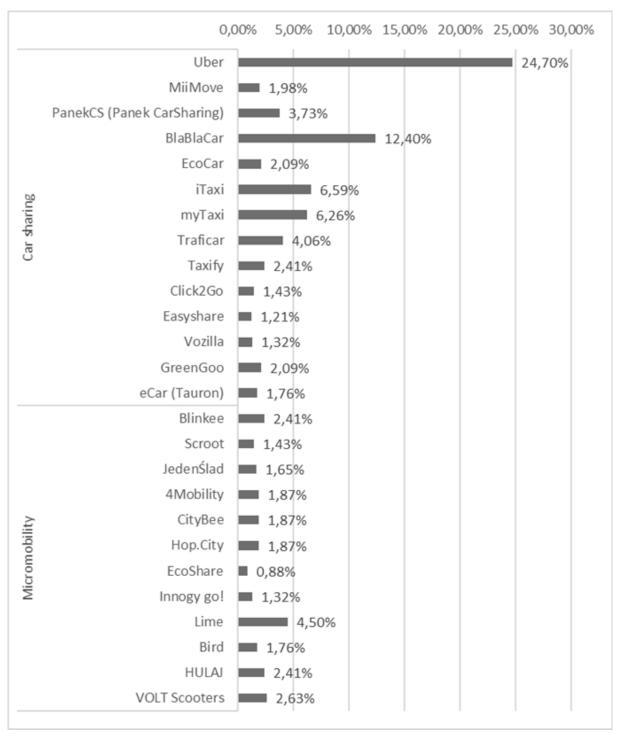
Source: Statista

Table 8. Ranks of carsharing fleet size and the congestion level

City	Rank – car- sharing fleet size	Rank – conges- tion level	Rank-pop- ulation density	Population den- sity per 1 sq km
Warszawa	1	5	1	3597
Gdańsk, Gdynia, Sopot	2	9	9	1855 (Gdańsk)
Kraków	3	3	3	2450
Poznań	4	7	7	2088
Wrocław	5	1	4	2298
Łódź	6	2	5	2287
Szczecin	7	4	11	1318
Katowice	8	11	10	1717
Lublin	9	8	6	2270
Bydgoszcz	10	6	8	1919
Białystok	10	10	2	2881

 $Source: own\ elaboration\ based\ on\ TomTom\ Traffic\ Index\ and\ Statista.$

Figure 8. Use of carsharing and micromobility in the group of respondents living in big cities in Poland



Source: own elaboration (n=911).

To conclude, our research has revealed that Polish people are car enthusiasts unwilling to abandon their vehicles, in large cities, small and medium-sized and in the countryside. In large cities, residents are more willing to use carsharing services, both among car users and PT users. However, their enthusiasm towards cars re-

mains high, and car culture remains prevalent among Polish society. The oldest and youngest residents present more eco-friendly mobility choices and attitudes. Nevertheless, their choices are dependent on the life stages, with parents being more car-oriented than people without children. The cohort of people aged 23-42 years old (generation Y) are the most enthusiastic about cars, many of whom are also parents. In general, the peak car phenomenon will be observed in Poland will likely persist for a few more years. However the Polish population is willing to transition their mobility choices towards more sustainable mobility options while still keeping ramming enthusiastic about cars.

Despite the valuable insights gained through this study, there are still some limitations. Firstly, the primary focus was on on carsharing services, not bike sharing. As such the study does not investigate people's willingness to use bike sharing and micromobility to transition away from car ownership. This should be the focus of future research investigations. Secondly, we did not examine the reasons for using cars other than those set forth by the limitations and obstacles put forth by PT operators. Lastly, we did not analyze the data with correlation to transport exclusion. Despite the limitations, we hope this study provides insightful information about Polish people, their mobility choices and preferences and start the discussion about providing viable alternatives to private car ownership in urban areas. Addressing the problem of high car enthusiasm is a high priority, not only in terms of choosing the preferred mode of transport but also in terms of convenience, that allows people to complete their daily actives. People need attractive alternative choices to cars in cities (e.g. micro cars or carsharing), in order to help them be more eco-friendly while still meeting mobility needs and preferences. Local authorities need to tackle congestion problems not only by restricting access to the city center but by also proposing alternatives away from private car usage.

FUNDING

The research was funded by National Science Center in Poland under the project "Sharing-economy and micromobility solutions for modeling flows of people and cargoes in cities and suburban zones", agreement no. UMO-2020/39/D/HS4/00299

REFERENCES

Arcimowicz, K., (2019), Znaczenia symboliczne oraz inne funkcje samochodu we współczesnej rodzinie, in Studies on the Theory of Education, 3(28), 111–128, Wydawnictwo Naukowe Chrześcijańskiej Akademii Teologicznej w Warszawie, Warszawa.

Carrabine, E., Longhurst, B., (2002), Consuming the car: Anticipation, use and meaning in contemporary youth culture, in Sociological Review, 50(2), 181–196, SAGE PUB., Lancaster.

Falkowski, M., (2010), Życie codzienne w samochodzie. Schematy interakcji i wzajemnego postrzegania się kierowców z perspektywy socjologii życia codziennego, in Kultura i Społeczeństwo, 54(1), 161–180, Komitet Socjologii PAN oraz Instytut Studiów Politycznych PAN, Warszawa.

Garus, A., Alonso, B., Alonso Raposo, M., Ciuffo, B., Dell'olio, L., (2022), Impact of New Mobility Solutions on Travel Behaviour and Its Incorporation into Travel Demand Models, in Journal of Advanced Transportation, 2022, Hindawi, London.

Heinonen, J., Czepkiewicz, M., Árnadóttir, Á., Ottelin, J., (2021), Drivers of car ownership in a car-oriented city: A mixed-method study, in Sustainability (Switzerland), 13(2), 1–26, MDPI, Basel.

Hendel, M., (2020), Miejsce zjawiska współdzielenia w koncepcji zrównoważonego rozwoju, in Poznań Journal of Law, Economics and Sociology, 2, 167–178, Wydawnictwo UAM, Poznań.

Jochem, P., Frankenhauser, D., Ewald, L., Ensslen, A., Fromm, H., (2020), Does free-floating carsharing reduce private vehicle ownership? The case of SHARE NOW in European cities, in Transportation Research Part A: Policy and Practice, 141(October), 373–395, Elsevier, Amsterdam.

Jóźwiak, J., (2017), Motyw spełnienia marzeń w reklamach samochodów w kontekście metafor głębokich, in Acta Universitatis Lodziensis. Folia Linguistica Rossica Acta, 14, 81–89, Wydawnictwo UŁ, Łódź.

Kallenbach, T., (2020), Narratives of urban mobility in Germany: on the threshold of a departure from the car-centered city?, in Sustainability: Science, Practice, and Policy, 16(1), 197–207, Taylor & Francis, London.

Kawa, M., Nesterowicz, A., (2022), Rozwój sharing economy w Polsce na przykładzie usług carsharingowych firmy Panek CarSharing S.A., in Przedsiębiorczość - Edukacja, 18(1), 90–97, Instytut Geografii Uniwersytetu Pedagogicznego w Krakowie, Kraków.

Leśniak-Moczuk, A., (2020), Społeczne funkcje samochodu w socjologii życia codziennego, in Transformacje, 1, 123–135, Fundacja Edukacyjna "Transformacje", Warszawa.

McLean, S., (2015), The rise of the sharing economy, in Computers & Law Magazine of SCL, 26(1), 26–28, SSCL, Edinburgh.

Mouratidis, K., (2022), Bike-sharing, car-sharing, e-scooters, and Uber: Who are the shared mobility users and where do they live?, in Sustainable Cities and Society, 86(104161), 1–14, Elsevier, Amsterdam.

Münzel, K., Boon, W., Frenken, K., Blomme, J., van der Linden, D., (2020), Explaining carsharing supply across Western European cities, in International Journal of Sustainable Transportation, 14(4), 243–254, Taylor & Francis, London.

Nansubuga, B., Kowalkowski, C., (2021), Carsharing: a systematic literature review and research agenda, in Journal of Service Management, 32(6), 55–91, Emerald, Bingley.

Pomianowski, A., (2018), Uwarunkowania i rozwój usług typu carsharing w Polsce, in Europa Regionum, 35, 43–53, Wydawnictwo Uniwersytetu Szczecińskiego, Szczecin.

Ramos, É. M. S., Bergstad, C. J., Chicco, A., Diana, M., (2020), Mobility styles and carsharing use in Europe: attitudes, behaviours, motives and sustainability, in European Transport Research Review, 12(1), Springer, Berlin.

Vith, S., Oberg, A., Höllerer, M. A., Meyer, R. E., (2019), Envisioning the 'Sharing City': Governance Strategies for the Sharing Economy, in Journal of Business Ethics, 159(4), 1023–1046, Springer, Berlin.

Waśkiewicz, A., (2022), Rewolucja konsumentów? Ekonomia współdzielenia jako nowa wizja ładu społecznego, in Poznań Journal of Law, Economics and Sociology, 1, 179–195, Wydawnictwo UAM, Poznań.

Zając, A. P., (2014), Samochód jako wyzwanie dla miasta XXI wieku, in Zeszyty Naukowe Uniwersytetu Zielonogórskiego: Inżynieria Środowiska, 155(35), 84–94, Wydawnictwo UZ, Zielona Góra.

APPENDIX

Table. A1. Partial correlations between the respondents with particular opinions (opinions 3-17), travel time (1) and frequency of using PT (2)

No.	Variable	-	7	က	4	2	9	7	80	6	10	==	12	13	14	15	16	17
	Travel time	1,00	60'0	-0,01	-0,03	-0,01	-0,07	-0,02	-0,07	-0,03	-0,04	-0,02	-0,05	-0,02	00'0	10′0	-0,02	-0,02
2	Frequency of using public transport		1,00	-0,02	-0,13	-0,03	-0,19	-0,04	-0,36	-0,20	-0,15	-0,15	-0,17	-0,12	-0,15	-0,01	80′0	0,19
က	In my opinion, cars should be environmentally friendly (e.g. powered by fuels from renewable raw materials)			1,00	0,28	0,18	0,22	0,22	0,11	0,24	0,23	0,19	0,21	0,19	0,11	60'0	0,23	0,12
4	Cars should be more durable than they are now				1,00	0,24	0,47	0,22	86,0	0,47	0,43	0,32	0,46	0,33	0,33	0,13	0,12	0,03
ıs.	The car gives unlimited travel possibilities					1,00	0,29	0,18	0,23	0,25	06'0	0,29	0,27	0,28	0,31	0,23	0,13	0,02
9	The car makes it easier to get together with family and friends than any other means of transport						1,00	0,13	0,54	95'0	0,57	0,54	09′0	0,35	0,48	0,25	80′0	-0,07
7	The car is just a means of transport for me, nothing more							1,00	20'0	0,15	90'0	80′0	60'0	0,21	-0,02	-0,03	0,11	0,14
8	I prefer to travel by car than any other means of transport								1,00	0,54	02'0	0,45	0,53	96'0	0,48	0,23	0,02	-0,19
6	Thanks to the car, you can get to the desired place much faster than by other means of transport									1,00	0,49	0,44	92′0	0,32	0,42	0,17	60'0	-0,07
10	The car supports self-realization, the achievement of one's own goals										1,00	0,50	9'0	0,37	0,58	0,32	0,14	-0,10
11	The car facilitates the use of entertainment (cinema, theater, pub)											1,00	0,49	0,33	0,47	0,26	0,13	-0,10
12	The car is associated with freedom and independence												1,00	0,37	0,56	0,28	0,11	-0,10
13	I would like to travel cheaply by car, even at the expense of comfort and quality													1,00	0,37	0,25	0,16	-0,05
14	Owning a car contributes to a higher level of happiness														1,00	0,44	0,13	-0,14
15	The car reflects the standard of living and material status															1,00	0,22	-0,02
16	I like the concept of carsharing or car rental by the minute/hour																1,00	0,16
17	I can live without a car																	1,00

Source: own elaboration (n=3094)

Table A2. Partial correlations between the attitudes and opinions of urban residents about the car and shared mobility

No.	Attitude/opinion	-	7	က	4	ß	9	7	8	6	10	11	12	13	14	15	16
1	The car gives unlimited travel possibilities	1,000	002'0	0,137	0,221	0,237	0,295	0,313	0,244	0,302	0,306	0,213	0,165	0,044	0,121	0,121	0,148
2	The car makes it easier to get together with family and friends than any other means of transport		1,000	0,101	0,541	0,556	0,553	0,550	0,614	896'0	0,518	0,302	0,073	-0,114	0,120	0,074	0,023
3	The car is just a means of transport for me, nothing more			1,000	0,027	0,126	0,007	0,058	0,051	0,162	-0,026	-0,038	0,131	0,169	0,024	0,133	690'0
4	I prefer to travel by car than any other means of transport				1,000	0,525	0,509	0,462	0,546	0,391	0,540	0,274	0,031	-0,232	0,158	-0,007	0,037
5	Thanks to the car, you can get to the destination much faster than by other means of transport					1,000	0,461	0,423	0,547	0,325	0,444	0,219	0,002	-0,076	0,026	7/000	690'0-
9	The car supports self-realization, the achievement of one's own goals						1,000	0,468	0,649	0,443	809′0	0,394	0,119	-0,202	0,164	080′0	980′0
7	The car facilitates the use of entertainment (cinema, theatre, pub)							1,000	0,459	0,359	0,496	0,357	0,087	-0,121	0,143	0,038	0,132
× ×	The car is associated with freedom and independence								1,000	0,401	0,581	0,380	0,092	-0,149	0,133	0,113	0,044
6										1,000	0,434	0,267	0,180	-0,100	0,220	0,075	0,189
10											1,000	0,476	0,157	-0,208	0,210	890′0	0,152
11	Your car reflects your standard of living and material status											1,000	0,212	-0,103	0,323	0,115	0,250
12	I like the concept of carsharing or car rental												1,000	0,119	0,587	0,404	0,531
13	You can live without a car													1,000	0,005	0,161	0,064
14	If a public carrier offered a shared car as one of the means of transport, I would use such a solution														1,000	0,245	0,702
15	I believe that the introduction of shared bicycles is a good idea															1,000	0,212
16	If the public transport offer included a shared car, I would give up driving my own car																1,000

Source: own elaboration (n=911)

E-CULTURE FOR ALL: AN INITIATIVE TO BROADEN HORIZONS. CREATING CONVERGENCES OUT OF A FRAGMENTED GLOBAL SCENARIO

Delma Rodriguez Morales

Teachers' Institute "Artigas"

(Instituto de Profesores "Artigas") in Montevideo

Avenida Libertador Brigadier General Lavalleja 2025, Montevideo, Uruguay

prof.delma.rodriguez@gmail.com

Abstract

Faced with several crises, such as climate change, social asymmetries and more, this article summarises key points in the field of e-Culture to engage audiences in raising awareness on current issues.

Analysing the latest situation from both a local and global approach brings some key points, such as questions and strategies to emphasize the co-creation of sustainable information and communication highways for e-Culture.

In conclusion, the article reinforces the value of educating future teachers as a cornerstone for shaping and transforming society. This education becomes a catalyst for generating a cognitive convergence capable of raising awareness of the creative human capacities needed to build a sustainable future, together with a robust training strategy in the digital humanities to address various crises, present or future.

Key words: e-Culture, Co-Creation, Teachers Training Education, Sustainable Future, Digital Humanities.

INTRODUCTION

The article's context focuses on the convergence of Educational Sciences located in the Teacher Training Education in Uruguay, together actions related to the field of e-Culture in the Latin American-European Cultural Ring in Uruguay and its global networks. The objective of different projects and initiatives carried out is aimed at fostering both global and local awareness, with an emphasis on sensitising and informing audiences about a sustainable future, through caring for nature in the face of the challenges caused by the expected climate change crisis.

In Europe, since the establishment of the European Commissioner for Climate Action (https://climate.ec.europa.eu/index_en) in 2010, there has been an increase in initiatives aimed at raising awareness about humanity's sustainability future in relation to the climate crisis. Moreover, in the field of e-culture, especially within the Latin American-European Cultural Ring in Uruguay, which serves as a network of co-creation across the Internet in the realm of art, science, technology and society (https://anillaculturaluruguay.net/) since 2011, numerous initiatives have been carried out on contemporary issues, as previously mentioned.

In this regard, it is useful to ask ourselves: what are the five key words for the future? In fact, there is the European platform on the web called "5 Words for the Future" (https://fivewordsforthefuture.eu/), curated by Prof. Pier Luigi Capucci. From this repository, the author the author shared five words for the future four years ago. It is important to clarify that there is no self-referential intent, but rather, these five words result from reflection and synthesis of the collaboaritve work in networks carried out in the Cultural Ring. These remain relevant in relation to the theme of the conference "Science and Education for Sustainable Development" particularly within the panel of "Humanities facing the challenges of the climate crisis", organized by the University of Gdansk on the 24th and 25th of November 2022.

The five words can also be understood as interrelated ideas and concepts, which are:
1) collaboration and co-creation of new developments, 2) empathy, involving deep comprehensive understanding about nature from a local and personal level, 3) openness through Internet networks, 4) networks bridging the gap between human and technology, 5) wisdom. In the context of the climate crisis, these five words (collaboration, empathy, openness, networks and wisdom) have a significant role to play in reflecting on the challenges faced by humanity.

Those reading this article have surely imagined their own five words for the future, shaped by individual perspectives and circumstances. Readers may feel free to imagine future scenarios when reading this text, for this article is not only intended to provide information, but also to motivate and exercise cognitive engagement in order to contribute to the creation of a new and improved future for all.

1. IMMERSED AT THE HEART OF THE E-CULTURE

Pioneered by Alfredo Ronchi in his book "e-Culture: Cultural Content in the Digital Age" (2009), the field of e-Culture relates to the preservation of cultural heritage, rather than commercial or business aspects. In addition, the development of the field itself is currently linked to the interdisciplinary study of creators, encompassing both artists and scientists, among many other profiles, who create various digital manifestations on Internet networks and connected devices [Baeva 2017].

We identify two types of interconnected digital devices: a) those that have a counterpart or similarity in the real world, such as e-museums, e-libraries, etc.; b) as well as digital objects themselves, such as video games, apps, social media, etc.

Other fields such as Digital Humanities¹, networked culture, digital activism, etc. intersect with the field of e-culture. Therefore, the need to establish a theory of e-Culture based on a concept of "third nature" [Baeva 2019: 513], generated between the interactions of human creativity and information technologies, emerges from the scarce intellectual and scientific production in this field.

All this leads to the development of a "systematisation of e-Culture" [Baeva 2018: 328] and makes the field an area of opportunities for professional work. However its study is complex due to the porosity and intertwining of disciplines, among other emergent or conditioning factors.

In order to address and transform local and global problems, such as the climate crisis, that affect all areas and fundamentally threatens the future survival as humanity, it is vital that we look at the climate crisis from both a local and a global perspective.

To establish a logical order of concepts, with the climate crisis as the focal point, we should recognize its correspondence with a global crisis and the need to view it simultaneously from a local and global perspective to find GloCal solutions (a neologism and acronym between Global and Local).

At present, if we seek find solutions to GloCal problems, despite these digital technological environments serving as both the problem and solution from the perspective of the climate crisis, we need to use the ICT world as the most appropriate strategy for raising awareness of the climate crisis.

This may appear to be obvious, but the challenge lies in the need to generate meaningful action from this awareness. To achieve this, we inevitably have to immerse ourselves in an intertwining of the symbolic world, individual and collective cognitions, together with ICT technologies. It is therefore working in the field of e-Culture within the Digital Humanities at its foundation is essential.

The linkages between e-Culture and the Digital Humanities seem at times almost undifferentiated and simulations are influenced by the challenges and novelty digital tools bring themselves, as well as containing the synergy between local and global dimensions.

What does the Digital Humanities entail?

 $^{^{1}}$ Hereafter, the acronym DH or Digital Humanities is used interchangeably in the text.

Similar to e-Culture, Digital Humanities aims to demonstrate the nature of epistemological shifts for research in the humanities', understanding that there are multiple representations of knowledge and culture, while also being grounded in a 'glocal (global-local)' scope [Rio Grande 2014], similar to e-Culture, which 'accounts for different ways of generating, representing and accessing knowledge and culture'. Whilst López Poza (2019) identifies DH as,

"a transdiscipline, a set of academic knowledge that combines the methodologies and contents of the traditional disciplines of the Humanities (and some include the Social Sciences) with the use of tools, applications and heuristic perspectives provided by computer science and statistics." (p.128)

On the other hand, Rio Grande (2014) emphasises that the DH "do not constitute a thematic discipline, but a set of procedures that cut across our areas of interest". Referring to the famous Digital Humanities Manifesto, the author states that trying to define the DH implies establishing "postcolonial parameters" that aids in understanding the global landscape of the Digital Humanities, through a "reworking of the concept of local knowledge that provides consistency to the knowledge and perceptions of this for a culture". [https://bit.ly/3m9tuz]

Another digital humanities expert, Christopher Nunn, asks and answers the question in his blog: "Is there THE theory of digital humanities? Certainly not. The field is far too diverse for there to be one single theory that covers it all". He defines himself as "someone who considers himself a practitioner" of the field, and at the same time as a digital humanities scientist, it is necessary to engage deeply with the theoretical imbrications in a process of permanent revision, avoiding reductionisms and absolutisms which are unnecessary in such a diverse and dynamic field of knowledge. [https://bit.ly/3ZM8rl1]

Returning to the idea of reconfiguring the GloCal correlation, with Rio Grande's idea of establishing "postcolonialist parameters" in the Digital Humanities connected with Educational Sciences, pedagogy and innovation, we find an interesting commonality. In the 2019 report 'Innovating Pedagogy' at Open University, which recommends 'decolonising learning' as a pedagogical trend for that year, among others such as 'virtual studios', 'drone-based learning', 'action learning', etc.

As a consequence of an increasingly globalised education, educational communities have questioned whether the teaching and learning value only comes from a world-view that is presented as male, white and rooted in the European tradition. So, we might ask, what is "decolonising learning" about?

The report mentions that,

"This isn't simply about removing some content from the curriculum and replacing it with new content – it's about considering multiple perspectives and making space to think carefully about what we value. Decolonising learning helps us to recognise, understand, and challenge the ways in which our world is shaped by colonialism. .. It is an approach that includes indigenous knowledge and ways of learning, enabling students to explore themselves and their values and to define success on their own terms." (Open University (2019), 'Innovating Pedagogy Report', Open University United Kingdom Publisher, p. 3)

And it goes a step further, reimagining learning that is impactful and valuable for all, where "Rather than using educational technology to amplify oppressive efforts, it can act as a catalyst that precipitates a change in the aims of education." (p. 17)

This role as a practitioner in the digital humanities also makes e-Culture an excelent field for intervention in both the real and virtual symbolic world within human appropriations. This is further encouraged by the practical nature of pedagogy, which is understood as an art, i.e. the art of cognition beyond the discipline that each teacher imparts. Additionally, that the field of educational sciences offers its epistemology and scientific method for research. As a corollary to this section, we can ask whether the professionals in the field of education and culture perceive themselves as having an artistic and scientific profile simultaneously.

If the answer to this question is in the affirmative, we should also consider how we might make this dual artistic and scientific role of the e-culture practitioner work in relation to Digital Humanities and education.

Therefore, it is appropriate to consider another approach that could be intrinsic to both fields. One key question in line with this inquiry would be, for instance, what skills are required for this hybrid role between art and science?

Juan Luis Suárez, from the DH, (https://youtu.be/XVqpijd80yQ, 1:09:00 min.) Underscores how creativity is the fundamental challenge for the education of any person in the digital world. The OECD's recommendations (2021) for sustainable education in the 21st century incorporate skills related to creativity into lifelong learning and the transversal skills acquired by the person. Creativity and imagination are part of deep learning, alongside critical thinking and problems solving, communication, collaborative work, awareness of global citizenship and personal character formation [Fullan & Langworthy 2013]. They are regarded as fundamental skills in the 21st century education for innovative contexts.

Thus, the profile of the practitioners and interveners in the fields of e-Culture and Digital Humanities in education should be perceived in his or her role as an artist of individual and collective cognition, as well as in his or her scientific research role, in order to be creatively empower the processes of local and global transformation.

2. THE ART OF CONVERGENCE AND INTERCONNECTEDNESS

In acknowledging the value of this vast sea of educational and cultural opportunities where diverse fields of knowledge and intervention intersect, another key question for reflection emerges: How can we foster a culture of the value of convergence and interconnectedness? These are fundamental skills for understanding the importance of a sustainable future that is being built in the present, by all of us.

One sure path lies in generating powerful digital experiences that evoke feelings and ecourage the appropriation of knowledge in relation to life and all the elements that make humans a sensitive and empathetic being.

For this reason, art in its various forms offer an infinite field of sensitisation and formation of audiences who in a present and promising future will be able to exercise micro transformations that mobilise other decisional changes on a micro, medium and large scale.

In this context of cognitive convergence and knowledge networking, let us first take an example of empowered digital content. For instance, the Symphony of Science project (https://www.symphonyofscience.com) is an example of this, it "is a view of our universe through the prism of music. The series puts a new spin on science by remixing lectures, documentaries, and movies into music videos celebrating the most mind-blowing knowledge we have. The videos have been used in classrooms around the world as a means to get people interested in science". [https://www.symphonyofscience.com/about]

Neil Degrasse Tysonp's commentary on this project aligns directly with the approach of this article "Only when creative people take ownership of cosmic discovery will society accept science as the cultural activity that it is. And so I applaud all such efforts of artists". [https://www.symphonyofscience.com/about]

Building upon the idea of convergence and interconnectedness, the symphonic video "We are all connected" was made from sampling Carl Sagan's Cosmos, The History Channel's Universe series, Richard Feynman's 1983 interviews, Neil deGrasse Tyson's cosmic sermon, and Bill Nye's Eyes of Nye Series, with added visuals from The Elegant Universe (NOVA), Stephen Hawking's Universe, and with a wealth of other multimedia contents. Spreading scientific knowledge through digital audio and visuals. [https://bit.ly/3kynY8Z]

It not only showcases the scientific power of interconnected knowledge, but also converges in an emotional proposal that motivates us to approaciate the beauty of things. For example when Carl Sagan mentions that the beauty of a living being is not in its atoms but in the beauty of how they combine, he goes on to say or sing that the cosmos is within us. As the project's website states, if this content has been used in classrooms around the world, we can imagine students dancing or singing about the beauty of the cosmos, whilst simultaneously appertaining the beauty and interconnectedness of all things.

Therefore, in addition to building the skills of a digital humanist, we need to understand, experience and deeply feel these interconnections in order to be aware of the consequences of climate change and the various crises it causes in multiple areas.

This awareness of interconnectedness can emerge when people have a prior understanding of cognitive convergence.

To delve further into this cocept, it is necessary to offer other examples of experiences that extend beyond the excellent proposal such as Symphony of Science, which still delivers quality content that remains closed for use, since is not made by the people it is intended for. In this regard, it is necessary to refer to an experiment in networked cultural and educational intervention, which was carried out in the context of Cul-

tural Ring UY and its global networks, called "MuRe, museografía en red" (MuRe, museography networking),

"had as its objective the generation of an exhibition circuit on the internet, with narratives around heritage objects, dialogues and interactions in real time with these objects, where only their exhibition existed as a whole through advanced internet networks. The museums, cultural centres, educational institutions and individuals involved did not all coexist geographically, but inhabited the same virtual space and time together. Networked Museography builds media narratives in an interactive audiovisual format with the public participating in each online session. Under the slogan "Experience the Internet by creating online", various cultural and educational institutions in America and Europe made multiple appropriations of museum content in a local and global key." [Rodriguez Morales 2019: 3]

In order to avoid the risk of believing that we are reinventing the wheel, in this same experience we theoretically took concepts bequeathed by pioneers of new media art, such as Professor Roy Ascott. In the early days of the Internet he carried out telematic artistic experiments and found that an "intersectorial sensitivity" emerges in the participants and creators of these proposals. He noted that this "intersectorial sensitivity" [Ascott 2003: 389], and "telematic embrace" occurs because it exists in virtual and real space, "hyper-connected minds", "identities in telepresence", and in the "museum mind" itself [Ascott 2003: 360]. Ascott himself probes this by questioning: what is more ubiquitous than consciousness - for a digital empowerment of "brain, body and heart" [Ascott 2003: 353]. The article titled "MuRe, museography networking" in the REIRE journal of Innovation and Research in Education takes these postulates and accounts for these overlaps by grounding theory with practice to feed back into future synergies. [Rodriguez Morales 2019: 8]

The challenge is for those who find themselves in the role of e-Culture practitioners and interveners who must understand these interconnections in order to design proposals accordingly.

In accordance with the experiences mentioned above, the impactful role of technologically mediated visual communication in the field of e-Culture is another valuable key for those who design and implement effective projects. Experiencing beauty in depth, regardless of the subject matter, mobilises the individual and opens doors for deep, lifelong learning. Regardless of the e-Culture initiative addresses, for instance the climate crisis, it should have this potential as a guiding principle for its actions.

3. THINKING OF UNTHOUGHT

In order to consider the unthought and venture beyond our comfort zone and try to think outside the box, we will focus on several key points in relation to the climate crisis and e-Culture. The first key point, in the context of decolonising learning, revolves around the role of indigenous communities and their ancestral wisdom in the environmental preservation. In United Nations and the COP26², this topic was

² COP stands for Conference of the Parties at the United Nations Framework Convention on Climate Change.

addressed in multiple sessions. (https://bit.ly/3J17saN) The case of COP27 was particularly interesting (https://bit.ly/3SENx4P), because it drew criticism from indigenous peoples themselves, who complaining that their voices were not heard [The Guardian 2022]

This could be overlooked in the news published by Dr. Luci Attala (Big Issue, 2022) on 8th November, which promises to open up new horizons by rethinking solutions to climate change issues. This focal point of this project centers on the United Nations project with the Kogi indigenous people of Colombia who are one of the four communities that make up the Aruaco indigenous people. This initiative brough them together with scientists in order to collaborate, and learn from the Kogi people, enabling them to acquire their strategies and skills for nature conservation.

It is important to clarify that for the Aruaco indigenous people, their ancestral duty focuses on the conservation of the Sierra Nevada de Santa Marta, one of the most biodiverse geographical areas in the world, that is located in Colombia. This is their existential mission.

In accordance with the principles outlined in the art of convergence and interconnection, in order to consider Aruaco people's mission, we can encapsulate it as our own. This sentiment can be expressed as follows: This mission should be our mission. Or their mission is our mission.

This implies that everyone, regardless of their place of living, should feel and act in withing their capacity to preserve local rivers, forests, and land. Each of us has that responsibility to our ancestors, whoever they were and wherever they lived. It is also vital to consider how sustainable changes over time develop when the social processes that gave rise to these transformations synergizes from both bottom up and top down approaches. Such synergies require reevaluation of standasided conceptions of power and domination, to pursuit a conception of power as a correlation of forces. This perspective facilitates inclusion, allowing people at from social clases can to gain a deep understanding that such synergies are necessary to build a more embracing and equitable society. This ultimately paves the way for a healthier and more sustainable society in any given area.

In other sections of this article we will explore these key issues of dominance, power and collaboration in more detail. Pursuing the idea of thinking the unthought, can subsequently align with the recent news concerning the climate crisis. These thoughts can contribute to the convergence of ideas and actions, combined with the imminent relevance of human factor training.

Three current local, regional and global news items highlight the urgency to strongly educate people in their responsible mission towards Mother Earth.

Firstly, the renewal of the Amazon Fund established in the new Brazilian government under Inacio Lula Da Silva, with Germany's support, seeks to preserve the Amazon and restore deforested rainforests. We can also do a critical analysis, due to Germany's return to the intensive use of coal, oil and nuclear energy, amidst the conflict

between Ukraine and Russia, which has forced the nation to hold its goals of reaching a 100 percent renewable energy matrix in the short term. However, beyond the financial support earmarked for cooperation, the German President Scholz, statement statet to Lulathat "I am happy, we are all happy, that Brazil is back on the world stage". [Deutsche Welle 2023]

This detail reminds us that for this type of responsible mission, there needs to be involvement and commitment from at least two parties. This is no trivial matter as any type of cooperation, had been suspended due to the absence of platforms for dialogue and exchange, where "otherness" is developed. This type of bilateral government process is part of the top-down scheme of action. To achieve even minimum success, it becomes necessary to have a multi-stakeholder warp involved in this responsible mission, to insure that millions of dollars designated for cooperation do not evaporate in a fruitless manner.

The second piece of news comes from Chile, where the Council of Ministers for Sustainability created a national fund to restore one million hectares of marine and forest ecosystems by 2030, in order to recover the ecological functionality of landscapes and thus improve people's quality of life. [Diario Sustentable 2022]

This initiative, which similarly follows the top down processes, is an example of the responsible mission previously discussed, although going beyond the headlines, once the funds had been spent and repairs to nature carried out, it became evident that simply the repair process is insufficient at keeping nature sustainable. To maintain sustainability it will be necessary to promote educational and cultural policies that sustain these projects in the short, medium and long term. These endevours are necessary to uphold the motto expressed above: Their mission is our mission. Only by promoting awareness of this shared responsibility and acknowledging fundamental and irreversible role of the human factor, will it be possible for items likes this to achive long-term sustainability.

The latest news to exemplify, is that,

"Uruguay placed in the market a green bond 'pioneer in the world' for 1,500 million dollars, by indexing its interest rate to the result of its environmental performance reflected in two indicators, the reduction of greenhouse gases and the conservation of native forests". [Medios Públicos 2022]

Although it is a novel instrument that bridges local, regional and global perspectives by linking environmental care, the economy and financial speculation, it is important to note on only two environmental indicators were chosen (reduction of greenhouse gases and conservation of native forests). Whilst, in reality the problem is multidimensional and should be approached with multiple indicators. Suprisingly two fundamental indicators related to water and land care were not included, especially considering the fact that Uruguay and the Latin American region have the third largest freshwater aquifer in the world (Guarani Aquifer Agreement: https://

bit.ly/3KOVp1F) and the largest arable land reserve in the world. (FAO https://bit.ly/41xiwUp)

In fact, these two indicators, water and land care, can be considered threatened at the local level. For instance in a recent interview [Búsqueda 19 January 2023: 23] the former Minister of Livestock, Agriculture and Fisheries, Carlos María Uriarte, mentioned that water management, responsible treatment of environmental impact, are not on the public agenda. For example, the issue of costal cyanobacterias outbreakes in the summer, caused as a result of untreated sewage that reach rivers and streams, require immediate action. He emphasised that these are the significant issues in the country, and that ensuring that sewage is properly treated should be a top priority. Another recent local news report on these conceptual and practical disparities, particularly in relation to land contamination. In Uruguay 16 out of a total of 19 provinces dispose of their waste on land in unauthorized landfill sites, and this poor management "can contaminate ground and surface water" with "impact on public health" [Búsqueda 26 January 2023: 18], the news item alludes not only to the environmental problem but also to the need to implement public policies that align with national and provincial governments, in order to insure efficient management. Thus, in order to encompass the examples given, the human factor is once again fundamental and closely linked with integration of a multi-stakeholder framework that has a a multidimensional vision to critically solve problems. Top-down processes alone are insufficient when the human factor is not positively empowered, as such, bottom-up synergies are needed to complement with top-down strategies.

4. RADICAL RESHAPING THE HUMAN FACTOR

As stated by Ronchi, (2022) a global authority in e-Culture, e-Government, e-Services, among others, is fundamental for future trends in the ICT society or "the networked society" [Castells 2000] we find ourselves in. And in this respect, it is paramount to emphasize that effective human solutions to the climate change crisis will emerge from a deep understanding and action spanning culture, economy and network society. The environment itself consistently demonstrates how it functions at micro and macro networking levels.

Expanding on the value of to the human factor, Ronchi positions the importance of education in primary and secondary level as fundamental setting out its most significant scenarios, such as,

"Firstly, a growing opportunity is the appropriate use of ICTs for development and for the inclusion of nations and regions. But because the Internet and its providers are cross-border entities, national access, or denial of access - inclusion or inclusion or exclusion - within any one country also affects an entire region and beyond. The effects of digital exclusion affect citizens, but also international markets, financial institutions and regions. international markets, financial institutions and the regional economy. Secondly, work on hybridity - the potential of ICTs and technology in general - to work in non-hegemonic ways with populations that have and wish to maintain their traditional tech-

nologies show great potential. The debates on "low-tech no-tech" and "low-code no-code" show opportunities to benefit all societies, not only less developed ones. Furthermore, hybridisation between ICTs and traditional technology can contribute to maintaining the momentum of democratisation and decolonisation of technology. The challenges for the coming years are the ways to sustain the humanitarian side and the inviolable right to personal freedom and privacy in an era of unlimited supply of information and technological enterprise. The need to strike the right balance is omnipresent. The social sciences and the humanities must establish close cooperation in the design or co-creation of cyber-technologies, always keeping the human being in focus". [Ronchi 2022: 236-237]

Amidst this sea of delicate symmetries, correlations and varying asymmetries, the human factor should be at its center, or at the very least, be a focal point. Design and co-creation are the foundation of practical methods for developing of any of these digital technologies. Fiormonte et al, have already mentioned the "human factor" (p.199) as fundamental in the development of technologically mediated skills that make up the digital humanist.

To conclude this section, we can ask ourselves how to effectively influence the human factor so that it serves as a transforming agent that permanently incorporates the motto "Their mission is our mission" as a vital priority. Undoubtedly, within the context of this article, the key lies in the art of convergence and interconnection through formative visual communication, to raise awanresses on these issues. Education and transmedia culture spanning a lifetime is a creative and intersectoral way to co-creative empowerment among citizens and appears to be a necessary process.

5. CULTURAL TRANSFORMATION THEORY

The nurture a digital humanist who is aware of the current issues related to the climate crisis, not only requires the training of the human factor in both the technological and the humanistic in a creative way. This endeavor also requires public policies that support this type of transformation. In this context, the work of Riane Eisler (2021) is essential as a pioneering woman, social scientist and creator of the theory of cultural transformation. From her role as president of the Center for Partnership Studies (https://centerforpartnership.org), she identifies the core components of societies that support positive human qualities such as consciousness, caring, and creativity, and explores how we can build those societies. In her contribution to "Global Crusade: e-Culture for all" (YouTube playlist: https://bit.ly/3J1BFXc) she underscore's that "e-Culture has a major role, and responsibility, to accelerate this shift to a more equitable, less violent and sustainable partnership future" (https://youtu.be/9NHcActmGOA) and also identified two social configurations: "the domination social configuration and the partnership social configuration".

To lay foundations for a better world, Riane Eisler states that, as previously mentioned, that public policies, education and media should educate individuals in the interconnectedness of social systems oriented towards domination or partnership in relation to: i) childhood, ii) gender, iii) economy, iv) language.

From this perspective, the author argues the need to create new tools that transform society, from a system of domination to one of partnership and collaboration. So, for Eisler e-Culture has to promote that,

"1. Changing how we measure economic health. 2. Demonstrate that supporting care work can cut through cycles of poverty. 3. Implementing a cohesive family policy where care work- still done for free primarily by women in families is rewarded - such as affordable and well paid, high quality early childcare and paid parental leave. 4. Sharing evidence that investing in caring for people and nature is good for businesses and society. 5. Recognizing that economic systems are affected by, and in turn affect, the larger social system." (https://youtu.be/9NHcActmGOA)

Thus, from Eisler's perspective of collective cultural creation extends beyond artistic experiences or scientific knowledge. This radically reshapes the co-creation of public policies through collaboration or partnership, forming interconnecting and transforming relationships which cover aspects such as race, the gender, economics, the environment, childhood, language, power, narratives, teamwork, among others. This theory is not only found at the academic level of social sciences, the Center for Partnership Studies offers a multilingual digital training toolkit (https://www.learn-partnership.org/techtoolkit) that is free to download by everyone. This toolkit can play a vital role in shaping the digital humanist in the present and future. In order to train human collectives capable of co-creating public policies from the perspective of collaboration, it is first necessary to incorporate a personal transformation. This transformation will need to encompass language, the ways in which we living with nature, in the manner in which we care for ourselves and others, our relationships across equality of gender and race, as well as the foundations of the economy and its correlations of power.

All this approaches gain significance if we look back at the previous sections of this article, whereby the role of teachers in effecting positive transformation of society in the face of the climate change crisis is discussed. Furthermore, this extends to the work of those involved in e-Culture. All of them may have the opportunity to shape audiences with a perspective of cognitive convergence and interconnectedness that enables radical co-creation in societal shaping of the human factor.

6. CO-CREATE, CO-CREATE, OTHERWISE WE ARE LOST!3

This section uses the case study [Stake 1999] as a tool for analysis and comparison. It will also be used to integrate other methods specific to the field of Digital Humanities and its technologically mediated analyses.

To illustrate and reflect on the importance of cognitive convergence in the field of e-Culture and teacher training, related to global and local awareness with ancestral knowledge, together with transdisciplinary co-creation, we have identified two case

 $^{^3}$ It paraphrases the dancer and choreographer Pina Bausch's "Dance, dance, otherwise we're lost!", which was also the eponymous title of Wim Wenders' film.

studies within the projects of Anilla Cultural Uruguay and its global networks. These examples are "MuRe, museography networking" and "Co-creation Lab", serve as examples of both cultural intervention and research projects.

MuRe is the acronym of "MuRe, museography networking" (http://anillacultural-uruguay.net/mure/), known most notably in the Iberoamerican. This experience described previously, was conducted in 2017and coincided with two other research projects (2017-1019). One related to the cultural intervention for the inclusion of various participating audiences, while the other delved into the deep learning from the same process. This made it evident that MuRe is a cultural, educational and technological interface for the inclusion and expansion of individual and collective consciousness, promoting co-creation in a network with a multilingual approach. It integrated languages as Spanish, Portuguese, English and also indigenous languages such as Quechua, Kichwa, Náhuatl, entre otras más. In 2017 there were seven synchronous meetings via different video conferencing systems (e.g. H323, via web, etc.). There first five meetings were themed and the last two events were constructed with an input from the participating audience based on the co-creation processes conducted.

In the context of MuRe research, we found that participants experienced a sense of convergence when they began to engage their bodies in the technological context through video conferencing, whether dancing, dancing or other forms of expressions to introduce others to them in synchronous encounters. Participants felt safe in a complex technological environment as other participants from different regions could also engage at the same time as them. [Rodriguez Morales 2020]

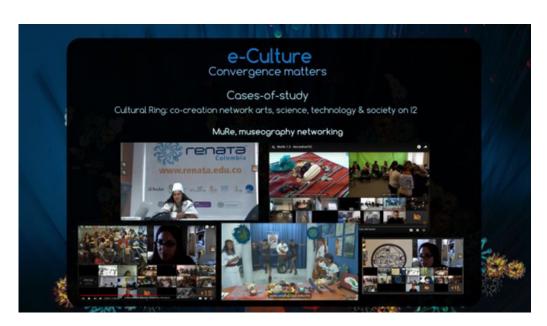


Fig. 1. Audiences participating in MuRe 1.1 and 1.3 respectively

This is synthesised in the Figure 1., which illustrates the co-creation processes during MuRe, where the Mure 1.3 session discussed "ICT Ancestors" (in English: https://bit.ly/3kzdGVZ) and where indigenous dances were performed, poetry was recited, among other actions. At the same time, in MuRe 1.1, with the theme "Global Consciousness" (in Spanish: https://bit.ly/3ZwwmEy), featured a connection with Mamo Lorenzo (a representative of the Aruaco indigenous people from Colombia). He shared with the participants the use of technology from his perspective, with participants having the opportunity to draw and create their own images based on the shared theme (in English: https://bit.ly/3SSt2BX). From MuRe 1.1 to 1.3 there was an accumulation of actions to sensitise the participants towards active involvement and from the third session onwards, we could see this change from active participants to protagonists who contributed with content in the following sessions. In addition, across all sessions from MuRe 1.1 to 1.7 (YouTube MuRe playlist: https://bit. ly/3J4wCFO), different access routes with languages interpretations were available within the platform, either in Spanish and English, Portuguese (https://bit.ly/3y3nwCS), or even in indigenous languages such as Quechua (MuRe 1.3) and Kichwa (MuRe 1.7 https://bit.ly/3J3NL2m). A repository of educational materials for teachers was created and is available, open and free to download, from the MuRe website: https://anillaculturaluruguay.net/repositorio-mure. In addition, research findings were published in the Monograph "Digital Humanities and Cultural Pedagogies" in the journal REIRE of the University of Barcelona. Rodríguez Morales, D. (2020).

The subsequent case stems from the accumulation of experiences and lessons learned in Cultural Ring, where the synergies of the projects are producing other initiatives to continue co-creating and carrying out research in action.

The second case study refers to the Co-creation Lab initiative (2019 edition), which consisted of a distributed laboratory of co-creation in art, science, technology and society. The premise was to generate new collaborations between people from different parts of the world, crossing language barriers and encompassing a wide range of backgrounds and experiences.

It is worth noting that "co-creation is a meta-level process that enhances collective creativity and drives innovation, cultural change by harnessing the creative potential of any group" [Rill and Hämäläinen 2018: 12]. Therefore, the focus lies in innovation and cultural change, with its articulation within the context of the Cultural Ring as bridge between educational and cultural institutions. This encourages co-creation inside and outside the laboratory, after the first experience in 2019, a trilingual repository (Spanish, English and Portuguese) on what co-creation entails, was made available on the YouTube playlist: https://bit.ly/3KOXMS7.

The question then becomes a pertinent one, what were the findings in this case? The participants found the facilities that allowed them to experience a pedagogy of co-creation in relation to cultural education and educational culture.

The key aspects of technological mediation involved developing the skills to explore the multilingual IT tools, to generate an empathetic visualization with others through ICT media, accompanied by a personalized and group guidance that allowed them to complete stages (synthesize, compile and define) and reach the end of the co-creation 'journey'.

In this respect, there is a demand for further research into the pedagogy of co-creation, most notably from the perspective of facilitators of co-creation processes. This was a new avenue that opened up the research process itself. These findings were presented in the framework of the international network NRENs⁴ of Internet 2 and GEANT into the NPAPWS event, Networking Performance Art Production Workshop (https://npapws.org) and had the participation of several of the laboratory's organisers. (Presented in the video from 18:37 to 21:26 min.: https://bit.ly/3KOXMS7)

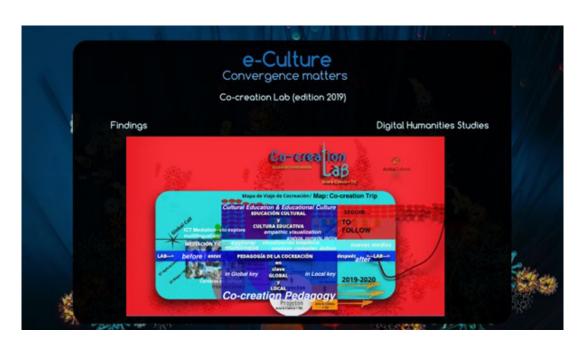


Fig. 2. Visualysed synthesis of findings into the processes of Co-creation Lab.

In summary, in accordance with the principle that co-creation is for all, the following tips lay the groundwork that build a strong "Co-creation House", explained in the video from 29:10 to 31:57 min.: https://bit.ly/3ZvEqp8. Participants should experience aspects such as, free association and clear steps in the process, the lack of external obstacles, enriched IT environments, availability of multiple advisers, expanded environments for self-expression, advice for co-creators' groups on the importance of bonds, convergence, solidarity, etc. Furthermore, they should collaborate with other co-creators, foresee challenges during the process, have direct and indirect strategies, and to maintain a permanent feedback loop. Last but not least, is managing and balancing frustrations in the co-creation process.

⁴ National Research and Education Network

The positioning of an individual in the face of co-creation as a life experience will become increasingly relevant, along with the role of teachers and cultural managers, both in the learning processes as well as in the quality cultural experiences to accessible to people.

These challenges related to repositioning the human factor are summarised in the crossover mentioned by Halit Ünver (2018, p.255) between the "Leonardo creature" becoming the human as a cultural creature and the "homo economicus cooperativus" in the social nature of humans., These transitions towards intelligent collaboration enable people to deal with uncertainty and set long-term goals with corresponding decisions.

From this perspective, the pillars of cultural transformation that combine elements the economy, environmental care, gender, childhood, languages and more, converge with creative environments directly linked to e-Culture, that should be allowed to circulate. The classroom, with its teachers and students, should not be distanced from these fertile realms of progress. Instead it should be conceived at the core of these contexts as co-creative laboratories for the society of today and the future.

7. FINAL REFLECTIONS

Returning to the synthesis of key concepts, here are the main ones compiled from the sections developed in this article.

It is essential to preserve and multiply the co-creative spaces of e-Culture to foster a new consciousness of humankind. This would allows us to generate positive changes in predatory habits and produce good practices in the mission of caring Mother Earth to continue the legacy of our ancestors, those who came before us and those yet to come.

GloCal initiatives, such as the Center of Partnership Toolkit, the Science Symphony project, the MuRe, the Co-creation Lab, the Global Crusade "e-Culture for all" are vital, to renewing the e-Culture after the pandemic period, with a main focus on climate crisis themes. These initiatives involve analysing the issues and co-creating global solutions.

The convergence cognition is at its core for the digital humanists formation, preferably immersed in powerful experiences through the beauty of visual communication that mobilises the sensitivity of human beings. Engaging in their body, mind and heart.

Human enrichment in e-culture is offered in human groups spanning diverse locations, languages, interests and backgrounds. The opportunity to generate something innovative appears when we challenge ourselves to think the unthought. This is most valuable for educators and cultural managers.

Thus, training future teachers should be strongly oriented towards cultural education and educational culture in transdisciplinary co-creative empowerment processes.

With this in mind, teacher education in its educational and cultural role, must be based on the nature of digital humanism - a triple rope that tightens art, science and technology. Such an approach has many benefits for a transformation that envisions a sustainable future.

ACKNOWLEDGMENT

The author wished to thank the students and teachers in the teachers training education in Uruguay, Latin American and European countries participating. Also a special acknowledgement to the NRENs in Uruguay and the Latin American region (e.g. Red CLARA, RAU, Red CUDI, RNP, REUNA, RENATA), as well as Internet 2 (in the USA) and GEANT (in Europe) for their invaluable collaboration in different projects. Many thanks to all those who have participated in the activities of Cultural Ring in Uruguay (and its global networks), either by contributing to or attending the different initiatives. And also thanks to my tutors (Raquel Gil Fernández and Carmen Escribano) and professors in the PhD Programme at UNIR in Spain. The acknowledgment to Alfredo Ronchi, Ann Doyle, Bryan Rill, Claudio Allocchio, Halit Ünver, Justin Trieger, Matti Hämäläinen, Riane Eisler, Ricard Huerta, Roy Ascott and Tom Gorman for their generosity in sharing their valuable expertise and motivation.

University of Gdansk thanks for crossing continents bringing opportunities with the international conference "Science and Education for Sustainable Development" and the European Journal of Transformation Studies.

REFERENCES

Ascott, R., (2003), Telematic Embrace. Visionary, Theories of art, technology and consciousness, University of California Press: California, United States.

Baeva, L., (2017), Values of media sphere and e-culture. Przeglad Wschodnioeuropejski, VIII(1), 173–184. Recuperado de http://uwm.edu.pl/cbew/2017_8_1/Baeva.pdf

Baeva, L., (2019), Existential Aspects of the Development E-Culture. En M. Khosrow-Pour, Advanced Methodologies and Technologies in Artificial Intelligence, Computer Simulation, and Human Computer Interaction (pp. 512–523). Hershey, PA: IGI Global. http://dx.doi.org/10.4018/978-1-5225-7368-5.ch038

Big Issue, (2022), To Stop climate change it's time to take indigenous knowledge seriously, 8th November 2022, Available at https://www.bigissue.com/news/environment/to-stop-climate-change-its-time-to-take-indigenous-knowledge-seriously/

Búsqueda, (2023), Para el agro 'no sería del todo catastrófico' si llegan las lluvias hay 'luces naranjas' por el 'atraso cambiario', 19th January 2023, 23

Búsqueda, (2023), Mientras solo cuatro departamentos tienen sitios de disposición habilitados, el gobierno busca cerrar todos los vertederos para 2025, 26th January 2023,18

Castells, M., (2000), La sociedad red, Alianza, Madrid.

Center for Partnership Studies, Available at https://centerforpartnership.org)

Center for Partnership Studies Toolkit, Available at https://www.learnpartnership.org/techtoolkit

Co-creation Lab, YouTube playlist, Available at https://www.youtube.com/playlist?list=PLC-MLAc7BEo5NgiNQ8-mT--9dUy7I2KKUn

Co-creation Lab, Available at (https://anillaculturaluruguay.net/lab-co-creacion-postula-cion-a-co-creadores/)

Conference "Co-creation LAB" 2019-21 ~ "Non-scholar talk with tips to become creative in the academic life", 21st April 2021, Ann Arbor, Michigan USA. Available at https://youtu.be/qUxJb1azTqU.

COP26, United Nations for Indigenous People, Available at https://www.un.org/development/desa/indigenouspeoples/

Cultural Ring Uruguay & Global Networks, Available at https://anillaculturaluruguay.net/

COP27, 'Stand and deliver', urges UN Secretary-General as divides threaten COP27 negotiations ahead of deadline, Available at https://news.un.org/en/story/2022/11/1130732

Deutsche Welle, (2023), Scholz lobt brasiliens klima, 31st January 2023, Available at https://www.dw.com/de/scholz-lobt-brasiliens-klima-pl%C3%A4ne-unter-pr%C3%A4sident-lu-la/a-64562283.

Diario Sustentable, (2022), Meta de 1 millón de hectáreas fija Chile en Plan Nacional de Restauración de Paisajes, 11st February 2023, Available at https://www.diariosustentable.com/2022/02/meta-de-1-millon-de-hectareas-fija-chile-en-plan-nacional-de-restauracion-de-paisajes.

Eisler, R., (2022), "e-Culture for all", Available at https://youtu.be/9NHcActmGOA.

Eisler, R., (2021), El cáliz y la espada. De las diosas a los dioses: culturas pre-patriarcales, Capitán Swing, Madrid.

European Commissioner for Climate Action, Available at https://climate.ec.europa.eu/index_en.

Fiormonte, D. et al, (2015), The Digital Humanist: A Critical Inquiry. Punctum Books, California, Available at https://monoskop.org/images/d/dd/Fiormonte_Numerico_Tomasi_The_Digital_Humanist_A_Critical_Inquiry_2015.pdf.

"Five Words for the Future", Available at https://fivewordsforthefuture.eu/

"Five Words for the Future", Delma Rodriguez' Statement, 1st January 2019, Available at https://www.youtube.com/watch?v=PZccVZLZju

Fullan, Michael. and Langworthy, Maria, (2013), Towards a New End: New Pedagogies for Deep Learning, Published by Collaborative Impact Seattle, Washington, USA, accessed January 15, 2023, http://redglobal.edu.uy/wp-content/uploads/2014/07/New_Pedagogies_for_Deep-Learning_Whitepaper1.pdf.

FAO, Conservación de suelos y aguas en América Latina, Available at https://www.fao.org/americas/prioridades/suelo-agua/es/#:~:text=El%20uso%20de%20la%20tierra,la%20expansi%20C3%B3n%20del%20territorio%20agr%20C3%ADcola.

"Global Crusade: e-Culture for all" (2022-23), Available at https://www.youtube.com/play-list?list=PLCMLAc7BEo5MjEI_kWvAwUFGEzQPfaapf.

Guarani Aquifer Agreement, Available at https://www.internationalwaterlaw.org/documents/regionaldocs/Guarani Aquifer Agreement-Spanish.pdf.

López Poza, S., (2019), Humanistas y Humanidades Digitales. Trayectoria y proyección en la filología española. pp. 125-158, en proyecto Biblioteca Digital Siglo de Oro 5 (BIDISO 5), con referencia: FFI2015-65779-P, financiado por el Ministerio de Economía y Competitividad del Gobierno de España y el Fondo Europeo de Desarrollo Regional (FEDER), 1-01-2016 a 31-12-2019, y se integra en el Grupo de Investigación Hispania (G000208) de la Universidade da Coruña. Disponible en: https://ifc.dpz.es/recursos/publicaciones/38/28/10lopez.pdf.

"MuRe, museography networking" (http://anillaculturaluruguay.net/mure/)

Medios Públicos, (2022), Uruguay emitió su primer bono verde por 1.500 millones de dólares, 22nd October 2022, Available at https://mediospublicos.uy/uruguay-emitio-su-primer-bono-verde-por-1-500-millones-de-dolares.

MuRe website, Available at https://anillaculturaluruguay.net/repositorio-mure/.

MuRe YouTube playlist, Available at https://www.youtube.com/playlist?list=PLCMLAc-7BEo5NnRm7qQZ7u1cc-00XpiIt0).

NPAPWS event, Networking Performance Art Production Workshop, Available at https://npapws.org.

Nunn, C., (2019), Poking in the fog – My personal access to Digital Humanities Theory. Disponible en: https://infoditex.hypotheses.org/1275.

OECD, (2021), "The OECD Framework for digital talent and skills in the public sector", OECD Working Papers on Public Governance, No. 45, OECD Publishing, Paris, https://doi.org/10.1787/4e7c3f58-en.

Open University, (2019), 'Innovating Pedagogy Report', Open University United Kingdom Publisher, Available at https://ou-iet.cdn.prismic.io/ou-iet/b0fbe67d-3cb3-45d6-946c-4b34330fb9f9_innovating-pedagogy-2019.pdf.

Rill, B.R., and Hämäläinen, M.M., (2018), The Art of Co-creation. A guide book of practitioners. Palgrave Macmillan, Singapore.

Río Grande, G., (2014), ¿De qué hablamos cuando hablamos de Humanidades Digitales?. Disponible en: http://sedici.unlp.edu.ar/handle/10915/64450

Rodríguez Morales, D., (2020), MuRe, museografia en xarxa. REIRE Revista d'Innovació I Recerca En Educació, 13(1), 1–19. https://doi.org/10.1344/reire2020.13.128684

Ronchi, A.M., (2009), eCulture. Cultural Content in the Digital Age. Springer. Germany.

Ronchi. A., (2022), Human Factor, Resilience, and Cyber/Hybrid Influence. Information / Security Journal, vol. 53, no. 2: 221-239, accessed January 15, 2023, https://doi.org/10.11610/isij.5315.

Stake, R.E., (1999), Investigación con estudio de casos, Ediciones Morata, Madrid.

Suárez, J.L., (2017), Conferencia Magistral en el III Congreso Internacional de la HDH, Málaga, España. Available at https://youtu.be/XVqpijd80yQ.

Symphony of Science project, Available at https://www.symphonyofscience.com.

The Guardian, (2022), 'Shameful' UN silencing indigenous voices say banned COP27 activists, 18th November 2022, Available at https://www.theguardian.com/environment/2022/nov/18/shameful-un-silencing-indigenous-voices-say-banned-cop27-activists.

Ünver, H., (2018), Global Networking, Communication and Culture: Conflict or Convergence?: Spread of ICT, Internet Governance, Superorganism Humanity and Global Culture. Springer. Germany.

"We are all connected", Symphony of Science project, Available at (https://www.youtube.com/watch?v=XGK84Poeynk).

REPORT OF THE SCIENTIFIC CONFERENCE: RUSSIAN INVASION OF UKRAINE AND THE NEW INTERNATIONAL ORDER – THE PERSPECTIVE OF CENTRAL EUROPE AND THE COUNTRIES OF THE GLOBAL SOUTH, MAY 31, 2023

Jan Wendt

University of Gdańsk ul. Bażyńskiego 4, 80-308 Gdansk, Poland

&

Jakub Potulski

University of Gdańsk ul. Bażyńskiego 4, 80-309 Gdańsk, Poland

On May 31, 2023 a scientific seminar entitled "Russian invasion of Ukraine and the new international order – the perspective of Central Europe and the countries of Global South" was held at the University of Gdansk, it was devoted to the issues of the war in Ukraine and Russian aggression against a neighbouring country. The seminar was organized by the Institute of Political Science of the University of Gdansk and the Institute of Geography of the University of Gdansk in cooperation with the Faculty of International Relations of the University of Warsaw and the Faculty of International Relations of the Jagiellonian University in Krakow. It was an element of cyclical meetings held by representatives of the Universities of Warsaw, Jagiellonian University and University of Gdansk, aimed at exchanging experiences, research results and integrating Polish academic centres.

The war in Ukraine poses a challenge to global security and the current international order. Therefore, it attracts the attention of researchers and analysts trying to understand its causes and effects. The seminar organizers decided to adopt the perspective

of the so-called semi-peripheral countries and countries of the global south and try to understand the ambiguous attitudes towards Russian aggression. The aim of the scientific seminar was to draw attention to significant differences in the international community's assessment of the war in Ukraine. From the perspective of the countries of Central and Eastern Europe, especially the Baltic countries and Poland, the official political assessment of events in Ukraine since 2014 and the subsequent annexation of Crimea is clear: the war in Ukraine is a manifestation of Russian imperialism, and Russia is a threat to the security not only of its immediate neighbours but also to global security. The authoritarian regime in Moscow must be stopped. Assessment of events in Ukraine from the perspective of the so-called the global south is, however, different, and many African and South American countries avoid explicit condemnation of Russian aggression. Therefore, the organizers of the seminar decided to compare these two positions on the war in Ukraine and understand their sources. At the invitation of the organizers, experts from Poland, Ukraine, New Zealand and Mexico took part in the seminar. The confrontation of positions and discussion were intended to help better understand the complex international situation and show different perspectives in assessing the emerging new international order.

The seminar was opened by the Director of the Institute of Political Science, Prof. Arkadiusz Modrzejewski, Ph.D., who introduced the invited guests and presented the issues of the seminar. The language of the seminar was English, and the seminar was divided into two panels: I The war in Ukraine – origins, geopolitical aspects and implications for the world order and II Perspectives and narratives of the countries of the Global South and Central Europe on the war in Ukraine.

The first panel was devoted primarily to the causes and consequences of the war in Ukraine for the international order. The session in panel I was opened by professor Roberto Rabel from the Center for Strategic Studies at the University of Wellington in New Zealand, with a lecture entitled "The democratic divide on the war in Ukraine and its implications for world order". Then, one of the most outstanding Polish specialists in international relations, professor Edward Haliżak from the University of Warsaw, who in his lecture "Great failure of the West liberal approach toward Russia after the Cold War. Central European Perspective" analysed why American policy towards Russia failed. This issue was approached by Prof. Haliżak form the perspectives of the experience of the countries of Central and Eastern Europe. These two lectures by world experts in the field of international relations became the basis for further discussion. The basic topic of the panel was developed in subsequent speeches. Professor Agnieszka Bogadał-Brzezińska analysed the causes of the Russian-Ukrainian conflict in her paper "The Russian-Ukrainian war and the variables determining the international order". Professor UG professor Jan Wendt, from the Institute of Geography of the University of Gdansk, in the paper ""La politique des Etats est dans leur geographie" - geographical aspects of the war in Ukraine", presented an analysis of the conflict from the perspective of political geography, paying attention

to the spatial aspects of the war. Another representative of the Institute of Geography of the University of Gdansk, Ug professor, O. Radchenko in his speech "The Genesis of the "Russian World". Invasion in Ukraine on the Example of Lugansk and Kharkov" presented how the idea of the "Russian world" was formed, which was an ideological justification for aggression for the Russian authorities. It is worth emphasizing that prof. Radchenko analysed the development of this idea from the perspective of the inhabitants of Lugansk and Kharkov, i.e. Ukrainian cities that found themselves at the centre of the Russian-Ukrainian conflict. Panel I ended with the speech of UG professor Tomasz Michalski, who in his speech presented the results of research conducted together with prof. O. Krukov, devoted to the demographic consequences of the conflict and the threats associated with the potential demographic collapse of post-war Ukraine.

The first panel ended with a discussion on the causes and consequences of the war in Ukraine. This discussion was also an introduction to panel II, in which the panellists tried to compare two different perspectives on the Russian-Ukrainian conflict, on the one hand, the countries of Central and Eastern Europe, directly threatened by Russian neo-imperial policy, and on the other, the countries of the global south, often sceptical of American concepts of international order.

Panel II opened with a speech by UW professor Maciej Ras "Competing Academic Narratives on the Russia-West conflict: Research Approaches in Poland", which analysed the formation of the dominant narrative towards the conflict in Poland and its impact on the direction of scientific research. Professor Ras analysed Poland's attitude to the conflict, pointing to the reasons for Polish involvement on the Ukrainian side. Prof. UJ professor Adrian Tyszkiewicz from the Jagiellonian University, in his speech "(Geo)politically involved, military neutral - Hungary and the Russian invasion in Ukraine", discussed the controversial, from the point of view of other countries in the region, attitude of the Hungarian government towards Russian policy and aggression against Ukraine. Then prof. dr. Jorge Schavion from the Mexican research institute CIDE (Center for Economic Research and Teaching) presented a speech on the Latin American perspective on Russian aggression against Ukraine and the attitude of Latin American countries towards US global policy. Speech by prof. Schaviona initiated the part of the seminar devoted to the politics of the countries of the global south. Speech by prof. Jakub Zajączkowski from the University of Warsaw was devoted to the Indo-Pacific region. Specializing in the topic of "global south", prof. Zajączkowski delivered a lecture entitled "The Indo-Pacific region in the EU strategy after Russian aggression against Ukraine", drawing attention to the growing role of the Indo-Pacific region in global politics and the importance of cooperation between the EU and the countries of the region for maintaining international security. Dr. Edyta Chwiej, in her speech "Russian invasion of Ukraine - the perspective of the Federative Republic of Brazil", presented Brazil's position towards the war. At the end of the seminar, two representatives of the Institute of Political Science of the University of Gdansk

presented their speeches: UG professor Marek Rewizorski and UG professor Wojciech Grabowski. The first of them in the paper "Bound to abstain? "The BRICS response to the Russian invasion of Ukraine" presented an analysis of the policy of the BRICS countries towards the Russian-Ukrainian conflict. However, a specialist in the Middle East, prof. Wojciech Grabowski with his paper "Saudi Arabia perspective on war in Ukraine and the order in the Persian Gulf in statu nascendi" drew attention to Saudi Arabia's position towards the war from the perspective of building a new international order in the Middle East and the interests of the Persian Gulf states.

INTERNATIONAL CONFERENCE 'SCIENCE AND EDUCATION FOR SUSTAINABLE DEVELOPMENT 2022'



Gdansk, 24.11.2022

Guests from foreign and Polish scientific centres arrived today at the University of Gdańsk, where the first international scientific conference titled 'Science and education for sustainable development,' organised by the Centre for Sustainable Development of UG, began. – 'We host researchers from Polish and foreign research centres, including partners from the SEA-EU alliance and other European universities, including those from Malta, Spain, Ireland, Finland, Norway, Italy, Slovakia and Lithuania. Meeting in such a large group is an ex-

cellent opportunity to present research results, exchange experiences and integrate the scientific community dealing with sustainable development,' – says dr Krzysztof Szczepaniak, Director of the Centre for Sustainable Development at the University of Gdańsk.

Events on the first day of the conference took place in the UG Main Library and the Faculty of Social Sciences. Among the numerous participants (about 140 people), there were dr Igor Mitroczuk from the Kozminski University in Warsaw, prof. Mark Mifsud from the University of Malta, prof. Manuel Larrán Jorge from the University of Cadiz or Bernadette Kumar from the Norwegian Institute of Public Health.

OFFICIAL OPENING OF THE CONFERENCE, NOVEMBER 24

The conference was opened by **dr hab. Sylwia Mrozowska, prof. UG, Vice-Rector for Cooperation and Development UG**, who welcomed the gathered guests during her speech at the UG Main Library.

– 'I am convinced that our conference will become a platform for sharing the latest knowledge. We will discuss the challenges for higher education institutions in supporting the process of achieving the goals of the 2030 Agenda,' – says dr hab. Sylwia Mrozowska. – 'I would like to stress that the topic of the conference is not only important from an academic perspective. For we are in the process of implementing the European Green Deal, which involves, among other things, trying to meet the challenges of EU energy policy. We are therefore looking for practical solutions, and our conference is an excellent opportunity to seek answers to questions about how universities can become more socially oriented. I wish you fruitful debates and proceedings.'

The floor was then taken by the Vice-Rector for International Cooperation, dr hab. Anna Jurkowska-Zeidler, prof. UG., who expressed her delight at the addition of a second woman to the rectoral authorities.

– I am delighted that we are opening today's conference together with prof. Sylwia Mrozowska. This is the first time in the history of Gdańsk that two women have sat on the university's governing body as rectors,' – said prof. UG Anna Jurkowska-Zeidler. She then warmly welcomed all the guests gathered at the conference: – Welcome to Gdańsk, the city of freedom, solidarity and our open, beautiful university. At UG we are dependent on certain European values. We are one of the key founders of the SEA-EU alliance of European maritime universities, which was established in 2019. In establishing the alliance, the European Commission wanted to evoke the vision of universities as visionaries and key centres committed to building a sustainable future for people and the planet, with a special dedication to the sea that unites us.'

Later in the meeting, conference participants were welcomed by **dr Krzysztof Szcze**paniak, Director of the Centre for Sustainable Development at the University of **Gdańsk**, who in his speech referred to the 1992 UN conference:

- In 1992, sustainable development, the environment and the economy were at the centre of the world's interest. Since then, UG academics have been conducting research related to sustainable development, taking action for the benefit of society and the environment. Today, more than 400 UG research, teaching and research staff are working on this issue. Sustainability research is ongoing and will continue, and this conference is a great opportunity to showcase it and share our experiences so that we can be even more involved in further research.'

The first plenary session started with an address by a researcher from the University of Malta. **Prof. Mark Mifsud** talked about the vision of sustainability in an extremely interesting way:

- 'We live in a unique, fragile place, our planet is a ball suspended in space, made of air, soil and water. It's all beautiful, it's all nice, it's all pleasant, but the question has to be asked: are we going to live like this forever? All you have to do is go on the Internet and read what is happening in the world at the moment. To give just a few examples: global warming, the Earth is warming up, sea levels are rising, insect infestations will occur, which will cause an increase in diseases, droughts will occur, there will be problems with food production, with water supplies – there are already more than eight billion of us on the Planet. The examples could be multiplied. The question is, are we doing anything about it?'

Prof. Mark Mifsud pointed out that a long-term vision for action is essential for sustainable development. He then referred to the education system, which he said is not geared towards sustainable development goals. He talked about his research and the work being done on sustainable development in Malta. Finally, he stressed that although any change is difficult, one should never lose hope.

This was followed by a paper entitled. Universities and their commitment to the Sustainable Development Goals: The Spanish case' was delivered by **prof. Manuel Lar-rán Jorge** from the University of Cadiz, who connected remotely with the conference participants.

This was followed by the presentation of awards for gender research, conducted by a team led by **prof. dr hab. Ewa Łojkowska**. Distinctions, for gender-inclusive research, were received from **prof. dr hab. Krzysztof Bielawski**, director of the University Centre for Applied and Interdisciplinary Research, and prof. Ewa Łojkowska: **mgr Katarzyna Jagłowska** (for the highest-scoring master's thesis) and **dr Krystian Tomala** (for the highest-scoring doctoral thesis).

PANEL SESSIONS

Another part of the programme were four parallel panel sessions. Three of them were held at the UG Faculty of Social Sciences.

The first one, on climate change and energy transition (chaired by dr hab. Marek Rewizorski, prof. UG), featured speeches by dr Igor Mitroczuk from the Kozminski University in Warsaw (his lecture concerned Poland's energy policy until 2040), dr hab. Tomasz Bojar-Fijałkowski, prof. of the University of Kazimierz Wielki in Bydgoszcz (he talked about the green transformation), and dr Agnieszka Fiszka-Borzyszkowska from UG (a lecture on improving water quality through advanced treatment technologies). Other speakers included dr Andrea Figulova from Comenius University in Bratislava (she talked about energy transition based on a case study of Slovakia) and prof. Ramunas Povilanskas from Klaipeda University (in a lecture he spoke about sustainable coastal development and climate change).

The second panel was chaired by **dr Elżbieta Czapka** from the University of Gdańsk and dealt with the topic of **migration**, **health and sustainable development**. The papers in this part were given by **Bernadette Kumar** – Norwegian Institute of Public Health, **Rose Azzoropardi** – University of Malta, **Mette Sagkbaken** – Oslo Metropolitan University (presentation on how the time experience of refugees affects their mental health and well-being), **prof. Bengt Morten Wenstøb** – Østfold University College, **Jennifer Gerwing** – Akershus University Hospital (lecture on the health risks of unacknowledged linguistic and cultural diversity) and **dr Omar Grech** – University of Malta.

The topic of the third panel, chaired by **dr Irena Chawrliska**, was humanities in the face of the challenges of the climate crisis. Six speeches could be heard here. Speakers included: **dr Rick Dolphijn** – Utrecht University (who delivered a speech titled Waves: recognising the rhythms of land and sea'), **dr Vincent Caruana** – University of Malta (who spoke about getting out of the crisis by changing the way we think), **dr Monika Szuba**, **prof. UG** (the paper dealt with a looming reality: the climate crisis and communities), **dr Thomas Aiello** – Valdosta State University, **dr hab. Magdalena Bielenia-Grajewska**, **prof. UG** ('Corporate discourse on climate change') and **Delma Rodriguez Morales** from Anilla Cultural Latinoamérica-Europa en Uruguay & Redes Globales.

The fourth panel, held at the UG Library, addressed the issue of **transforming higher education institutions towards sustainability**. This part was chaired by **dr hab. Bożena Matusiak** from the University of Łódź. Speeches were given by: **dr Sinikka Suomalainen** and **dr Annina Kainu** – Turku Academy (on the example of Finland, they talked about the transformation of higher education institutions towards sustainable development), **dr hab.** Natasza Kosakowska-Berezecka and **dr Magdalena Żadkowska** (the speech concerned gender equality, and was discussed on the example of UG, where the implementation of the gender equality plan was initiated), **dr Mariola Zalewska** from the University of Warsaw (the lecture concerned the com-

petences and skills of sustainable development managers), **dr hab. Tymon Zieliński**, Institute of Oceanology, Polish Academy of Sciences (lecture on 'Sustainable future through sustainable education and science'), **Ewa Stoecker** and **Aleksandra Migalska** from Jagiellonian University in Kraków (with a lecture on 'Support for transgender and non-binary students at the oldest university in Poland'), **dr hab. Janusz Reichel**, University of Łódź, **dr Natalie Sampson**, University of Michigan-Dearborn and **dr Joanna Morawska from UG** (lecture on 'Together for people, environment and prosperity. UG community engagement through the lens of sustainability').

DISCUSSIONS WITH YOUNG RESEARCHERS

After the lunch break, it was time for discussions with young researchers moderated by experienced researchers. The presentations took place in parallel, under the pillars of sustainability: human & social, economic and environmental. The Human & Social panel was moderated by **dr Barbara Kijewska** (WNS) and **dr Maciej Nyka, prof. UG** (WPiA). The Economic panel was moderated by **dr Małgorzata Bielenia** (WE) and the Environmental panel was moderated by **dr hab. Tymon Zieliński** from the Institute of Oceanology, Polish Academy of Sciences. This part featured a total of sixteen papers and presentations by young scientists sharing the results of their research to date.

SECOND DAY OF THE CONFERENCE – NOVEMBER 25 – EMIGRATION MUSEUM IN GDYNIA

The second day (25th November 2022) of the international conference Science and Education for Sustainable Development began with a visit by event participants to the Emigration Museum in Gdynia. Guests listened to a presentation of the project Narratives of Sustainable Development – a Polish perspective and a panel discussion Sustainable Polish? Narratives of Sustainable Development.

Participants on the second day of the conference included students from Trinity College Dublin, Chinese students from Harbin studying Polish Studies at the University of Gdansk and students from TUFS in Japan.

Guests at the Emigration Museum in Gdynia were welcomed by Sebastian Tyrakowski – Deputy Director of the Museum.

The first item on the agenda was a presentation of the project Narratives of Sustainable Development – A Polish Perspective. The guests then had the opportunity to listen to a panel discussion Sustainable Polish? Narratives of Sustainable Development, with the participation of **Prof. Przemysław Gęba**l (University of Gdańsk), **Dr. Irena Chawrilska** (University of Gdańsk), **Dr. Michał Pruszak** (University of Gdańsk), **Maksymilian Bochenek** (Emigration Museum in Gdynia), **Marek Pandera** (Trinity College University in Dublin) and **Wojciech Stachura** (Miniatura Theatre). The panellists convinced the audience that today, cultural activities conducted in museums, theatres, during the study of Polish or any other language and culture can

be a tool for change in local and multicultural communities to raise their awareness of sustainable development goals.

The international students also had the opportunity to participate in a workshop on text editing. The results were short stories based on picture stories.

We were also honoured by the presence of representatives of the National Agency for Academic Exchange: **Mariusz Czech** (Director of NAWA Polish Language Programmes Office) and **Wieslawa Krasuska** (NAWA).

The project "Narratives of Sustainable Development – Poland's Perspective" is funded by NAWA within the framework of the Polish Language Promotion Program. The project is conducted in cooperation with Trinity College Dublin, University of Dublin. The visit to the Emigration Museum was concluded with a guided tour of the exhibition. Guests had the option of choosing a group in Polish or English.

After the visit to the Museum, the guests were taken by bus back to the Oliwa campus of the University of Gdansk, where the final panel of the conference Sustainable development in research took place at the Faculty of Social Sciences.

During the panel, the following academics from UG and other universities presented their papers: dr hab. Arkadiusz Modrzejewski, prof. UG (a paper on the normative approach in political science as an element of sustainable development of science and higher education), dr hab. Sylwia Mrozowska, prof. UG (a paper on the role of wind energy in the energy transition in Poland), dr hab. Anita Adamczyk, prof. UAM (analysed research on the concept of the climate migrant), dr Dorota Kowalewska from the University of Szczecin (paper on Ukrainian refugees with disabilities and their situation in Poland), dr Krzysztof Szczepaniak from the University of Gdańsk (paper on effectiveness in achieving sustainable development goals at the local level), dr Magdalena Markiewicz from the University of Gdańsk (lecture on the social responsibility of universities and the social responsibility of business), Weronika Kamińska from the University of Gdańsk (talked about the role of sustainable development in sociological research on the example of patients under hospice care), dr Irena Chawrilska, from the University of Gdańsk (outlined a vision of the future of the humanities in the context of health, the environment and society), dr Elżbieta Czapka, from the University of Gdańsk (challenges related to migration research), dr Barbara Kijewska, and dr Dawid Weisbrodt (presented a perspective on how teachers and students perceive the environmental crisis in the context of methodological challenges), and Bartosz Duraj from the University of Gdańsk (analysed determinants of the energy transition in Poland).

With this, the two-day international conference Science and Education for Sustainable Development has end. We would like to thank all our guests for such a large and active participation! For more information about the participants and the conference, please visit https://czrug.ug.edu.pl/en/sesd2022/

The International Scientific Conference "Science and Education for Sustainable Development" was co-funded by the Minister of Education and Science within the framework of the "Excellent Science" program.

Elżbieta Michalak-Witkowska Szymon Gronowski