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THREATS TO THE SECURITY OF THE BLACK SEA REGION CREATED BY THE RUSSIAN-UKRAINIAN WAR (2022)

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Abstract: *The Russian Federation's invasion of Ukraine, launched on February 24, 2022, has demonstrated Moscow's approach to the Black Sea region. Contrary to the provisions of the law on the law, the Russian Federation blocked the freedom of navigation in the inland Sea of Azov and the principle of enforcing the right to act harmlessly in Ukrainian territorial waters off the coast of Crimea. Following the collapse of the Soviet Union, the Black Sea region has become a place of intensive trade and transit and the transfer of energy resources from the Caspian Sea area and Central Asia to Europe. The events in Georgia in 2008 and the recent developments in Ukraine show that the Russian Federation is trying to rebuild its former influence and take control of the region. This article aims to diagnoze the security of the Black Sea Region in the context of the ongoing Russian-Ukrainian war (2022). The article discusses the historical security context of the Black Sea Region, the main threats to the security of the region in the context of the ongoing Russian-Ukrainian war (2022) and, forecasts for the formation of the security of the Black Sea Region after the end of hostilities. Scientific research conducted that the Battle of the Black Sea may become the cause of a clash in the Russian-Ukrainian war, which will affect not only Ukrainebut also members of the people around the world, as well as Russia's blockade of the Black Sea communication routes. The research methods used are literature analysis and criticism, historical methods, comparison, and generalization. Scientific studies have shown that the Battle of the Black Sea could become a key clash in the Russo-Ukrainian war that will affect not only Ukraine but also members of the nation around the world and lead to the Russian blockade of the Black Sea.*

Keywords: Black Sea, security, region, threats, Russian-Ukrainian war (2022)

1. Introduction

The Black Sea is the border south-eastern between Europe, the Middle East, and Asia, and is also the only large sea between the Caspian Sea and the Mediterranean Sea. The Black Sea is an important region for the projection of military power in the Russian direction, as the Carpathian Mountains chain in Romania and the Caucasus Mountains limit the conduct of land operations from the south (Zarychta, 2016, p. 54). The Black Sea represents the only alternative

route by which the Russian Federation can be threatened from this direction. This region is also an important transit route for European countries in international trade, as an important connection for Europe of routes leading from east to west and from south to north (Rogozińska, 2023). According to analysts, control or domination of the Black Sea facilitates the takeover of the entire European continent, especially the Balkans and Central Europe, but also the eastern Mediterranean region, the southern Caucasus, and the northern part of the Middle East (Stępniewski, 2013, p. 166). Over the centuries, the interests of the superpowers have intersected in the area, the main states interested in dominating the region being Russia and Turkey (Andrusiewicz, 2004, pp. s. 173–174). Today, the security challenges in the Black Sea region are interlinked and inextricably interwoven into the wider Euro-Atlantic security context.
Three NATO member states are located in the Black Sea area (Bulgaria, Romania, and Turkey) and several NATO partner states, so any manifestation of instability or hostility in the region directly affects the Alliance.

Today, security threats in the Black Sea region are an accumulation of interconnectedness and are an elementary part of Euro-Atlantic security. In the Black Sea region lie the member states, Romania, Bulgaria, and Turkey, as well as several NATO partner states, which means that any threats in the region directly affect the security of the Alliance. In recent years, the Russian Federation has consistently strengthened its military presence and initiated and supported disinformation activities. The most serious threats to European security that undermine the existing international order became apparent in the Black Sea region during the Russian Federation's conflict with Georgia in 2008 (Kowalczyk, 2017, pp. s. 170–173), the annexation of Crimea in 2014 (Zaniewicz, 2020), Russian destabilization activities in eastern Ukraine (Gladii, 2017, p. 64) and the military invasion of Ukraine in 2022 (Bryjka, 2023). In addition to the use of conventional weapons, the Russian Federation also uses asymmetric means of conducting operations in the region, materializing in hybrid warfare (Banasik, 2018, p. 94).

The main research problem of the article was formulated in the form of the question: What threats does the war in Ukraine (2022) create for the security of the Black Sea region and what are the predictions for the formation of future security in the region?

The main research problem is divided into the following specific problems: 1. What is the historical context of the security of the Black Sea region?; 2. In what is the security of the Black Sea region expressed in the context of the aggression of the war of the Russian Federation with Ukraine (2022)?,;3. What predictions can be drawn for the security of the Black Sea region?

The article aims to identify and diagnose the threats created by the Russian-Ukrainian war (2022) to the security of the Black Sea region and forecast future security in the region. The research area is situated in the discipline of security sciences. The research methods used are literature analysis and criticism, historical methods, comparison, and generalization.

2. The historical context of security in the Black Sea region

For geographical reasons, the Ottoman Empire (1299-1922) was decisive in the Black Sea region. The Empire controlled two major straits, the Dardanelles, connecting the Aegean Sea to the Sea of Marmara, and the Bosphorus, connecting the Sea of Marmara to the Black Sea. The role of these straits, dubbed the Turkish Straits, is fundamental tothe reason that they constitute the only entrance to the Black Sea from the Mediterranean. Confirmation of Ottoman dominance in the Black Sea region came with the conquest of -Crimea in 1475. Foreign ships were then excluded from sailing the Black Sea, creating Ottoman domination of the area for three centuries. This domination lasted until 1774~~,~~ when the Ottomans decided to support Poland in the war against Russia (Morawski, Szawłowska, 2006, pp. 90–91). Empress Catherine the Great then placed ~~the~~ Crimea under a Russian protectorate, guaranteeing its merchant shipping free passage through the straits (Serczyk, 1974, p. 220). Over the following years, the issue of the Black Sea straits remained the subject of international rivalry. Some agreement was not reached until 1923 in Lausanne (Batowski, 2001, p. 75). The treaty adopted at that time stipulated that all ships, even warships, had the right of free passage through the straits but only in peacetime. The International Straits Commission was to supervise the provisions of the treaty by overseeing the implementation of the various provisions of the treaty, including their demilitarisation. Changes in this regard came in the 1930s when Turkey claimed that the demilitarisation clause of the Lausanne Treaty was contrary to Turkey's right to self-defence. The change of the previous provisions was forced by developments in international politics: the remilitarisation of Germany accelerated the erosion of the post-war collective security system

established by the League of Nations. Turkey therefore returned to the subject of the straits at another conference, this time in Montreux, Switzerland.

Russia was also a power vitally interested in regulating access to the Black Sea straits. Its demands included that the Black Sea be closed to all but the littoral states. These conditions were a consequence of the fact that Ukraine and Georgia were then part of the USSR, while Romania and Bulgaria were Russian allies. However, Russian ideas for the shaping of order in the Black Sea region did not meet with the approval of the Western powers. Britain and other European states took steps to limit the ability of Russian warships to explore the waters of the Black Sea unfettered in the event of a naval war and to seek refuge there. Western states also sought to limit Turkey's ability to block the Black Sea straits. Faced with the impossibility of reaching a compromise, a compromise solution was eventually adopted by the states concerned with the Black Sea Straits issue. The provisions of the 1936 Montreux Convention allowed Turkey to remilitarise the zone of the straits, granting it some control over them (Batowski, 2001, p. 276). At the same time, the agreement regulating the passage of ships increased Soviet influence in the Black Sea.

In the ongoing Russian-Ukrainian war, the Montreux Convention provides the legal basis for regulating traffic in the Black Sea. Already at the beginning of hostilities, Ukraine asked Turkey to close the strait to Russian warships, pointing to Turkey's crucial importance in maintaining peace in the Black Sea region. The Turkish government agreed to the proposal on 28 February 2022 (Respect, 2022). However, this didn’t stop Russia from placing several warships in the Black Sea waters. In response, Turkey stated that it would not prevent Russian warships from entering the Black Sea if Russia claimed that they were returning to their home ports (Respect, 2022).

The key provisions of the Montreux Convention governing the entry of ships into the Black Sea during wartime read: 1) Turkey may close the strait to warships of belligerent parties in time of war or when Turkey itself is a party to the war or is threatened with aggression by another state, 2) Turkey may close the strait to merchant ships belonging to states at war with Turkey, 3) Any state with a coastline in the Black Sea - Romania, Bulgaria, Georgia, Russia or Ukraine - must give Turkey eight days' notice of its intention to send warships through the strait. Other countries, those that don’t border the Black Sea, must give Turkey 15 days' notice. Only

Black Sea states may send submarines through the strait, but only after prior notification and only if the submarines were built or purchased outside the Black Sea, 4. Only nine warships may pass through the strait at any one time, and there are restrictions on the size of the ships, either individually or in groups. No group of ships can exceed 15,000 metric tonnes. Modern warships are heavy, with frigates around 3,000 metric tonnes and destroyers and cruisers around 10,000 metric tonnes. Modern aircraft carriers are too large to pass through, and under Turkish regulations are not allowed anyway (Tulun, 2020).

Dominion of the Black Sea entails many advantages. Ships of coastal countries sailing on it have much greater rights than vessels from outside the Black Sea. Ships of coastal countries sailing there have much more rights than non-Black Sea vessels. Foreign warships, for example, cannot stay in the basin for more than 21 days, Black Sea navies are exempt from such restrictions (Łomanowski, 2023). In addition, non-Black Sea navies have a permissible total tonnage of 45,000 tonnes with no non-Black Sea power having more than two-thirds of this figure. Ships of countries involved in hostilities are not allowed to enter the Black Sea, making it impossible, for example, to replace, the sunken cruiser „Moscow". Turkey's situation in the ongoing Russian-Ukrainian war is difficult. Both sides in the conflict are important partners in key energy and military trade agreements (Olech, Potera, 2022). Turkey is a member of NATO and seeks to strengthen its ties with the West, at the same time the Russian Federation is one of its key partners. Turkish control of key straits may prove decisive for its future relations with both partners.

3. The security of the Black Sea region in the context of the aggression of Russia's war against Ukraine (2022)

The Russian Federation's aggression against Ukraine on 24 February 2022 had serious implications for the security of the Black Sea region. Russian actions in the region reduced the role of the Black Sea to a „Russian lake" (Korbut, 2023). To this end, contrary to the provisions of international law, Russia blocked the freedom of navigation of ships in the inland Sea of Azov and the exercise of the right of passage in Ukrainian territorial waters off the coast of Crimea. Since the beginning of hostilities, the Kremlin has used terrorist acts against the Black Sea fleet, launching drifting „anchor" mines into the sea lanes, shelling merchant ships, occupying foreign

territories and, blocking commercial ports (Pedrozo, 2023, pp. 15–58). Examples of this type of action included the shelling of the Turkish bulk carrier "Yasa Jupiter" near Odessa (Grotnik, 2022), the Panamanian ship "Namura Queen" in Odessa (Payne, 2022), and the Romanian chemical tanker "Millennial Spirit", the annexation of Crimea, the seizure of Mariupol and Snake Island (Ukraińska, 2022).

In the case of the latter, the seizure already took place on the first day of the war, 24 February 2022. This rocky islet, which has no strategic importance, has become a symbol of Ukrainian resistance to the Russians, as exemplified by the sinking of the flagship of the Black Sea Fleet, the missile cruiser Moskva (Flota, 2022).

The Russian blockade of Black Sea ports is not only exacerbating the collapse of the Ukrainian economy but also contributing to increased access to food ~~to~~ in the world's most backward countries. It was via the Black Sea sea routes that Ukraine shipped more than half of its foreign trade. Ukraine is the world's first exporter of sunflower oil, the world's fourth supplier of maize, and the fifth exporter of wheat (Matuszak, 2022).

In the first year of the war, more than 24 million tonnes of grain (14 million tonnes of maize, 7 million tonnes of wheat, and 3 million tonnes of sunflower seeds) were in Ukrainian warehouses, putting Ukraine at risk of losing around 6 billion dollars in a year, with no storage space for new crops and wasted old ones (Matuszak, 2022).

The blockade of Black Sea ports was an instrument of non-military influence, by blackmailing with hunger the Russian Federation was not only seeking financial gain but additionally wanted to force Western countries to lift some of the economic sanctions imposed on the Russian Federation. A break of the maritime blockade was successfully negotiated with the involvement of the United Nations Organization and Turkey on 22 July 2022 (Jest porozumienie, 2022). The agreement was extended three times (Szymczak, 2023). The grain agreement has ensured the safe passage of ships carrying grain from Ukrainian ports. To date, the agreement has allowed almost 33 million tonnes of food to be exported through Ukrainian ports. The negotiated agreement covered only three Ukrainian ports: Yuzhno, Odessa, and Chernomorsk, their export capacity is estimated at over 7 million tonnes per month. Goods went to 43 countries, the support was planned to include mainly nations facing a hunger crisis: Egypt, Indonesia, and Bangladesh.

The agreement expired on 17 July 2023, and Russia did not agree to extend it. At the same time, the Kremlin authorities in public statements, such as that of Dimitry Peskov, suggest that it is possible to return to talks on the extension of the agreement, the condition being the fulfillment of the provisions of the agreement obliging the UN to facilitate free access of Russian fertilizers and other products to world markets (Rudnik, Matuszak, Michalski, 2023).

For virtually the entire duration of the grain agreement, Russia has complained about obstacles to fertilizer and grain exports. Although European Union and United States sanctions do not affect crops or fertilizers, restrictions in the financial, insurance, and ship leasing sectors hit Russian exports hard. The Kremlin decided to sign the agreement in return for, among other things, allowing the Kremlin to export ammonia, an important component of nitrogen fertilizers. The Russian Federation had demanded the resumption of ammonia shipments using a pipeline running through Ukraine to the port of Odessa (Ukraine 2023). Currently, Russia "no longer needs Ukrainian ports for ammonia exports" (Koniec, 2023), its export can take place via an alternative route. To this end, a special terminal is being built in Russia for the transport of ammonia, which could replace the pipeline running to Odessa. The terminal is being built on the Taman Peninsula, on the Black Sea (Ukraine, 2023).

Anticipating the possibility of the Kremlin withdrawing from the grain agreement, Ukraine has secured a special insurance fund of around 547 million dollars for companies whose ships will come through the Black Sea to Ukraine after Russia withdraws from the agreement (Rudnik, Matuszak, Michalski, 2023). In such a situation, the alternatives for Russian food exports will remain smaller river ports on the Danube or the land route, via European Union countries, including Poland.

It should be noted that food products are not the only goods exported by Ukraine by sea. For example, two companies (Inagas and Cryoin) located in the south of Ukraine secure 45-54% of the world's needs for neon needed for lasers cutting so-called silicon „wafers” for microprocessors (Ukraine, 2022). Ukraine is also a leading supplier of wire harnesses for the automotive industry (through the Leoni plant built there by the Germans). Supply restrictions in this sector have affected companies such as Volkswagen, BMW, and Mercedes, reducing vehicle production by up to 700,000 in the first and second quarters of 2022 alone (Amann, Carey, 2022).

Safeguarding the waters of the Black Sea and the Black Sea Fota is the continued rearmament of Ukraine with long-range anti-ship systems.

The transfer of this type of equipment is already underway, with the UK providing Ukraine with a batch of Brimstone-type short-range 'ground-to-ground' missiles, which are also highly suitable against small surface targets (Allison, 2023). Admittedly, beyond the reach of the Brimstones is the maritime exclusive economic zone, but securing it is possible with external assistance. An example of this is Denmark, which has offered to give Ukraine coastal mobile Harpoon anti-ship missile launchers with a field of fire of almost 300 km (Jeong, 2022). In this way, the Ukrainian armed forces could have at their disposal 24 NSM missiles (12 on launchers and 12 in reserve), which would be sufficient to stop any Russian, ship-based landing craft (Dura, 2023). It should be noted that the situation of strengthening Ukraine's defense capabilities, obviously necessary, could lead to a repeat of the „Tanker War" that occurred during the Iraq-Iran war in the 1980s (Navias, 2023). Then it blocked the flow of oil to Europe, now it could block the flow of grain to Africa.

Taking a long-term view, it should be taken into account that the blockade of Ukrainian ports does not necessarily end with the war in Ukraine. The Russian Federation may use the instrument of hunger blackmail in other parts of the world, aware of the lack of response from Western countries. After all, similar actions have already taken place, if only about the airspace over, for example, Syria (Conflict, 2023).

4. Security outlook for the Black Sea region

The battle for the Black Sea may be the most important clash in the Russo-Ukrainian war, with not only Ukraine's economic future but also the food security of millions of people worldwide at stake. In this context, it seems reasonable to consider scenarios for the development of the future situation in the Black Sea region, depending on the hypothetical end of the Russian-Ukrainian war.

The first scenario under discussion envisages a split in NATO and European Union countries, leading to a weakening of sanctions against the Russian Federation and a reduction in the supply of arms to Ukraine. In this scenario, the provisions of the 1936 Montreux Convention remain unchanged and the Black Sea remains a „Russian lake" (Korbut, 2023). However, based

on an assessment of the recent successes of Ukrainian forces and the symptoms of a possible collapse of the Russian army, this scenario seems increasingly unlikely.

The second scenario envisages the defeat of the Russian Federation by Ukraine, the balance of political power, however, does not allow for a change in the provisions of the Montreux Convention. In the context of developments in Ukraine, this scenario can be considered likely.

The third scenario envisages Russia losing the war, after the end of hostilities the United States, European Union, NATO, and the Black Sea states undertake a redrafting of the Montreux Convention to restore and ensure long-term stability and security in the region. As a result of the changes, the Montreux Convention is updated, but Turkey's position remains unchanged and it retains control of the straits unchanged. At the same time, the Turkish straits are no longer treated as a separate legal regime under the Montreux Convention but are subject to the rules on international straits set out in the United Nations Convention on the Law of the Sea. This is the least likely scenario, primarily due to Turkey's resistance to any infringement of its sovereignty.

To generalize, it must be said that how to secure the sea lanes in the Black Sea to Ukrainian ports is not just a Ukrainian problem. Of course, in the first instance, it is the Ukrainians who will lose financially from the blockade of Odessa, but the lack of their exports will be felt by dozens of other countries, and not just the poorest ones. Russia's blockade of Black Sea transport routes, which is illegal under maritime law, cuts off access to Ukrainian foodstuffs for many countries, causing famine and directly related regional armed conflicts. By blackmailing hunger, the Kremlin not only wants to benefit financially but also to force Western countries to lift some of the sanctions already imposed on the Russian Federation. The Russians, by the way, are not hiding about this at all, as evidenced by a statement made by Russian Deputy Foreign Minister Andrei Rudenko on 25 May 2022. In an interview with the Interfax agency, he stated that 'Russia is ready to provide a humanitarian corridor for ships carrying food from Ukraine in exchange for the lifting of certain sanctions' (Russia ready, 2022). If the Kremlin succeeds in its ongoing war, Russia will feel so confident and impunity that it is likely to pursue further annexations: starting with Transnistria - a Russian-backed enclave in Moldova (Rogozińska, 2023) - and extending its influence across Ukraine, and possibly into Romania, all the way to the Black Sea (Rogozińska, 2022).

5. Conclusions

Due to the current unstable situation in the Black Sea region caused by hostilities between the Russian Federation and Ukraine, transport and trade in this basin have been severely hampered. For centuries, there has been an unresolved dispute over the dominion of the Black Sea. It is of particular importance in the case of the war in Ukraine - Russia, in violation of international law, is illegally deploying its ships and blocking food supplies.

For centuries, the Black Sea region has been the intersection of important communication routes between Europe and the Middle East, between the Eastern Balkans and the Southern Caucasus. Ensuring the security of these trade and communication routes is an essential condition for the development of both the region and the countries using these routes. The right of access to the sea in the Black Sea straits is governed by the Montreux Convention of 1936, providing Russia and Turkey with a privileged position in the region. However, the Kremlin is violating the Convention by illegally deploying its submarines in the Mediterranean and blocking food and energy supplies. The battle for the Black Sea could be the most important clash in the Russo-Ukrainian war, which could have dire consequences for hundreds of millions of people around the world and trigger a wave of migration of people at risk of starvation. It will also automatically be linked to riots and local armed conflicts, which are most often linked to food crises. If this is a deliberate action by the Kremlin it means that the Russians are introducing a new way of waging hybrid warfare that will bring millions of casualties and a global crisis without the need for military instruments of influence.

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ECONOMIC PERSPECTIVES AND THE ROLE OF TECHNOLOGY IN CULTURAL HERITAGE PROTECTION AND SUSTAINABLE DEVELOPMENT

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Abstract: *The analysis of an economic perspective on cultural heritage was carried out until the 1900s using theories from cultural economics. However, practice at that time showed the need to create a new branch that would look specifically at cultural heritage, beyond the cultural theories that existed in cultural economics at the time. This led to the emergence of a new concept: Economics of Heritage. In this context, there were voices in the literature (artists, archaeologists, cultural practitioners) who believed that a translation of cultural heritage in economic terms was in fact an unnatural trivialisation and materialisation of heritage, which would have a degrading effect on it. These effects would be represented by the commercialisation, devaluation, destruction, and improper exploitation of cultural heritage to gain economic benefits from it. On the other hand, recent studies promote the economic utilization of cultural heritage and the utilization of artificial intelligence in virtual and augmented reality technology, with the purpose of increasing measures of cultural heritage protection. This article proposes an analysis of both theoretical approaches, while including the role technology plays in the shift of the economic perspective on culture and cultural heritage and accentuates the role of a new framework for cultural heritage protection, in line with concepts such as sustainability and sustainable development..*

Keywords: cultural heritage, virtual reality, digitalization, economic development, sustainability of cultural heritage.

1. Introduction

The analysis of an economic perspective on cultural heritage was carried out until the 1900s using theories pertaining to cultural economics. However, practice at that time showed the need to create a new branch that would look specifically at cultural heritage, beyond the cultural theories that existed in cultural economics at the time. This led to the emergence of a new concept: Economics of Heritage. In this context, there were also voices in the literature (artists, archaeologists, cultural practitioners) who believed that a translation of cultural heritage in

economic terms was in fact an unnatural trivialisation and materialisation of heritage, which would have a degrading effect on it. These effects would be represented by the commercialisation, devaluation, destruction, and improper exploitation of cultural heritage to gain economic benefits from it. Moreover, the same scholars argued that, while financial benefits can be gained from cultural heritage, these are only short-lived and the long-term effects of using cultural heritage for economic purposes are negative. On the other side, studies and statistics conducted in the last 20 years by experts, scientists, NGOs, countries and reputable international organizations like the European Commission, show that an economic evaluation and utilizations of cultural heritage, not only does not negatively impact it, but it provides the proper framework for cultural heritage protection and conservation in a time of uncertainty and decline. This article proposes an analysis of both approaches, while including the role technology plays in the shift of the economic perspective on culture and cultural heritage. The purpose of this paper is to present the arguments in favour of the economic use of cultural heritage, as well as to present ways in which this economic utilisation can be done without affecting the preservation of cultural heritage sites and objects.

In the first part of the article, we analyse the economic value given to cultural heritage (in ways of direct and indirect use, as well as non-use, and how innovative technologies such as virtual reality and augmented reality can be used to protect and preserve cultural heritage, while maintaining its economic use. The second part is dedicated to the concept of „paradox of authenticity" in relation to the reinterpretation of cultural heritage with technology. Lastly, we focus our attention on a new concept in the field's literature: the Eco-Sufficiency Perspective.

Methodologically, the paper addresses and analyses the economic perspectives and uses of virtual reality and augmented reality to promote and protect cultural heritage, using the classical bibliographical review together with document analysis and data analysis, in a CLR mix. This mixed method of research allows for a coherent and deeper understanding of the theme, overlapping multiple conceptual frameworks in a multidisciplinary approach on cultural heritage studies (Onwuegbuzie and Frels, 2016, 1-28).

2. The issue with economic evaluation of heritage

Cultural heritage can play a significant role in sustainable development, providing a basis for social and economic development, creating job opportunities, and promoting cultural diversity and social cohesion. Cultural tourism, for example, can generate income for local communities while promoting the preservation of cultural heritage. In addition, traditional knowledge and practices can be harnessed for sustainable resource management and conservation. At the same time, sustainable development can contribute to the preservation of cultural heritage. Development projects that take cultural heritage values into account help to preserve historic buildings and landscapes, while ensuring a socially and environmentally responsible development process. This process makes the relationship between cultural heritage and sustainable development one of interdependence, with the aim of promoting social, economic, and environmental sustainability.

For many years, experts believed that obtaining financial and economic benefits by using cultural heritage was a mistake, a trivialisation that would result in the destruction of heritage on the long run. Moreover, the same scholars argued that while financial benefits can be gained from cultural heritage, they are only short-lived and the long-term effects of using cultural heritage for economic purposes are negative. The arguments against the use/commercialisation of cultural heritage were:

The possibility of degradation of cultural heritage. The more popular a heritage site is, the more intensively it will be visited and therefore the more "worn out". The problem with the use of cultural heritage is that it cannot be restored to its original form without losing its cultural importance once it has been degraded.

Preservation of cultural heritage used for economic purposes is not financially sustainable. The costs of preserving and protecting cultural heritage are far too high compared to the benefits of its exploitation. These costs are not financially sustainable and cannot be covered by the heritage owner without subsidies or external funding.

Artificially increasing demand for cultural heritage. Some heritage objects are popular and will be exploited economically without understanding their cultural significance. This artificial increase in demand for a cultural site leads to degradation on an image basis, not on a cultural basis. This effect, also known as the "Venetian dilemma" (Peacock and Rizzo, 2012),

causes degradation of cultural heritage without, in return, providing a higher level of culturalization for visitors.

3. The value of heritage and use of the enhanced reality technologies

In his paper, "Heritage Economics: Coming to Terms with Value and Valuation", (Throsby, n.d.) Throsby argues that the involvement of economists in the field of cultural heritage is not intended to degrade culture, but rather to contribute to the overall understanding of the societal values involved in the management of cultural heritage conservation and to provide new directions and guidance in this area. This paper highlights three areas of research from an economic perspective when it comes to cultural heritage: the theory and applications of economic analysis on heritage issues, valuation methods and their relevance to the estimation of cultural value and the economic impact of heritage policies. A relevant perspective on the economic impact of cultural heritage on sustainable development is given for the first time in the field of scientific research by El Sarafi, in 1999, in "The Environment as Capital", where he compares the concept of natural capital with that of cultural capital (especially from a sustainability perspective). Eighteen years later, the idea is taken up by Throsby, who describes the concept of sustainable cultural development as having similar elements to environmental sustainability. Cultural management is thus integrated into the overall framework of sustainability and is used as a factor in the formation of environmental public policies.

From an economic perspective, the value of cultural heritage is determined by the benefits of its direct use (extractive/consumptive), indirect use (non-extractive) and even non-use. When we refer to the extractive or direct value of cultural heritage, we mean what we are willing to physically pay to benefit from a particular space, place, asset, heritage item (whether we are talking about buying it, renting it, or buying a ticket to visit it). The indirect value of heritage is the mere existence of the heritage object, which increases the value of its surroundings (aesthetic value, recreational value). An example of this is the increased value of real estate near a cultural site, or the higher prices charged by cafés, restaurants, and pubs near heritage sites. The value of not using cultural heritage is the most difficult to estimate but it cannot be ignored. This refers to the particular situations where a heritage object is more valuable when it is not exploited and implies that its very use for some purpose may reduce its value by damaging it. For example,

for some indigenous peoples, a sacred site is more valuable if it is protected and access to it is restricted. Its very existence gives it value for that cultural group and using it for tourism purposes can reduce that value.

The European Commission argues that cultural heritage is of significant economic importance, particularly for the cultural and creative sectors surrounding it. At the same time, cultural heritage "is an important resource for economic growth, employment and social cohesion, with the potential to revitalise urban and rural areas and promote sustainable tourism." (European Commission, 2022)

But what are the levers we can employ to make the economic use of cultural heritage more effective, while protecting and preserving it? The answers can be diverse. In this paper we will focus on innovative AR/VR/MR (augmented reality/virtual reality/mixed reality) technologies and how they contribute (or have the potential to contribute) to the process of protecting and preserving cultural heritage in the context of sustainable development. These types of immersive technologies are those that allow the barrier between the real and virtual worlds to be reduced, even dissipated, allowing users to perceive an immersion in time and space that cannot be experienced otherwise. Theorising on the importance of immersive technologies is still in its infancy and the literature on the subject is limited. However, existing studies show a high interest in the inclusion of augmented and virtual reality elements in the cultural domain. (Suh and Prophet, 2018) Virtual heritage, as the merging of culture and technology, represents a 'cross-fertilisation' of the disciplines of virtual reality (VR) and cultural heritage. This new field encompasses not only culture, but also elements of virtual archaeology, art in virtual space, anthropology, etc. In "Digital Cultures, Lived Stories and Virtual Reality", Maschio proposes a new cultural paradigm, according to which digital space is an opportunity to rethink and reinterpret cultural communities.

The application of virtual and augmented reality in the context of cultural heritage can serve two purposes: the promotion and sustainable use of heritage and its conservation, restoration, and protection. Virtual heritage incorporates reality-based interactive technologies in an intangible space. This creates a visual (sometimes tactile) representation of monuments, artefacts, buildings, and other heritage objects that can be used as educational material to improve the process of analysing historical events, or that can be exploited economically. As

mentioned at the beginning of the article, one of the main concerns when it comes to tangible cultural heritage is its preservation in the context of sustainable development. However, heritage is fragile and ancient, and inefficient use or excessive exploitation can have unfortunate effects on it. Innovative technologies such as Virtual Reality and Augmented Reality have the potential to provide a unique cultural experience when visiting a place, thus preserving its integrity and reducing the impact of tourism on it. The arguments in favour of using VR and AR technologies are manifold and can be divided into three categories: time, space, and sustainability.

When it comes to time, the use of VR and AR technologies allows us to access the cultural heritage of periods that we would not have physical access to in the real world. For example, through a virtual exercise we can re-enact a scene from 500 years ago using the physical resources we have, to which we can add artificial reconstructions of the architecture of the time, the music of the era, the clothing, the customs, and many other things. Virtual and augmented reality allow people living in the 21st century not only to read about the reality of a past time, but also to simulate an experience as close as possible to the reality of that period. Augmented reality utilizes real space to display additional information or to reproduce, through technology, certain sequences representative of that space, whereas virtual reality takes place exclusively in a virtual environment, through tools such as VR glasses and cameras. Also from a temporal perspective, the use of virtual and augmented reality technologies aims not only to recover elements of cultural heritage that have been lost in the mists of time, but also to preserve those that are still present to preserve their cultural heritage for centuries to come. In "The Key Role of VR in Preserving Cultural Heritage", (Leslie, 2022), the author discusses the key role that modern technologies play in preserving cultural heritage, especially in situations such as Ukraine, Syria or Iraq, where it is threatened with destruction due to war, and how, through modern VR and AR technologies, we have the chance to save, if not the physical cultural heritage, at least its memory by encapsulating it in other technologies. By capturing cultural heritage with innovative technologies, there is a chance to preserve it and leave it as a legacy to future generations, as well as the opportunity to rebuild heritage in times of peace. One such initiative is the Institute of Digital Archaeology - a project of Harvard and Oxford Universities in partnership with Dubai's Museum of the Future - which has recreated a Roman triumphal arch from Palmyra, destroyed in the Syrian war, in 3D based on archaeological evidence and

photographs taken by tourists. Once replicated in virtual reality, the Institute's robots were able to create a physical replica based on the digital model. The arch has since been exhibited in several locations around the world, as a testament to digital art in the contemporary world, but also as a proof of technology's ability to save cultural heritage and pass it on in diverse and creative ways.

4. The paradox of authenticity

This cultural approach is not without its critics, who argue that the greatest risk to cultural heritage in reproducing the past through virtual reality is the loss of authoritative authenticity (Zhao, 2021). In theory, virtual reality is supposed to fully mimic the target heritage object(s) using high-fidelity technology to preserve the authenticity of the cultural experience. If this could be put into practice, it would result in an identical user experience in both contexts (real and virtual). However, this is not possible. The virtual experience is not limited to simulating the real user experience. Through the virtual experience, reality is redefined and reinterpreted each time.

The paradox of authenticity in virtual heritage is that there is no consensus on what is truly authentic. As a result, two different schools of thought emerge when it comes to the authenticity of virtual heritage. The first promotes the idea that virtual heritage is authentic if it accurately reproduces the original object down to the smallest detail, without trying to enhance the user experience (Roussou, 2002). This is the direction most archaeologists, historians and museographers take, as it has proven to be the most relevant to heritage conservation. The second direction aims at authenticity from the perspective of creating something new from the existing cultural heritage, adapting it to the current needs of users and 'revitalising' access to cultural heritage. Visual experience is more important than historical and archaeological accuracy. This vision is shared by artists, media technicians and owners of cultural tourist attractions. For them, the use of cultural heritage for economic purposes seems to be more important than historical accuracy, and newly created elements are not perceived as lifeless replicas of the old, but as new, original elements that describe culture in an innovative way.

From a spatial perspective, the use of virtual and augmented reality technologies aims to bring cultural heritage closer to the viewer. If, in the above context, virtual reality recreates something that once existed and now only exists in archaeological finds, images or historical

books, in the current context virtual reality seeks to remove another barrier between the heritage object and the viewer/user: space. The barriers related to the spatial element can be multiple, both in terms of the culture consumer (economic, time, mobility, etc.) and in terms of the cultural element itself (state of degradation, reduced accessibility, access restrictions imposed by authorities, etc.). Virtual reproductions of heritage elements remove many of these barriers, providing the ideal context for the beneficiary to access the heritage element(s) and eliminating the implications of the resulting restrictions, as well as those related to the element itself.

However, the space of virtual reality is far from neutral, especially because of the artistic vision of the heritage element. Most virtual representations of heritage items follow the model of three-dimensional reconstruction of that object, based on the specific Cartesian coordinates of three mutually perpendicular axes. Although the model is inspired by Descartes' philosophy, it only emphasises one of the two terms representative of this philosophy - *res extensa* - namely the material aspects that occupy space in the physical world we know and understand. What is missing from this approach is what actually defines culture, namely the second fundamental element of Descartes' philosophy - *res cognitans* - the intangible, non-material elements of humanity, such as consciousness and subjective experience of time and space. Apart from the generally accepted mathematical perspective, the idea of 'space' has different connotations and interpretations from one culture to another. Indian culture, for example, has more than one concept that described by the term 'space', unlike Romanian or English. In Sanskrit, the same word, *akasa*, is used to define mental space, consciousness, and physical space. This is also the case in Japanese culture.

In other words, the virtual recreation of heritage elements using AR and VR technologies has the ability to represent only one of the many facets of the spatial dimension, depending on the artistic vision of the people behind the technology.

5. Sustainability in heritage and the premise for a new theoretical framework: eco-sufficiency

The use of digital technologies to recreate and enhance the cultural experience was a natural response to the need to protect and preserve cultural heritage. The degradation of cultural tourism objectives, the exposure of heritage paintings and sculptures to inappropriate light and

temperature, the constant contact of heritage elements with large numbers of people, the destruction of heritage in conflict areas, the excessive tourism associated with excessive commercialisation, but also the lack of awareness of the importance of heritage, are some of the reasons why there is a consensus among heritage professionals about the lack of sustainability in heritage tourism (Ashworth, 2009). There is an interconnected relationship between cultural heritage and the environment. The negative impact of cultural heritage on the environment affects the former to the same extent as the latter. The same applies to the negative impact of the environment on cultural heritage. A relevant example could be the following: heritage sites are exposed to natural conditions, such as very high or very low temperatures, humidity, air pressure or specific soil characteristics, which result in the natural degradation of building materials over time. Degradation processes cause the chemical, physical and biological compounds from which buildings are constructed to break down and become embedded in the soil layers, perpetuating the degradation process (Pedersoli, 2016).

Fortunately, technological advancements are making it possible to digitise heritage tourism and access to heritage sites. Photogrammetry and imaging technologies, combined with digital data processing and post-processing, make it possible to exploit heritage features for economic purposes (tourism) as well as for further scientific research and historic preservation. The use of immersive technologies allows access to cultural heritage not only for tourists but also for specialists. Digital heritage (as heritage exploited through virtual and augmented reality and other similar technologies is called in the literature) can be defined as one of the most important resources for the field of knowledge, as it contains cultural, scientific, technical, architectural, and other data created from elements of historical value.

The most representative example of digital heritage is the Google Arts&Culture collection, which at the time of writing includes over 1,200 museums and art galleries world (Hajirasouli et al., 2021).

Among the largest movements in the field of sustainable development, environmental protection and the circular economy, and first among them, is the Club of Rome. It was formed in 1968 by distinguished personalities, famous in the fields of science, politics, culture and business, who realised that climate change, the problems facing the environment, resources and population are the consequences of irresponsible use of resources. It was the creators of the Club

who came up with the idea of "limits to growth", which they and experts from MIT (Massachusetts Institute of Technology) documented and analysed from economic, biological, sociological, anthropological and technological perspectives, and put all these ideas into what is now considered the "Bible" of the sustainable development field, "The Limits to Growth", which promotes the idea that our resources are finite, so that infinite economic expansion is not realistic or sustainable. The book outlines the predicament facing humanity in terms of growth based on depleting resources and excessive consumerism and provides an overview of the drivers of this unsustainable growth, as well as alternative measures that can be taken to create "a global steady state".

The term "sustainability" has emerged as a ubiquitous discourse in contemporary literature. While there are divergent perspectives on the precise origins and initial instances of its utilization, there is a prevailing consensus that the conceptualization of sustainability does not predate approximately five decades. Today, the concept of sustainability has permeated every aspect of life, both in everyday life and in specialised areas. According to the Brundtland Commission, sustainable development defines the level of development which meets the needs of the present, while making sure the future needs of the generations to come are still being able to me met. In the context of cultural heritage, it denotes the responsibility to protect and preserve cultural heritage, considering all the ethical, social, economic, and environmental aspects involved in the process.

In response to the ethical dilemma regarding the sustainability of using innovative virtual and augmented reality technologies to preserve and promote cultural heritage, experts have laid the theoretical foundations for a new concept: the eco-sufficiency perspective (Paschalidou, Fafet and Milios, 2022). It is based on the premise that the best way to preserve cultural heritage is through digitisation. In order to minimise the negative impact of the digitisation process on the environment, it is necessary to create a new conceptual framework that integrates elements of sustainability into the sphere of development of innovative virtual heritage technologies. Eco-sufficiency aims to strike a balance between efficiency and sufficiency, balancing the positive impact of developing a new technology for heritage use and preservation with the negative impact of the same technology on the environment.

Although still at an early stage, the new concept has the potential to revolutionise the relationship between sustainability and cultural heritage by involving policy makers and international heritage organisations in the development of the measurement tools needed for such benchmarking.

6. Conclusions

Heritage plays an important role not only in the creation and implementation of socio-economic development strategies, but also when it comes to sustainable development. The environmental issues facing society have been a central focus of all soft-power policies over the last 30 years, and their integration into all socio-economic aspects is no longer new. The European Union is increasingly focusing attention on the impact of cultural heritage on sustainable development, initiating a series of cultural funding projects with a key objective: "the first climate neutral continent". (The European Commission, 2022). The shift from traditional economic perspectives (pertaining to cultural economics) to a framework dedicated entirely to cultural heritage shows a growing recognition for the need a specializes approach in the field. But it also brings a wave of divergent opinions in the literature, between the voices promoting the preservation of cultural heritage and criticizing the economic utilization of it, and those claiming that economic utilization, done properly, is the key to cultural heritage protection and conservation.

In support of the latter, virtual reality and augmented reality offer the best means to both explore cultural heritage from an economic perspective, and contribute to the preservation of it, providing tools for safe and non-damaging utilization of culture and cultural sites. But these advanced technology tools have their own limitations: big costs, limited attribution, and issues regarding authenticity. Is a virtual and augmented representation of an antic art piece an ideal copy of it or a reinterpretation with its own cultural value? This is a question that finds its answers differently, depending on the conceptual framework we analyse. The paradox lies in the challenge of defining the concept of authenticity in the virtual world, where the users experience, differently from the real world, can be constantly and continuously redefined and reinterpreted.

In the pursuit of a new theoretical framework to define and understand the challenges of promoting and protecting cultural heritage in a world focused on growing and expanding beyond

its means, the concept of eco-sufficiency proves it is possible to integrate the principles of environmental sustainability and protection in the process of preservation of cultural heritage. While still in early stages, the framework provides enough evidence to support a strong potential collaboration between environmental and cultural heritage management with the purpose of developing strategies and taking measures to enhance digital endeavours towards sustainable development and protection.

This paper proves a dynamic interplay between economic perspectives, technology advancements and sustainability concerns in the realm of cultural heritage protection. The multidisciplinary nature of this research contributes to a deeper understanding of the complex connections between cultural heritage, economics, technology and sustainability. Future endeavours in the subject must analyse the evolution of eco-sufficiency and its potential to sustain a new framework for risk management in cultural heritage protection.

With regards to the limitations of the research, one of the most challenging aspects was to integrate the economic perspective with other fields pertaining to cultural heritage, such as sociology, anthropology, and archaeology, while fully accounting for the policy framework in the cultural domain, at national and international levels.

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THE EU LABOUR MARKET: TRENDS AND PATTERNS FOR CANDIDATE COUNTRIES

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Abstract: *The article examines specific aspects of the European Union (EU) labour market, its dynamics and structure to assess the potential opportunities for candidate countries. The research aims to identify trends and patterns of labour market development for candidate countries and potential candidates for membership in the European Union. The study uses data from labour market statistics for the EU, candidate countries, and potential candidates (enlargement countries). The research is based on comparison, grouping, generalisation, trend analysis, correlation regression, and cluster analysis. The labour market indicators in most studied countries are significantly lower compared to the EU, but positive dynamics are observed. The results show that candidate countries and potential candidates have different indicators that characterise the level of development and dynamics of the labour market. Most candidate and potential candidate countries (except the Republic of Turkey) have downward trends in unemployment and a close negative correlation between unemployment and Gross Domestic Product per capita. Labour market analysis can support policymaking for candidate countries and potential candidates and monitor participation in the EU labour market.*

Keywords: candidate and potential candidate countries, economic activity, employment, EU, labour market

1. Introduction

Unemployment is one of the most pressing global issues today. In the EU, this predicament is tackled using intricate methods of regulation, which not only provide financial support but also establish the necessary conditions for economic growth. However, in countries undergoing economic transition, specifically those considering EU membership, high unemployment remains an outstanding challenge that requires resolution. Applying for membership in the EU, less developed countries expect to receive economic benefits from interaction with more developed countries, thus solving the issue of poverty and unemployment.

One of the primary objectives of the EU's labour market development by 2030 is to attain an employment rate of 78% among individuals aged 20 to 64. Simultaneously, it aims to encourage the education of citizens by ensuring that 60% of the adult population participates in training programmes. Additionally, the EU aims to reduce the risks of poverty and social isolation by lifting at least 15 million citizens from the risk of poverty. These ambitious objectives are outlined in The European Pillar of Social Rights Action Plan (European Commission, 2021). By 2019, most developed European countries were steadily progressing towards their labour market targets. Nevertheless, the COVID-19 pandemic changed the development strategy, resulting in a pause in rapid progression. The employment rate in the European market dropped to 72.4% during the third quarter of 2019 according to the European Commission (2021). However, there is some variation among researchers regarding reducing employment during the crisis. Although at the outset of the COVID-19 outbreak, many experts and scientists were discussing the pandemic's negative and potentially catastrophic impact on the labour market, the trends observed in 2021 have validated the hypothesis that nearly all European developed countries have been obliged to adopt a new, more dynamic approach to development. This transformation is attributed to innovations and the transition of almost all sectors to new product launches and sales technologies (De Vet et al., 2021).

The rapid market recovery of high-income countries affects labour markets in less-developed countries. The impact is felt even within the EU, where the increased demand for

labour stimulates migration from the less developed regions of Eastern Europe. Once the labour market becomes accessible for the EU-candidate countries, where wages and living standards are much lower than in Europe, their labour market will be reformatted entirely (World Bank, 2019).

The research aims to identify trends and patterns of labour market development in candidate and potential candidate countries for the European Union membership.

To accomplish the aim, the subsequent tasks were completed:

- Comparative analysis of the labour market in the candidate countries and potential candidates;
- Identification of trends in changes in the employment level of the population in the countries after joining the EU;
- Determination of the relationship between unemployment and Gross Domestic Product (GDP) per capita in candidate and potential candidate countries;
- Identification of standard and distinctive features of labour market development in the studied countries.

Research identifying potential opportunities and threats for EU candidate countries is scarce at the scientific level, so this topic has significant scientific value.

The study's structure comprises an introduction, a literature review outlining crucial aspects of the EU labour market's evolution, its distinctive traits, and transformations. The research findings involve an examination of activity level alterations (in EU membership applicant and possible applicant nations), employment and unemployment indicators (in EU 2004 and 2007 accession states), recognition of the relationship between unemployment and GDP level in states seeking EU membership and potential candidates, cluster analysis, data discussion, and conclusive author observations from the analysis.

2. Literature review

In the 1950s, the formation of the European Coal and Steel Community (ECSC) and the European Economic Community (EEC) established the basis for developing a shared labour market, free labour mobility, and social protection for migrants. Since then, there has been a pronounced rise in economic cooperation among member states of the EEC, and

subsequently, the EU. During the period of deepening integration processes, one of the primary objectives of the EU was to establish a unified market, guaranteeing the free flow of goods, services, individuals, and capital throughout its boundaries. However, this goal has been impeded by intangible barriers and difficulties in decision-making, leading to significant delays in the integration process (Lehtimäki & Sondermann, 2022). The European Commission's White Paper in 1985 was crucial in restoring integration by outlining requirements for a single market. The creation of a genuine single market had outlined the economic needs, channels, and impact. This became the foundation for further adopting the Single European Act in 1986 and forming a common market. Consequently, it served as an essential stage in recognising the labour market as part of the common pan-European internal market. Since 1992, the European Union's single market has expanded by admitting new member states that have become part of the common market. As a result, the European Union labour market has developed key features. This includes the freedom of labour movement, a social security and protection system, a promotion of occupational mobility, and collaboration in skilled worker training. The EU labour market, established on the principles of a shared market, has emerged as the pivotal component of Europe's sociopolitical spectrum.

To thoroughly analyse the issue, it is essential to study the complex structure, organisation, and unique characteristics of the labour market in the EU. The core objectives of EU general social policy involve ensuring a high level of employment, reduced unemployment, stable living standards, social protection, and addressing migration issues (Didenko, 2010). The authors' research outlines the unique characteristics of employment policies and the EU's strategies for addressing employment-related challenges. The Open Method of Coordination (OMC) forms part of the EU's employment policy and Luxembourg process and can serve as an instrument of the Lisbon strategy. This framework allows the Member States to cooperate towards achieving common objectives by directing their respective national policies. Under this intergovernmental approach, countries assess each other through peer pressure, while the Commission's responsibility is limited to monitoring (Eurostat Statistics Explained, 2023a).

Tvrdon (2008) showed the theoretical foundations of labour market formation in the EU, highlighting the institutional component and its importance in the efficiency of the labour market and economy. Regarding the structure of the EU labour market, the author's research examines

the influence of the Visegrad Group nations, encompassing Poland, the Czech Republic, Slovakia, and Hungary, on the EU labour market. Tvrdon (2008) identified that the labour market in these countries struggles with less effective regulation compared to developed European countries. The significance of improving labour market regulation efficiency is supported by Dayıoğlu and Aydın's (2020) research. The authors identified economic development, unemployment stemming from labour market management, inflation, and current account balance as crucial indicators of a country's economic performance. The interplay between these variables holds immense significance for economic policies.

A key feature of the contemporary EU labour market is to encourage employment in specific member countries of the EU and to address workforce deficiencies caused by migration of workers (Ward-Warmedinger & Macchiarelli, 2013). The authors demonstrate that EU members establish labour and work conditions that can efficiently tackle unemployment in various countries and economic sectors within a particular nation. Khaing (2021) analysed the countries' policies to regulate labour migration, while Arpaia et al. (2016) support the notion that population mobility can bring balance to labour markets across EU countries. Barrett et al. (2006) and Ward-Warmedinger and Macchiarelli (2014) demonstrated the particularities of workforce movement in diverse areas of the of the EU.

Kahanec's (2015) analysis explored the impact of labour migration from the Eastern to the Western regions of the EU. The study identified the primary threats and opportunities faced by both sides. Kahanec argues that the receiving country gains a larger benefit than the sending country in regards to available labour resources. However, the advantages and disadvantages of labour migration and free mobility within the enlarged EU are influenced by a variety of individual and industrial factors. Nevertheless, these practices allow for more efficient labour markets. Global crisis phenomena, including the COVID-19 pandemic, play a pivotal role in the labour market across various countries. An analysis of the pandemic's effects on the labour market revealed a significant surge in the EU market during the first quarter of 2020. The countries with the highest absenteeism rates were Cyprus, the Hellenic Republic, Spain, Italy, and France, while the Czech Republic, the Slovak Republic, Sweden, and Hungary had the lowest rates. According to experts (Chinn et al., 2020), unemployment in Europe could be

prolonged. Economic recovery was expected to take up to four years in 2020, but in 2021, experts anticipate a complete recovery from the pandemic by 2022 (De Vet et al., 2021).

The impact of the pandemic on the labour market is not uniformly adverse across all countries and economic sectors. Certain states will benefit from the labour market crisis. For instance, Poland, Romania, and Italy will be able to hold onto their highly skilled workforce that would typically migrate to work in other European countries (Buttler, 2021). Regulating labour markets within European countries greatly affects the overall effectiveness of employment level management in the EU. Therefore, the functioning of labour markets at the national level remains increasingly relevant and is a significant area of scientific research. Tassinari (2022) analyses labour market regulation in Italy, investigating the various stages of liberalisation and identifying persistent obstacles that hinder further growth. The research reveals that policies governing the labour market, particularly with regards to post-pandemic trends, remain restricted in scope, leading to a lack of substantial change. Italy's National Plan for Recovery and Resilience centres on measures impacting the supply of the labour market (Tassinari, 2022). Similarly, Walter (2023) emphasises the particular importance of the German market in the EU labour market structure. His study analyses the link between the effectiveness of German labour market reform and employment, looking at the impact of productivity growth in Germany and Eastern Europe and the relationship between trade intensification and labour productivity.

The labour market conditions in EU candidate countries are less favourable than those in developed European nations. Blazhevski and Nikolic Blazevska (2023) underline in North Macedonia the labour shortage as a consequence of migration trends and the decreasing employment of workers with specific knowledge, abilities and skills. In Montenegro, Golubovic et al. (2022) examine poverty within the working population and discover that it has reached an unprecedented level, surpassing all other countries in the former Yugoslavia, demonstrating its lack of compliance with the EU's poverty guidelines. Factors contributing to the issue of poverty in Montenegro are the prolonged lack of minimum wage adjustments, inadequate benefits, limited financial assistance based on income, challenges in obtaining child support from employment status, and relatively high tax rates on earned income. Albania's labour market is characterised by developmental variability, particularly with the country's transition to a market economy. Vulnerability is observed among two categories of the working population: young

people who are new participants in the labour market and workers of the older generation who struggle to adapt to changes in the working environment, social services, and public enterprises (Xhumari, 2023). The authors highlight the significance of customising Albanian work provisions for these vulnerable workers to meet the standards and principles of European social policy, as the nation pursues integration with the European Union. Bosnia and Herzegovina also faces challenges related to population ageing, leading to difficulties in employing older generations of citizens (Pranjić and Račić, 2020). The trends in population ageing contribute to a deteriorating employment situation and an increase in unemployment, further widening the gap between the country's indicators and those of successful, developed EU states. Also, Stojanova et al. (2019) conducted a study on the elderly population of EU countries, examining the duration of their working lives and the prevalence of unemployment in a distinct context. The author determined that the shorter the duration of working life, the less likely the labour force aged 55 to 64 will be unemployed. Older people are expected to retire earlier, reducing unemployment in the 55–64 age group. As per the author, digitalisation and unemployment are correlated. To maintain employment levels among older citizens in the "Industry 4.0" era, strategic workforce planning, role adaptation, personnel selection, and professional training are crucial. These measures aim to equip the labour force with additional IT skills.

Active discussions are taking place regarding the dependence of labour market development on various factors. Notably, monetary policy is singled out as one of the main and significant factors that correlate with labour productivity (Assemien et al., 2019; Gomes et al., 2023), especially concerning the control of inflation levels (Ari et al., 2023; Bulligan and Viviano, 2017; Yildirim, 2015;) and the discount rate.

It has been demonstrated that emigration influences employment and unemployment rates. Specific patterns were identified by Škuflić and Vučković (2018), who found that a higher share of emigrants corresponds to a higher unemployment rate, indicating a positive correlation between the variables. However, an unambiguous interpretation of this conclusion is not possible due to the influence of other factors such as differences in skills between emigrants and those who remain, labour shortages in specific sectors, potential immigration, and wage levels, and the resulting consequences (Zaiceva, 2014). The emigration prerequisites are also linked - if emigrants were previously classified as unemployed, the unemployment rate would decrease;

however, if emigrants were employed before emigration, the impact would be contingent on the likelihood of filling their vacancy with eligible candidates (Asch, 1994).

Moreover, a noticeable correlation exists between the level of innovation development in a state, technological progress, and labour productivity. Chinoracký and Čorejová, T. (2019) made a noteworthy contribution and conducted a correlation regression analysis to determine the relationship between labour market development and digital transformations. Their findings highlight that the main trends in the correlation between the two are the changes in employment rules, requirements for competencies, knowledge, skills, and attitudes of employees. The risk of automation due to global digitisation is inherent in all European nations. However, those in Eastern and Southern Europe are at a significantly higher risk of job automation. This could bring about potential transformations in the job market structure and employment indicators. According to the authors' calculations, countries with low levels of employment face a greater risk of job automation, while those with higher employment levels are less likely to experience it.

In the context of enhancing productivity management and mitigating job losses brought about by digital transformations, emphasis is placed on enhancing digital skills and the professionalism of human capital (Aly, 2022). Retkoceri and Kurteshi (2018) investigated Kosovo, Deshati (2015) analysed Albania, and Nikolic et al. (2015) researched Serbia, pinpointing the primary limitations to innovative progression in particular EU member states and their influence on the labour market and employment opportunities.

3. Methodology

The study analyses the labour market of various groups of countries based on a sample. EU member states include Albania, Montenegro, North Macedonia, Serbia and Turkey, all candidates for joining the EU. In addition, Bosnia and Herzegovina and Kosovo are considered potential candidates. These countries have demonstrated their unequivocal interest in joining the European Union. Nevertheless, the European Commission is presently examining their status as members of the European Community (European Commission, n.d.). As labour market statistics are only available up to and including 2020, it was necessary to consider modifications to the list of candidates and potential candidates for 2021 and 2022.

For the study, we have provided an overview of labour force characteristics covering indicators defined according to the methodology adopted in the EU (Eurostat Statistics Explained, 2015):

1. Activity rate – the percentage of active persons about the comparable total population. The economically active population comprises employed and unemployed persons;
2. Employment rate – the percentage of employed persons about the comparable total population. The comparison is made with the working-age population for the overall employment rate;
3. Unemployment rate – the number of people unemployed as a percentage of the labour force.

Eurostat publishes labour market statistics based on the definition of unemployment provided by the International Labour Organization (ILO). The primary source for European labour force statistics is the European Union labour force survey (Eurostat Statistics Explained, 2023). The labour force survey is conducted according to the European legislation in all EU Member States. Likewise, Montenegro, North Macedonia, Serbia and Turkey, candidate countries and potential candidates, carry out the survey following the same protocols. Both the EU and their data are available for free on Eurostat's website (Eurostat Statistics Explained, 2023b). Data for the enlargement countries (candidate nations or potential candidates) is collected annually for a range of indicators via a questionnaire sent by Eurostat.

Correlation coefficients were calculated from 2010-2020 data to explore the correlation between unemployment levels and GDP per capita in candidate nations and potential candidates for EU membership. The regression equation for each country was established:

$$y_i = a_i + b_i x_i, \quad (1)$$

where: i – years, y – GDP per capita (current EUR), x – unemployment rate (% of the total labour force).

The utilization of correlation-regression analysis enables a thorough depiction of the interdependencies among indicators. Chinoracký and Čorejová (2019) previously employed this methodology to investigate the labour market of the European Union. Their research sought to establish correlations and evaluate the degree of influence between the labour market progress of designated EU nations and variables that impact it, for instance, the proliferation of digital

technologies. The selected methodology enables a clear depiction of interdependencies and causal relationships. The study examined the correlation between the unemployment rate among those aged 55-64 and individual explanatory variables utilizing the methodology presented in Stojanova et al.'s (2019) work. Additionally, the research conducted by Škuflić and Vučković (2018) analysed the influence of migration processes on the level of unemployment.

To obtain a labour market forecast for 2021-2022 in candidate and potential candidate countries, a trend analysis was conducted based on data for 2010-2020.

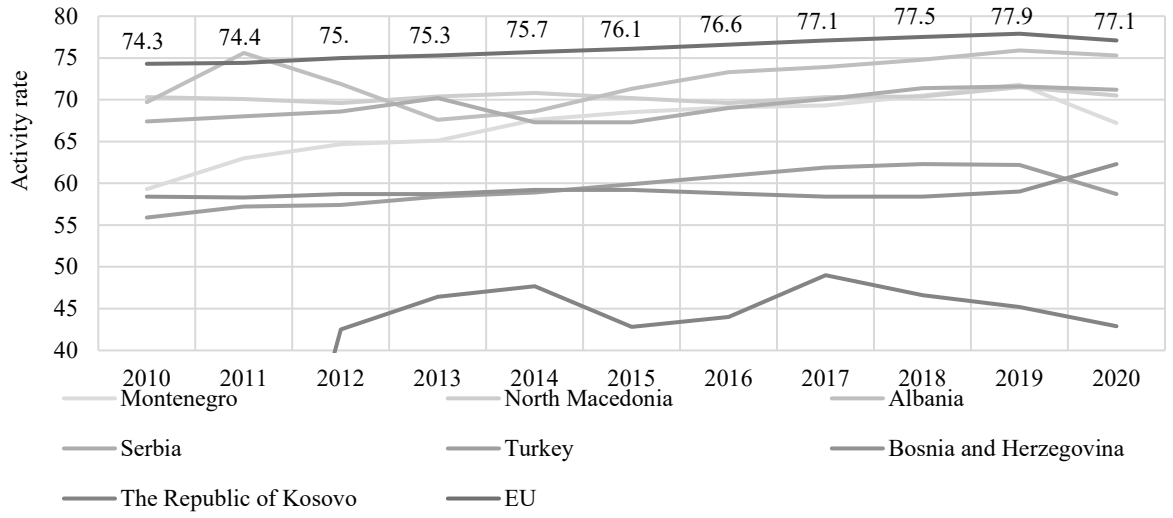
The study employed the cluster analysis method to cluster analysed countries according to their unemployment rate and GDP per capita similarity in 2010 and 2020. An Agglomerative Hierarchical Clustering (AGNES) was used to create the clusters. The statistical analysis was conducted using XLSTAT software in Excel.

4. Main features on the labour market within EU and enlargement countries

In the context of the rapidly evolving migration processes and the rise in human capital mobility, coupled with the exacerbation of crisis phenomena at the national economy level, the significance of the EU labour market is of paramount importance. The European labour market provides a relatively stable atmosphere with a dense concentration of skilled, top-notch labour and enticing job prospects. The crisis between 2010 and 2022 had a significant impact on market stability, resulting in decreased employment levels and an uptick in the unemployment rate. However, the clear adherence to defined guidelines, principles of employment management, and the social sphere, along with member states' compliance with national goals and obligations in labour market management, helped prevent indicators of activity on the European labour market from reaching critically low levels.

The co-ordinated employment management policy of the EU creates a highly desirable European labour market for developing countries. These countries commonly align themselves with the European integration development trajectory. As a result, the activity rates have increased in most of the EU's potential candidate countries, including Albania, Serbia, Montenegro, Bosnia and Herzegovina, from 2010 to 2020 (refer to Figure 1).

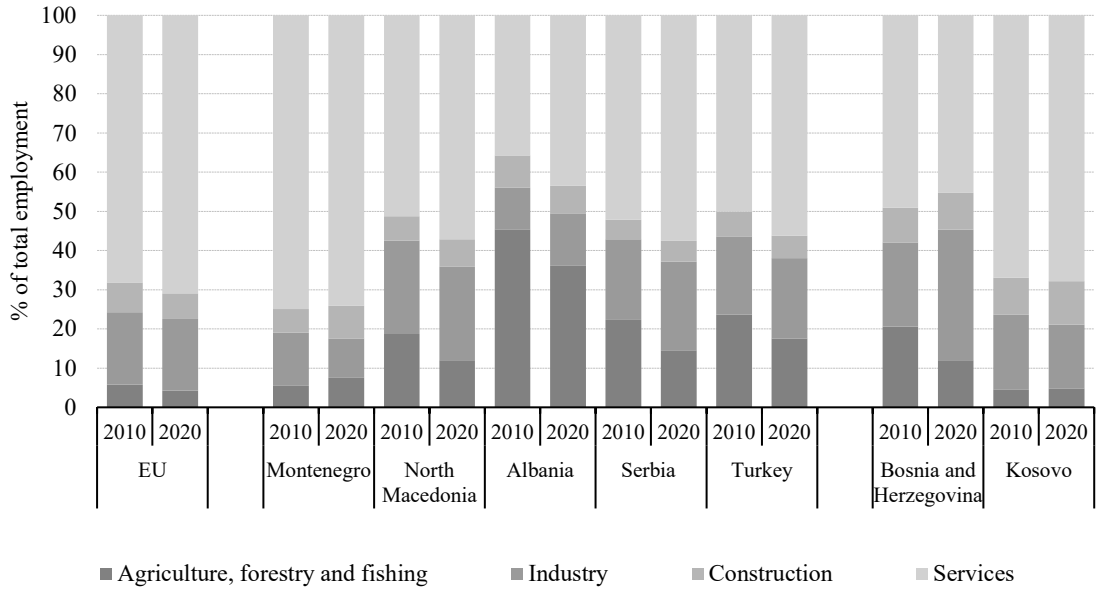
Figure 1. Activity rates of persons aged 20-64 years, 2010-2020



Source: Eurostat Statistics Explained (2023b)

Based on Figure 1 data, the average activity level among the population aged 20 to 64 years residing in EU member states stands at 76.1%. During the investigated period, there was an increase of 3.8% in the indicator. Despite the survey, none of the countries have achieved the EU activity level. Albania reported the highest activity rates at 75.3%, whereas Kosovo, a potential candidate for the EU, marked the lowest at 43%. As the activity level quantifies the proportion of active individuals within the entire population, it is relevant to concentrate on the count of both employed and unemployed individuals in prospective EU member states and potential candidates. Figure 2 shows an analysis of the employment structure for 2010 and 2020 by broad economic activities.

Figure 2. Employment of persons aged 15 years or more by economic activity, 2010 and 2020 (% of total employment)



Source: Eurostat Statistics Explained (2023b), Eurostat (2023a)

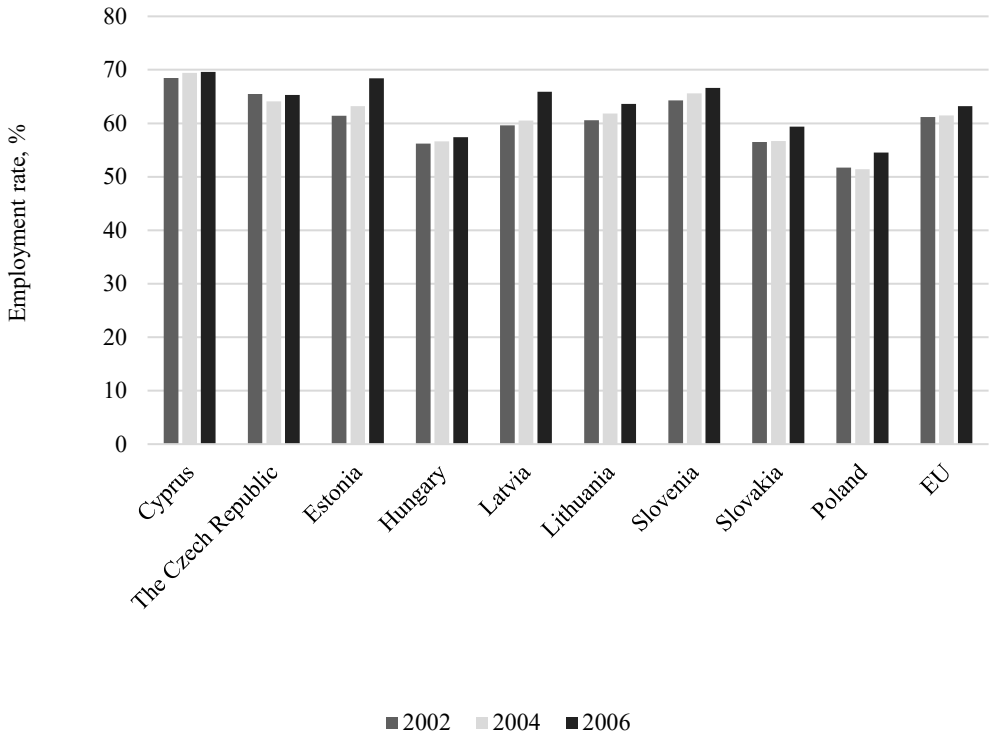
In most candidate and potential candidates' countries, services are the most significant proportion of the workforce and grew during the analysed period. In 2020, services accounted for more than half of people employed in all studied countries except Albania Bosnia and Herzegovina. The highest employment share of services was in Montenegro (74.1% in 2020) and Kosovo (67.9% in 2020). Many of the workforce was employed in agriculture, forestry, and fishing in most candidate and potential candidates' countries except for Kosovo (4.8%) and Montenegro (7.5%). The industry's employment share was relatively stable and changed slightly over the period analysed. The different structure of economic activity was in the EU's workforce. In 2020, more than 70% of persons were employed in the service; the industry had the second largest share with more than 18% of total employment, and the claims of employment in construction, agriculture, forestry, and fishing were much lower (Eurostat Statistics Explained, 2023b).

Generally, the unemployment rate changes sometimes after specific economic or political influences. When a country's economy begins to respond to definite macroeconomic factors, employers remain typically cautious about hiring new workers, and there may be a delay before the unemployment rate begins to fall. A study of various country-specific case studies and trends

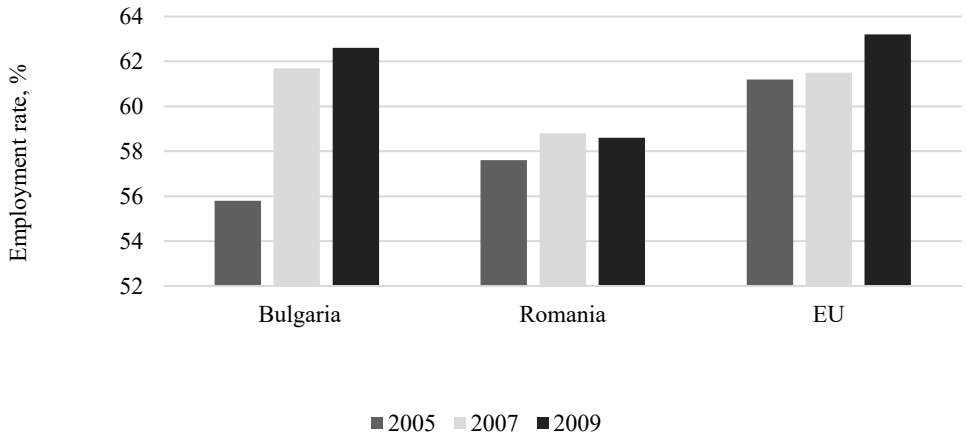
demonstrates that changes in labour market stem from alterations in regulations and regulations-related institutions that govern the labour market (International Labour Organization, 2016).

EU membership has a variety of impacts on the labour market, and accession may lead to changes in employment rates. Figure 3 (a, b) presents data for the nations that joined the EU in 2004 (Estonia, Latvia, Lithuania, Slovenia, Slovakia, Cyprus, Czech Republic, Hungary, Poland) and 2007 (Bulgaria and Romania).

Figure 3. Employment rate, total (% of the total labour force of working age): a - in Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Slovenia, Slovakia, Poland and EU; b - Bulgaria, Romania and EU



a)



b)

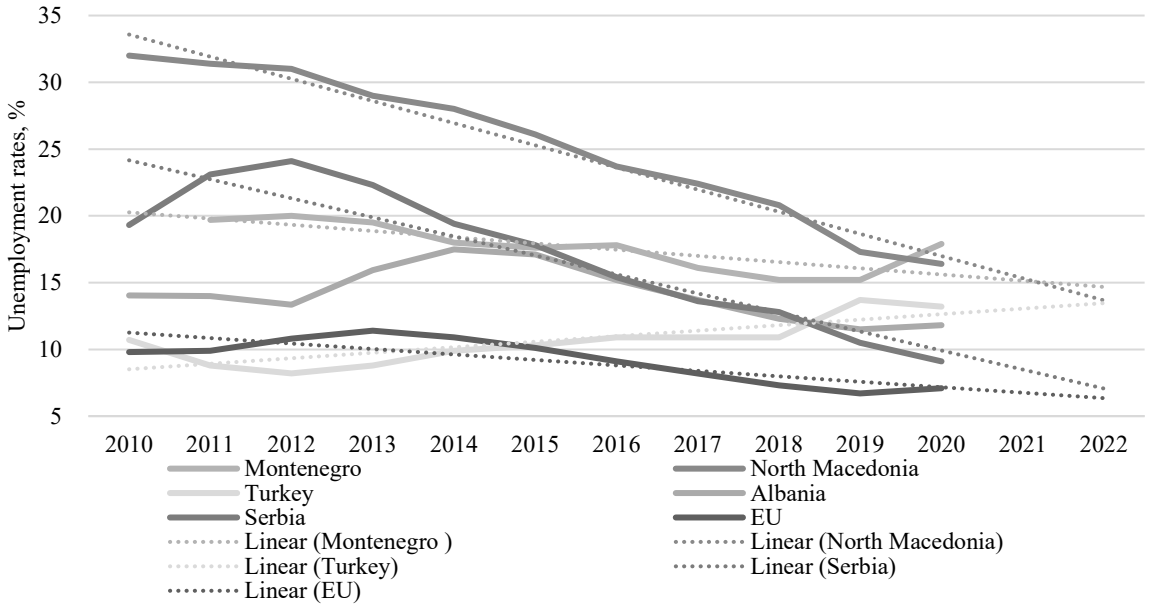
Sources: Compiled by the authors on the data from Eurostat (2023a)

Employment rates in EU accession countries have varied during the study period and no specific pattern emerged. Certain countries, such as Estonia, Latvia, Lithuania, Slovenia, and Slovakia, experienced an increase in employment rates within two years of accession. However, others, including Cyprus, Czech Republic, Hungary, and Poland, witnessed a decline. The accession countries that joined the EU in 2007 had differing scenarios, with Bulgaria experiencing a decline in employment and an increase observed in Romania.

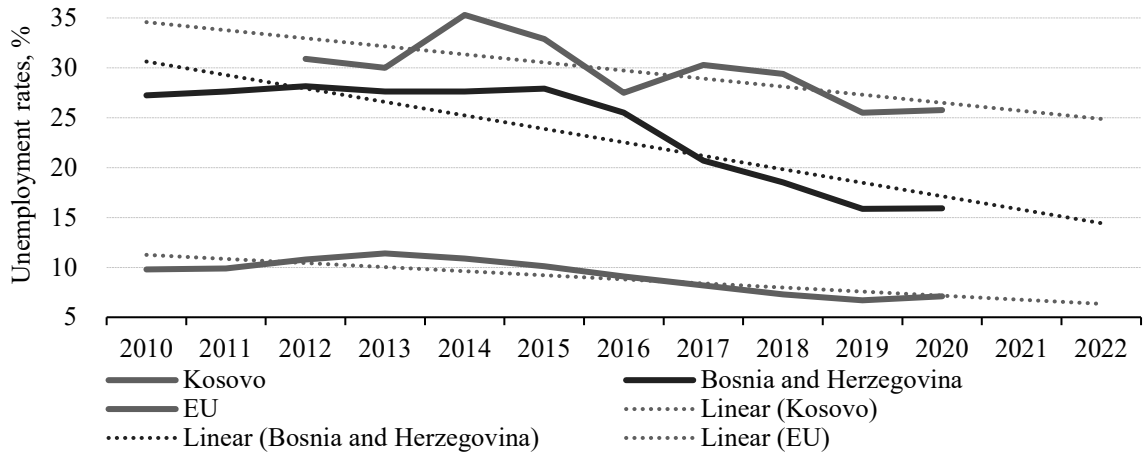
Unemployment rate data for candidate and potential candidate countries, as well as for the EU, is presented in Figure 4 (a, b).

Within the 2010-2020 period, unemployment rates peaked in Kosovo and Albania in 2014, in Montenegro, Bosnia and Herzegovina, and Serbia in 2012, in North Macedonia in 2010, and in Turkey in 2019. The highest unemployment rate for the EU was recorded in 2013. Unemployment rates in most EU candidate and potential candidate countries hit their lowest point in 2019, during the period from 2010 to 2020. However, Turkey experienced its minimum rate in 2012 (refer to Figure 4 (a, b)).

Figure 4. Unemployment rates 2010-2020 (% of the labour force): a - in Montenegro, Turkey, Serbia, North Macedonia and Albania; b - in Kosovo, Bosnia and Herzegovina and EU



a)



b)

Sources: Compiled by the authors on the data from Eurostat Statistics Explained (2023b), Eurostat (2023c)

The unemployment rate in the EU was 7.1% in 2020, with an average rate of 9.2% from 2010-2020. Kosovo had the highest unemployment rate in 2020 and the highest average unemployment rate between 2010 and 2020. The countries with the highest unemployment rates during this period were Montenegro, North Macedonia, and Bosnia and Herzegovina, while Serbia and Albania had the lowest unemployment rates in 2020 amongst the countries analysed.

Turkey's unemployment rate in 2020 was 13.2%, surpassing the average rate of 10.6% from 2010 to 2020 and standing out from its candidate and potential candidate counterparts.

5. Results and Discussion

The trend lines for 2021-2022 indicates a general trend towards diminishing unemployment rates throughout the European Union, including both candidate and potential candidate countries. Notably, Serbia is predicted to meet the EU's unemployment level by 2022. However, Turkey is the only country that displays an inclination for escalating its current unemployment rate over the course of 2021-2022.

The analysis of the relationship between unemployment (UnL) and GDP per capita (GDPpc) in the candidate countries and potential candidates based on the correlation-regression analysis of the data for 2010-2020 is shown in Table 1.

Table 1. Unemployment rate* and real GDP per capita** in candidate countries and potential candidates in 2010-2020

	Albania		Bosnia and Herzegovina		Kosovo		Serbia		Montenegro		Turkey		North Macedonia	
	Real GDP pc	UnL	Real GDP pc	UnL	Real GDP pc	UnL	Real GDP pc	UnL	Real GDP pc	UnL	Real GDP pc	UnL	Real GDP pc	UnL
2010	3 090	14.09	3 665	27.31	2 271	…	4 330	19.22	5 050	19.65	8 000	10.66	3 460	32.02
2011	3 180	13.48	3 792	27.58	2 528	…	4 450	22.97	5 200	19.76	8 760	8.8	3 530	31.38
2012	3 230	13.38	3 794	28.01	2 655	30.88	4 440	24.00	5 060	19.81	9 070	8.15	3 510	31.02
2013	3 260	15.87	3 878	27.49	2 794	29.77	4 590	22.15	5 230	19.59	9 710	8.73	3 610	29

2014	3 330	18.05	3 967	27.52	2 950	35.26	4 540	19.22	5 320	18.05	10 050	9.88	3 740	28.03
2015	3 410	17.19	4 155	27.69	3 202	32.84	4 640	17.66	5 500	17.55	10 520	10.24	3 870	26.07
2016	3 530	15.42	4 355	25.41	3 368	27.49	4 820	15.26	5 660	17.73	10 730	10.84	3 980	23.72
2017	3 670	13.62	4 578	20.53	3 534	30.34	4 950	13.48	5 920	16.08	11 380	10.82	4 020	22.38
2018	3 830	12.3	4 891	18.4	3 715	27.76	5 200	12.73	6 230	15.19	11 560	10.89	4 130	20.74
2019	3 920	11.47	5 169	15.69	3 959	25.07	5 460	10.39	6 480	15.13	11 490	13.67	4 290	17.26
2020	3 810	11.8	5 040	15.87	3 772	25.46	5 440	9.01	5 490	17.88	11 600	13.11	4 100	16.55
Multiple R	0.5429		0.9614		0.7178		0.9238		0.9651		0.6748		0.9662	
R Square	0.2948		0.9243		0.5152		0.8535		0.9315		0.4554		0.9335	
X Variable	-73.2362		-102.9695		-98.2492		-72.9698		-257.8805		493.8183		-49.7067	

Sources: Compiled by the authors on the data from Eurostat (2023c), Kosovo Agency of Statistics (2022), Agency for Statistics of Bosnia and Herzegovina (2023)

Note: *Unemployment, total (% of the total labour force); **GDP per capita (current EUR).

The correlation coefficients computed in Table 1 confirm a tight correlation between unemployment and GDP per capita across nearly all considered countries. The calculated coefficients range from 0.5429 (Albania) to 0.9662 (North Macedonia). An examination of the results mentioned earlier indicates that unemployment rates have an effect on the GDP level.

The countries of Bosnia and Herzegovina, Kosovo, Serbia, Montenegro, and North Macedonia share a direct and significant relationship between their indicators. By decreasing unemployment rates, these nations could improve their GDP, boost production levels, and drive aggregate demand. As these nations undergo transformation, the persistent effort to maximize the effective utilization of their human potential should be a critical component of their development strategy. The implementation of socially-driven initiatives by these nations will aid in achieving acceptable levels of production while facilitating steady GDP growth. In contrast, the scenario in Albania and Turkey varies, where the correlation between unemployment and actual GDP is comparatively weaker. A more complex set of factors influences the creation of GDP, and unemployment is not the sole determinant of its dynamics. Pricing processes, market price regulation, economic conditions, and inflation play significant roles. The markets' unique characteristics, as well as the relatively higher inflation rate in Albania and Turkey compared to Bosnia and Herzegovina, Kosovo, Serbia, Montenegro, and North Macedonia, may explain the average density of connection between the studied indicators in these countries (Appendix A). Inflation and unemployment show a dependent relationship, as evidenced by the Phillips curve, whereby a reduction in unemployment rates leads to a faster increase in inflation-adjusted wages in the long term.

Although the correlation between these indicators has undergone some changes following the global financial crisis of 2008 and the 2019 pandemic in Eurozone countries, it still demonstrates instability over time but remains present. The decrease in unemployment rates in Albania and Turkey cannot be interpreted solely as a consequence of increased labour productivity. Therefore, it did not considerably influence the increase in production volumes and the upward trend in GDP, as indicated by correlation indicators.

The information gathered from Table 1 on unemployment levels and GDP per capita allowed for the classification of candidate and potential candidate countries into three groups at the start (2010) and end (2020) of the study period (Table 2).

Table 2. Results of cluster analysis for candidate countries and potential candidates in 2010 and 2020

Clusters	2010	2020
1	Albania	Albania, Serbia, Montenegro, North Macedonia
2	Bosnia and Herzegovina, Kosovo, Serbia, Montenegro, North Macedonia	Kosovo, Bosnia and Herzegovina
3	Turkey	Turkey

Source: Compiled by the authors

Cluster analysis results provide evidence of different labour market development patterns for candidate and potential candidate countries over the period studied. Consequently, Turkey exhibits distinctive features within its labour market. Between 2010 and 2020, Albania, Serbia, Montenegro and North Macedonia exhibited similar levels of unemployment and GDP per capita, comparable to those of Kosovo and Bosnia and Herzegovina, which are currently potential candidates. These countries share common traits with regard to the indicators and their relationship.

Emigration is a widespread phenomenon in EU candidate countries and potential candidates. Based on Eurostat website data, the majority of studied countries, excluding Turkey, exhibit a negative net migration indicator, demonstrating high emigration rates in these states.

Table 3 displays the correlation-regression analysis of data from 2011 to 2020 concerning the relationship between net migration (MIGRn) and unemployment (UnL) in candidate and potential candidate countries.

Table 3. Unemployment rate and net migration* in candidate countries and potential candidates in 2011-2020

	The Republic of Albania		Bosnia and Herzegovina		The Republic of Kosovo		The Republic of Serbia		Montenegro		The Republic of Turkey		The Republic of North Macedonia	
	MIGRn	UnL	MIGRn	UnL	MIGRn	UnL	MIGRn	UnL	MIGRn	UnL	MIGRn	UnL	MIGRn	UnL

2011	-18 626	13.48	-271	27.58	-34 674	…	2 437	22.97	-910	19.76	135236	8.8	-795	31.38
2012	-19 841	13.38	0	28.01	15 159	30.88	-1	24.00	-952	19.81	26 251	8.15	-934	31.02
2013	-20 684	15.87	244	27.49	-17 167	29.77	0	22.15	-930	19.59	129512	8.73	-455	29
2014	-21 702	18.05	0	27.52	-33 982	35.26	2 420	19.22	-937	18.05	80 657	9.88	-475	28.03
2015	-20 501	17.19	…	27.69	-49732	32.84	0	17.66	-938	17.55	124584	10.24	-508	26.07
2016	-9 346	15.42	0	25.41	-2 994	27.49	0	15.26	-936	17.73	186182	10.84	-161	23.72
2017	-14 904	13.62	-2 255	20.53	294	30.34	0	13.48	-937	16.08	130380	10.82	163	22.38
2018	-15 027	12.3	0	18.4	-16 603	27.76	0	12.73	-937	15.19	370616	10.89	225	20.74
2019	-23 096	11.47	…	15.69	-25 919	25.07	0	10.39	-937	15.13	403404	13.67	-276	17.26
2020	-16 684	11.8	…	15.87	2 821	25.46	0	9.01	-938	17.88	…	13.11	-755	16.55
Multiple R	0.1402		0.5067		0.3967		0.4355		0.2279		0.8112		0.4611	
R Square	0.0197		0.2567		0.1574		0.1896		0.0520		0.6582		0.2126	

Sources: Compiled by the authors on the data from Eurostat (2023d)

Note: *net migration (number).

The findings of our investigation partly align with those of Škuflić and Vučković (2018). Our analysis has demonstrated a notable association between emigration levels, predominantly the net migration index, and unemployment rates in the nations under investigation. As per the evidence, the correlation was moderate (0.5067 for Bosnia and Herzegovina, 0.3967 for Kosovo, 0.4355 for Serbia, and 0.4611 for North Macedonia) and strong (0.8112 for Turkey). It has been observed that the prevalence of emigrants over immigrants leads to a rise in the unemployment rate, ultimately resulting in a shortage of labour in these countries. Membership in the EU provides fresh employment prospects for individuals deserving of jobs in the European labour market. This could potentially reduce the outflow of citizens from the surveyed nations and contribute favourably to the unemployment rate. Analysis of correlation indicators and research by Zaiceva (2014) affirms that several other factors considerably affect migration and may arise as an outcome of emigration. Assuming that emigration is caused by an excess supply of labour within a specific country, rising emigration rates can reduce current levels of unemployment by redistributing the labour force. Moreover, this modification may potentially benefit salaries, notably for employees in regions with labour shortages due to migration. The outcomes of the research exhibit only limited correspondence with Zaiceva's (2014) findings due to the interrelationship amidst the factors. Nonetheless, its efficacy is limited in certain countries (especially Albania and Montenegro), proving that curtailing emigration does not ensure the attainment of low unemployment rates and has minimal impact on the nation's job market.

Our research affirms the perspective put forth by Pryimachenko, Fregert, and Andersson (2013) that "unemployment may result in emigration, but such migration can positively impact and alleviate unemployment," highlighting the interconnectedness of these elements. There are various limitations to the statistical separation of the effects of emigration and their assessment, which implies the limitations of our research. The development of the labour market is influenced by a significant number of factors, and as a result, membership in the EU does not guarantee stable, high employment levels.

Simultaneously, trend analysis suggests that favourable alterations in the unemployment rates are observable within the labour markets of EU accession states.

The trend analysis indicates favourable prospects for the labour markets of the countries under scrutiny. The activity and employment dynamics have been gradually improving,

especially within the 2010-2020 period, following their acquisition of candidate status or potential candidate. Despite this, the indicators continue to fall below the EU and member states' weighted average. Potential candidate countries (Kosovo, Bosnia and Herzegovina) and Turkey have the worst activity rates. The most common type of economic activity among enlarged countries is services, the share of which increased during the period under study in most countries and the EU. Also, many workers are employed in agriculture, forestry, and fishing, distinguishing the studied countries from other EU countries.

The study's findings confirm that a nation's entry into the EU substantially affects the level of joblessness, leading to a decrease. The results of the countries that joined the EU in 2004 (namely Estonia, Latvia, Lithuania, Slovenia, the Slovak Republic, Cyprus, the Czech Republic, Hungary, and Poland) and those that joined in 2007 (such as Bulgaria and Romania) are in line with the findings of the International Labour Organization's (2016) review, which reveals that changes in the labour market of individual nations are brought forth by external factors. However, it is apparent that EU membership cannot universally manage employment growth. Zaiceva's (2014) research highlights this; when the 2004 and 2007 countries joined the EU, there was economic growth and an increase in labour demand.

This led to a decrease in unemployment as there was more intense labour movement between sectors and states, ultimately requiring new personnel. The determination of the unemployment rate in 2004 and 2007 was predominantly driven by business cycle factors (Škuflić & Vučković, 2018). It would be imprudent to assert that the unemployment rate has decreased unequivocally. The rise in the employment rate is attributable solely to the country's membership in the EU. However, the operation of the labour market is influenced by a combination of economic and political factors, with EU accession being only one of them.

The presence of a close relationship between the level of unemployment and GDP per capita should be taken into account when developing a national policy for the development of the labour market in candidate and potential candidate countries since, with an increase in the level of employment, the indicator that reflects the prosperity of nations will increase. The findings from this investigation, concerning varying degrees of correlation between GDP per capita and unemployment levels among candidate countries and potential candidates, align with

the conclusions drawn by An et al. (2017), demonstrating the applicability of Okun's Law in advanced economies but its inapplicability in low- and lower-middle-income countries.

The trend analysis for 2021-2022 indicates a decline in unemployment within the EU and the candidate and potential candidate countries. Serbia is projected to reach the average EU level of unemployment in 2022, while Turkey is expected to experience a further increase in unemployment during 2021-2022.

The cluster analysis results confirm the presence of various trends and patterns of labour market development for the candidate countries and potential candidates during the studied period. Due to its prominent features, Turkey occupies a separate cluster during the studied period. Albania, Serbia, Montenegro and North Macedonia achieved common approaches regarding the unemployment rate and GDP per capita. Kosovo, Bosnia and Herzegovina, potential candidates, have similar features regarding the studied indicators and their relationship.

Our analysis of Turkey is consistent with the findings of Dayıoğlu and Aydın (2020), who observed an inverse correlation between growth and unemployment in Turkey, particularly during times of crisis. Additionally, the International Labour Organization (2016) recognises Turkey as a country with non-standard employment practices.

When considering the development of the labour market in Turkey as a potential EU member, it is crucial to objectively examine the correlation between inflationary processes and the market's trends. Despite its rapid industrial growth, Turkey's unrestrained inflationary processes are impeding its potential for a thriving labour market. We concur with Yildirim's (2015) research, which illustrates a correlation between labour productivity and inflation. This correlation is inverse and stronger than the impact of real wages on labour productivity. Additionally, the causal relationship between wages and productivity indicates a unidirectional causality that disrupts the constant interdependence of these indicators. Consequently, harmonising the Turkish labour market following EU standards, particularly when inflation rises, becomes increasingly challenging.

This study focuses on countries with economies in transition and developing countries, as these nations have unique labour market developments. Our results confirm significant features in the labour market of candidate and potential candidate countries, as most are classified

by the United Nations (2021) as transition economies, including Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia.

In developing countries, particularly those seeking EU membership, monetary policy has a significant impact on the labour market, productivity, activity level and employment (Assemien et al., 2019; Gomes et al. 2023). Monetary policy instruments play a crucial role in regulating market processes during macroeconomic instability. Labour productivity is responsive to fluctuations in both inflation rate and discount rate levels. Research conducted by Yildirim (2015) suggests that a managed reduction in discount rates has the potential to enhance labour productivity, particularly in larger business operations.

While monetary policy tools are customary in the regulatory activity of nations and have a broad influence on the labour market, innovations are a fundamental aspect of contemporary management practices and have a substantial impact on the development of human capital, the calibre of human potential and its efficacy at work. The innovative element of the labour market development strategy is being revised due to the impact of digitisation. Digital transformations are of great significance in developing nations; however, the pace at which innovations are adopted within labour markets is not as speedy when compared with that of highly developed EU member states.

Digitisation has a significant impact on human capital and labour productivity. The quality of human resources varies among EU member states and candidate states for membership based on differing levels of digital literacy and skills among citizens.

Considering this, the harmonisation of social policy in employment and human capital development should include steps towards fostering digital competencies and facilitating general adaptation to work in the digital space. Simplifying the process of integrating national labour markets into the European ones is possible by eliminating significant differentiation in the levels of digital personnel training. Aly (2022) conducted a study demonstrating a closely positive correlation between the digital transformation index and economic growth, labour efficiency, and employment in the state. Using innovations, particularly artificial intelligence, in the labour market brings significant advantages for developing countries. To obtain these benefits, it is advisable to address specific barriers, including:

– Firstly, adapting employees to work within the digital environment;

– Secondly, seeking additional financing sources to support technical transformations in national labour markets (Aly, 2022).

Digital literacy is an essential aspect of education. Moreover, it is agreeable with scholars that to enhance labour markets, interested authorities must focus on reinforcing the high-skilled labour market and increasing the education level and entrepreneurial activity (Liotti, 2022; O'Higgins and Pica, 2020). With adequate education, the workforce possesses the option of either being employed or self-employed. Ewing and Hendy (2021) focused on the significance of the level of qualifications and innovative qualities of the workforce while developing the job market in European nations. Ozgen (2021) examined the influence of diverse directions of regulatory policy on alterations in the labour market. They substantiated through empirical evidence that the state establishes the necessities for cultivating the economy and the labour market by influencing the labour market through innovation. Koster et al. (2011) demonstrated the repercussions of innovation on the labour market, which instigates growth in the demand for highly skilled labourers among nations. Thus, the greater the government's investment in cutting-edge technology and research, the more vibrant and active the job market will become.

The labour market development system may be altered by adopting an unemployment policy that aims to offer financial compensation and aid while encouraging labour resource growth and innovative potential among the population, as recommended by the International Labour Organization (2021).

Unfortunately, the innovative potential of candidate countries is weaker compared to highly developed EU states, primarily due to a set of barriers, including:

– In Kosovo (Retkoceri and Kurteshi, 2018): government policies and legislation.
– In Albania (Deshati, 2015): high economic costs for innovation, market instability and crises, poor copyright protection, and ease of copying innovations.
– In Serbia (Nikolic et al., 2015): society's unpreparedness for innovative transformations, insufficient awareness of the importance of innovation, particularly in the labour market, irrational state innovation support strategies, market restrictions, insufficient capital, non-innovative organisational culture, and inadequate stimulation of innovative activity.

The OMC is a crucial element among measures to harmonise the functioning of labour markets and employment policy in the EU. However, its effectiveness must be clarified due to the mild regulatory influence without European legislative regulations and mandated efforts (Eurostat Statistics Explained, 2023a). The OMC is effective if the aspirations and goals of the EU members are united. Therefore, it can only be considered as an additional element supporting the processes of adapting the labour markets of the new EU members to the already-formed market environment.

This approach facilitates the dissemination of best practices among Member States and promotes progress towards the EU's key objectives, such as enlargement policy. As part of the enlargement objectives, the candidate countries are required to enhance the quantity and quality of their data submitted to Eurostat. The primary objective is to supply standardized, superior data conforming to European and global benchmarks, which can aid in regulating, anticipating, and consolidating the job market in the European Union for current, candidate, and aspiring countries (Eurostat Statistics Explained, 2023b).

6. Conclusions

There can be many reasons for the diversity observed across candidate and potential candidate countries' labour markets. Differences in the economic level, regulations, protections, historical conditions, sectoral composition of employment, etc., play an important role. Nonetheless, EU labour market policies and institutions also affect the speed at which the labour markets of the candidate and potential candidate countries adjust. Differences mean that EU labour markets will need time to absorb the large numbers of workers after EU enlargements. This process can be supported by reforms of employment protection, cohesion policy, legislation, and further efforts to enhance the flexibility of labour market regulations.

The sluggish recuperation following the financial and economic crisis in the EU and the increasing indications of surging unemployment propelled the European Commission to release a scheme of propositions regarding how employment policies interconnect with various other policy domains in favour of intelligent, viable, and all-inclusive development.

Practical implications

Since the enlargement, nations will steadily enhance the amount and quality of their information for Eurostat. The results may function as a component of the employment policies coordination of the EU member states to attain shared labor market objectives, allowing for the traits of the candidate nations and potential candidates.

Limitations

The research conducted is limited by the data used in the study, which includes only the indicators for activity level, employment, and unemployment found on the Eurostat website. These indicators were obtained through a survey method in accordance with EU legislation, principles, and practices adopted by all member states. Data from countries that are candidates or potential candidates are collected according to standardized principles. However, disparities in data collection and processing methods between the EU and World Bank methodologies may result in variations in the outcomes of the study if alternative information sources are used. It is important to note that results may differ when taking into account more extensive indicators. Furthermore, the selected time frame must be considered.

To examine the correlation between the unemployment rate and GDP in the chosen countries, we have selected the period from 2010 to 2020. Choosing a different period for the study may change the results. Third, these are selected countries. Since only EU member states, candidate countries and potential candidates were selected for the analysis, the outcomes may differ if a similar study were conducted using data from other countries.

Future research directions

The further direction of the research is the study of individual scenarios of the development of the labour market for the Republic of Moldova and Ukraine, which received the status of candidate countries in 2022.

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Appendix

Inflation rate in EU accession candidate countries and potential candidates (rate of change)

	Albania	Bosnia and Herzegovina	Kosovo	Serbia	Montenegro	Turkey	North Macedonia
2010	:	1.3	:	6.2	:	8.6	1.1
2011	:	4.4	:	11.2	:	6.5	3.2
2012	:	6.3	:	7.4	:	9.0	1.8
2013	:	4.8	:	7.7	:	7.5	2.7
2014	:	4.3	:	2.3	:	8.9	0.0
2015	:	-0.7	:	1.5	:	7.7	0.1
2016	:	-1.2	:	1.3	-0.1	7.7	0.2
2017	3.2	-0.5	1.5	3.3	2.7	11.1	2.1
2018	1.8	1.1	1.1	2.0	2.6	16.3	2.3
2019	1.7	1.3	2.7	1.9	0.5	15.2	0.7
2020	2.2	-0.3	0.2	1.8	-0.5	12.3	1.2

Sources: Compiled by the authors on the data from Eurostat (2023b)

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EU PROJECTS IN THE FIELD OF SECURITY AND DEFENSE: CHALLENGES AND PROSPECTS OF IMPLEMENTATION

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Abstract: *The article dwells upon the problems of implementing the EU defense strategy, taking into account the leading European concept, strategic documents and the current initiatives in the EU security and defense sector. It was proved that due to the divergent views of the EU member states, there exist the following interpretations of the leading defense concept, namely: 1) "strategic autonomy / sovereignty" (France, Germany, Spain, Italy) considers independence in decision-making, increased integration and generating of finances and resources; 2) "strategic responsibility" (Netherlands, Finland, Estonia) is about greater collective contribution to the regional security system, which provides for a balance of interests in the EU-NATO-USA partnership; 3) "open strategic autonomy" (Poland, Slovakia, Hungary, Lithuania, Latvia) deals with preservation of power only in priority areas of EU activity. The peculiarities of the transformations of the EU defense strategy were identified, and the following three EU strategic documents were analyzed, i. e., the European Security Strategy of 2003, the EU Global Strategy of 2016, and the EU Strategic Compass of 2022. It was determined that the Strategic Compass should introduce consistency in the rules, the management structure of the defense initiatives, clarify the boundaries between ambition and pragmatism, and integrate the defense sector. The strengths and weaknesses of the defense initiatives both within the framework of EU treaties (PESCO, CARD, EDF) and outside them (EI2) were pinpointed. The set of shortcomings detected in the abovementioned defense initiatives were outlined. The priority scenarios are represented. It has been predicted that by 2030, under the conditions of preserving the ambition of "strategic autonomy", it is necessary to take a set of the following measures: 1) to define a single vision of their cooperation; 2) to find out the structure of the defense cooperation within the framework of EU treaties (PESCO) or outside the EU (EI2); 3) to clarify the rules of the defense sector management and a special body for decision-making.*

Keywords: EU defense strategy, Strategic Compass, Russian-Ukrainian war, PESCO.

1. Introduction

Since the time of its foundation, the European Union has not assumed the role of protector and defender in terms of military issues of the European continent, but took as its basis the "theory of a non-military state". That is why the ability of the European Union to use military force to settle conflicts on the European continent has always been low and unlikely. Obviously, the EU tried to avoid direct confrontation in most of the conflicts that took place in the neighboring countries of Europe. Security and defense factors came under the competence of the North Atlantic Alliance, based on the fact that the member states of the Community are also the members of NATO. However, the events in the modern world have forced the EU to reconsider its security role on the world stage. With the changing security environment and geopolitical challenges, Brussels began to position itself as the "security maker" on the European continent.

The discussions regarding the ability of the European Union to protect the European continent from potential military threats began as early as 2014. However, such discussions were not successful and considered inappropriate, since the main component which was paid due attention to was the economic one. Besides, in 2022, the discussions on the strategic autonomy

of the EU in the field of security and defense were intensified again in the context of Russia's invasion of Ukraine. In this regard, back in October 2021, the head of the European Council, Charles Michel, made a statement that 2022 was declared the "year of the European defense" (Herszenhorn, 2021). Such a decision was intended to show that the EU states are capable of resisting the widespread misconception that Europe is not capable of defending itself militarily.

The High Representative of the EU for Foreign Affairs and Security Policy, Josep Borrell, also emphasized that one of the many tasks which the European Union is facing deals with relearning the "language of power". His words marked the beginning of a review of the global role assumed by the association.

This position was supported by the head of the Austrian Ministry of Foreign Affairs, Alexander Schallenberg; he added that he was deeply convinced that the Russian war, which was launched against Ukraine, forced the European community to look at the security situation from a different angle. He claims that it was this military aggression that pulled political leaders and society out of their false dreams of a post-national and post-historical Europe and inspired large-scale changes that would not have taken place due to the organization's unwillingness to look at the world affairs without rose-coloured glasses, thus giving the desired valid.

On March 25, 2022, a month after the start of the Russia's full-scale military invasion of Ukraine, the Strategic Compass was adopted at the Community summit, which should provide an explanation of the Europe's role in the defense sector and determine the vector of the EU future defense policy. As the new Defense Strategy, the Compass tries to fill the gap between the common objectives of the Community set out in the Global Strategy of the European Union 2016, the European Security Strategy of 2003 and the instruments for building up military forces and capabilities (PESCO, CDP/CARD, EDF).

The new EU Defense Strategy gives the Community a chance to strengthen its influence in solving global problems of humanity, namely, war, struggle for energy sources, climate catastrophe and health crisis. However, no matter how ambitious the Strategic Compass may seem, its scope and results will depend crucially on the extent to which European states are willing to revise their national defense ambitions. This raises the issue of whether the EU will be able to face security challenges and implement the defense strategy.

The aim of the article is to research and analyze the key problems of the implementation of the EU defense strategy and the prospects and possible trajectories of its development.

2. Literature review

Scientific studies that analyze the issues of the EU defense strategy implementation can be divided into four main groups. The first group focuses on understanding the concepts of European strategic autonomy and sovereignty in the field of security and defense. Within this group, many contributions are focused on clarifying the term "strategic autonomy" (Bailes, 2005; Erlanger, 2020; European strategic autonomy in ..., 2021; Kempin, Kunz, 2017) and its characteristics (Lippert, Ondarza, Perthes, 2019); Arteaga, 2017b). The researchers additionally pay attention to the "strategic sovereignty" (Leonard, Shapiro, 2019; Lefebvre, 2021), and the distinctions between strategic sovereignty and strategic autonomy (Arteaga, 2017a).

The second important group of studies is aimed at analyzing the regulatory and legal field of security and defense of the EU. It was important to find out the origins of the idea of the European defense (Franco–British St. Malo Declaration ..., 1998) and subsequent documents that contributed to the settlement of this issue (Implementation Plan on Security and Defense, 2016; Establishing the European Defense Fund: ..., 2021). Special attention was paid to the following documents: EU Strategic Course (Missiroli, Tocci, Mogherini, 2015; Myronova, 2022), "Shared Vision, Common Action: A Stronger Europe" or EU Global Strategy (Yildirim, 2021; Shared Vision, Common Action: A Stronger ..., 2016; Vincenti, 2016; Missiroli, Tocci, Mogherini, 2015; The European Union's global strategy ..., 2019; Le Gleut, Conway-Mouret, 2021) and Strategic Compass (Questions and answers: threat analysis ..., 2020; Wagner , 2022; For a European Union that protects ..., 2022; Le Gleut, Conway-Mouret, 2021; Paul, Shea, Chihaia, Ciolan et al., 2022).

The third group aims at outlining the challenges faced by the EU while implementing the defence strategies. When considering the EU ***Permanent Structured Cooperation on Security and Defense (PESCO)*** platform, it was found out which countries are its members (Establishing permanent structured cooperation (PESCO) ..., 2017), as well as the progression of the launching projects (Permanent Structured Cooperation (PESCO)) with their further prospects (Dorosh, 2023b; Dorosh, Ivasechko, Nocoń, 2020). The strengths (Development, Delivery and

Determination: PESCO ..., 2022; Peruzzi, 2022; Paolucci, 2021; Concerning a roadmap for the implementation ..., 2018) and weaknesses of PESCO were pinpointed and clarified (Le Gleut, Conway-Mouret, 2019; Barigazzi, 2021; PESCO Strategic Review 2020, 2020). ***The EU's Coordinated Annual Review on Defense (CARD)*** provides the opportunity to monitor all the EU states' defense spendings and investments, including the research (Waard, 2020; Borrell, 2023). The strengths (Fiott, 2017) and the weaknesses (Report CARD 2020, 2020; Reybroeck, 2019) were clearly outlined. Having analysed the ***European Defense Fund (EDF)*** (Establishing the European Defense Fund: ..., 2021; European Defense Fund: EU to invest..., 2023), it is possible to clearly identify their strengths (For a European Union that protects ..., 2022; The European Defense Fund (EDF), 2022; European defense fund – performance, 2021) which were acquired in a short time of its existence and their weaknesses (Ilmonen, 2021; Nádudvari, Varga, 2019; Zandee, 2021), which are the obstacle for the work of the fund. The study also examined the strengths (Letter of Intent between the …, 2018; Mills, 2019; 2022 military strength ranking, 2022) and the weaknesses (Mölling, Major, 2018) of the European Intervention Initiative (EI2) (Sjökvist, Frisell, 2023; "Vladimir Putin has jolted back NATO"..., 2023).

Finally, the fourth group of studies highlights the possible development algorithms in the field of security and defense of the EU. The scenarios for the progression of European defense events in the world in 2025 have been determined (Future of European Defence: reflection paper, 2017).

3. Theoretical and methodological foundations of the study

The defense strategy of the EU has always been a relevant research issue for the representatives of scientific and political spheres, and in recent years it has increasingly begun to emerge in the published works. The luminary of diplomacy Henry Kissinger (1962) in his article "Unsolved Problems of European Security" clearly indicated which challenges the European region faces when it comes to its security. In general, the issue of the EU defense strategy was paid attention to by such researchers as Eric Brattberg, Tomasz Valašek (2019) and Felix Arteaga (2017), who studied, identified and described the weak links in the defense of Europe. It is known about the differences in the idea of the defense strategy of the EU, and, therefore, scientists could not ignore the "strategic autonomy/sovereignty" as one of the

interpretations of the leading concept and tried to clarify what is meant by this definition (Koenig, 2020). Besides, Lorenzo Vai (2021) managed to describe the genesis and development of the idea of "strategic autonomy" and explained the aspects of this term and which political spheres are included in it. Sascha Lohman (2021) made an attempt to conceptualize "strategic autonomy" through the prism of contextualizing its political genealogy and use. It is also significant that such researchers as I. Yakovyuk, O. Tragnyuk and D. Boychuk (2020) are convinced that the implementation of the idea of the "European sovereignty" in the area of security and defense will not lead to direct competition between the EU and NATO, but take more responsibility for its own security and the security of its neighbors and strengthen its role in transatlantic relations. Henric Larsen (2022) notes that Russia's invasion of Ukraine represents a new political reality in which European states are ready to strengthen their role in continental defense. However, the main focus should be on "strategic responsibility" and not on the "strategic autonomy", which is unrealistic both from the military and political viewpoints. Nicholas Burns and Douglas Lute (2019) in their report, which was considered with NATO, suggested that "strategic responsibility" could be a better concept for the European Union. "Strategic responsibility" is a more accurate term that encompasses Europe's efforts to take on additional responsibilities for the security of its neighbors without undermining cooperation with international partnerships and alliances (Helwig, 2020). Investigating the concept of the "open strategic autonomy", Eric Van den Abeele (2021) highlights the origins of the term and represents the evolution of the denoted concept of the "open strategic autonomy" in order to analyze its foundations and further consequences. Mavluda Sattorova (2023) focused on considering the fundamental principles of the open strategic autonomy of the European Union. It is quite obvious that the transformations of the EU defense strategy (Violakis, 2020) contributed to the development of the regulatory framework that regulated this issue, i.e., the European Security Strategy of 2003 (Becher, 2004; Toje, 2005; Biscop, 2010; Anderson, Brattberg, Häggqvist, Ojanen, 2011), EU Global Strategy 2016 (Smith, 2017; Pishchikova, Piras, 2017; Biscop, 2021), and EU Strategic Compass 2022 (Blockmans, Macchiarini, Paikin, 2022; Sweeney, Winn, 2022; Gjoreski, 2022; Biscop, 2022; Dorosh, Lemko, 2022, Dorosh, 2023a). The theoretical points of view were also presented for defense initiatives that are enshrined in EU treaties, namely, PESCO (Wolfstädter, Kreilinger, 2017; Biscop, 2017; Biscop, 2020; Billon-

Galland, Efstathiou, 2019; Blockmans, Crosson, 2021), CARD (Reybrouck, 2019), EDF (Haroche, 2020; Sabatino, 2022); additionally, the EI2 initiative (Koenig, 2018; Zandee, Kruijver, 2019) which is outside the EU agreements, was represented for better theoretical awareness.

4. European strategic autonomy and sovereignty in the field of security and defense

The term "strategic autonomy" has an old French origin and is defined as the ability to independently use one's own military power, while in the modern interpretation the concept of "European strategic autonomy" is the ability to independently decide and determine one's own priorities in the field of security and foreign policy, taking into account financial, institutional and political resources, whether it is in partnership with third countries or, if necessary, independently (Bailes, 2005; Erlanger, 2020).

Effective strategic autonomy is characterized by the ability to create, change and control international rules, as opposed to unconscious submission to the rules of others. The contrary to the strategic autonomy is dependence on strategic decisions made by other states (Lippert, Ondarza, Perthes, 2019).

The traditional definition of autonomy has expanded its meaning, where in addition to the concept of "hard power", there are issues of defense, energy, raw materials, medicine, innovation, finance, etc. Nevertheless, it is recognized that the essence of the concept of the "European strategic autonomy" is related to the ethical understanding of security (European strategic autonomy in ..., 2021).

The Spanish researcher Fernando Arteaga adheres to the vision that regardless of terminology and interpretations, the viability of strategic autonomy depends on political and financial prerequisites. The political prerequisite is the alignment of the strategic culture. After all, it is not worth declaring a high level of political ambitions if there is not enough will to implement them. In case of financial prerequisite, strategic autonomy requires additional budgetary efforts (Arteaga, 2017).

According to the scientists Ronja Kempin and Barbara Kunz, the cornerstone of the modern idea of strategic autonomy of the Community is the independence of the army and

politics in the system of multilateral organization. Therefore, such autonomy has the following three elements:

1) political autonomy (Strategy), achieved through a qualified majority to independently decide on security policy issues;

2) industrial autonomy (Equipment) is developed via increasing defense potential to achieve autonomy in military activities;

3) operational autonomy (Capabilities) deals with the ability to independently develop an action plan for operations and implement it on a civilian or military scale (Kempin, Kunz, 2017, p. 10).

It is worth noting that traditionally the term *strategic sovereignty* is often equated with *national sovereignty*. However, the definition of the "strategic sovereignty" is explained as the establishment of one's own rules in the international arena, and not deepening into the national governance of European countries. The key goal of this type of sovereignty is to establish favorable conditions where EU citizens have a common vision for the future of Europe (Leonard, Shapiro, 2019).

The French diplomat, Maxime Lefebvre, claims that "the tool for achieving strategic sovereignty is strategic autonomy". Such an integrating concept may seem less ambitious, less politicized and more state-centric, but the adjective "strategic" enhances its importance, as the French politician adds (Lefebvre, 2021).

A distinguishing feature of the strategic sovereignty from the autonomy is that European sovereignty is still subject to limitations and relative character. Accordingly, the economy, society, culture, education, health care, police and judicial system remain national prerogatives, while the spheres of diplomacy, defense and finance belong to the principle of unanimity (Arteaga, 2017a).

Concurrently, effective strategic sovereignty is the ability to achieve the expected result regarding one's own rules and ambitions, and the prerequisites for such strategic sovereignty are the shared strategic vision and the ability to act and decide (Leonard, Shapiro, 2019).

5. Normative and legal regulation in the field of security and defense of the EU

The European Union is a subject of international relations, which implements the European identity, expresses the position of EU citizens, directs policy based on democratic principles, and has the appropriate attributes of power (currency, legislation), i.e., it is a sovereign within a multilateral organization.

Initially, the idea of European defense autonomy appeared in the Franco-British declaration of 1998. The clarity of the declaration is equal to its ambitious content: "in order to be a full-fledged player in the international arena, the Community must have the opportunity for independent actions, which are secured by military power, tools to make decisions, and the will to respond to the international crises" (Franco-British St. Malo Declaration ..., 1998).

Subsequently, the concept of strategic autonomy was transformed into the ambition of the EU defense strategy from 2016. Thus, the Strategy encourages determination to act independently to combat new security challenges (Implementation Plan on Security and Defense, 2016).

It is worth paying attention to the Regulation of the European Defense Fund (EDF) from June 2021, the purpose of which is to promote the strategy of self-sufficiency and freedom of action of the Community by strengthening the innovation potential of the industrial and technological base (EDITB). Accordingly, this interpretation of the "strategic autonomy" gives this concept even greater value (Establishing the European Defense Fund: ..., 2021).

On December 12, 2003, the High Representative of the EU for External Relations and Security Policy Javier Solana made public the project of the first strategic course of Europe, which describes the global challenges in the security environment, delineates priorities and highlights the expected consequences (Missiroli, Tocci, Mogherini, 2015).

The EU Strategic Course of 2003 characterizes the European security environment as the space full of challenges of a low quality of life; the collapse of state governance; the struggle for energy sources and resources; terrorism; the emergence of criminal groups; the escalation of conflicts in the regions; the emergence and the use of new types of weapons that affect a large radius of the territory both chemically and destructively. Terrorism is highlighted in the European Security Strategy as the type of threat that is one of the components of social relations.

The sources of terrorism can be corruption and a high level of crime (Missiroli, Tocci, Mogherini, 2015).

In addition, the Javier Solana hoped that such a strategic course of Europe would bring the following results:

1) the development and harmonization of the EU defense sphere with the priorities of the foreign policy course and crisis management;

2) the growth of military and defense potential through mobile and operational models of armies and convergence of the resources;

3) the integration of defense research into the common system;

4) increasing the role of diplomacy;

5) expanding the network of partners, primarily with Canada, Japan, China, India and Russia (Myronova, 2022).

From the practical point of view, the European Security Strategy showed how to transform its own values into precise mechanisms, where the Community was guided by the principle of multilateralism, preventive actions and the comprehensive (complex) approach in solving problematic phenomena. However, apart from the general acknowledgment of the threats and methods, the strategy contains little explanation of the resources that are needed to achieve these goals, i.e., how many and which ones are needed. In short, the first EU strategy codified the objectives, but did not really take into account the capacity of the European Union and a clearly defined implementation plan. Therefore, the European Security Strategy (2003) is not a strategic course of the EU, but rather a leading concept for the development of the Common Foreign and Defense Policy.

The next strategic document, entitled ***"Shared Vision, Common Action: A Stronger Europe" (or EU Global Strategy)***, appeared after world events such as the financial crisis and the Russian-Georgian war of 2008, the Arab Spring revolution of 2010, the Russian-Ukrainian war of 2014, and the Brexit decision of 2016. The Official Brussels was looking for the strategic document that would combine more defense tools for two reasons: 1) to be able to face new security challenges; 2) to consolidate the place of the European Union in the world market of the defense industry (Yildirim, 2021).

On June 28, 2016, Federica Mogherini, being the High Representative of the EU foreign and security policy, approved the new course of European strategic planning, namely, the EU Global Strategy. The key goal of the document is to change the way of strategic thinking of the European Union from the concept of idealism about government powers with the manifestation of values and ambitions to the pragmatic narrative about the system resistant to internal and external challenges (Shared Vision, Common Action: A Stronger ..., 2016; Vincenti, 2016).

The preparation stage of the EU Global Strategy took place in 2015 together with the strategic review of the High Representative for External Relations and Security Policy Federica Mogherini; it represented five main issues for the EU, namely:

1) due to the emphasis on strategic relations only, the dynamics and relevance of the European Security Strategy are lost;

2) insecurity with the shared logistical means, intelligence and army is accompanied by dependence on other international actors;

3) low level of incentives of the European states regarding the increase in capacity directly affects the growth of the degradation of industry, trade, and defense;

4) the participation of foreign aid in management and its standards does not allow directing finances to urgent defense needs and priorities of the European Union's foreign policy, hence financial and political instruments are not prone to flexibility;

5) the lack of coordination and policy fragmentation harms the EU role as one of the largest aid donors and reduces its diplomatic activity (Missiroli, Tocci, Mogherini, 2015).

The Global Strategy of the EU, is of a rather blurred and generalized character. According to the assessment of the Global Strategy of the EU, the world of the 21st century faces the challenges of the consequences of globalization, cross-border problems, conflicts and crises in the neighborhood, extremism, escalation of terrorism, and the emergence of a new type of threat, i.e., hybrid, global warming, pollution of the environment, instability of the political and economic system of the state, violation of human rights, health crisis and the insecurity of the energy and digital sectors (Shared Vision, Common Action: A Stronger ..., 2016).

Thus, the EU strategic document from 2016 updates its action plan to more realistic tasks that will be regularly monitored. Subsequently, the priorities of the Community are the protection of the territories and the citizens, and the key vectors of the implementation of the Global

Strategy of the EU are the protection of the Community, a comprehensive approach to conflict stabilization, social and state stability of EU neighboring countries, regional partnership structures and world management in the 21st century (Shared Vision, Common Action: A Stronger ..., 2016).

The review of the strategy took place during 2016–2020, and shows the following:

1) the range of threats is expanding to chemical attacks, propaganda and disinformation and attacks on digital infrastructures. Therefore, in this context, a special achievement is the Hybrid Fusion Cell – a tool for making political decisions based on the rapid analysis of information from various sources;

2) due to irrationality in the distribution of defense finances, the Community spends a lot of money on it, but does not reach the level of the defense union spending;

3) the potential for joint procurement of equipment is not used;

4) the Community is unable to act collectively and in a coordinated manner regarding the stabilization of crisis phenomena and war, the key problem is the lack of consensus;

5) based on the experience of the EU member states, the inefficiency of the UN and international economic institutions is noticeable;

6) The European Union does not expand cooperation with other continents of the world such as Asia or the Middle East (The European Union's global strategy ..., 2019).

In our opinion, the shortcomings of the Global Strategy are as follows:

- the lack of hierarchy of goals blocks the processes of both the strategy and the Common Foreign and Security Policy;

- although the strategy points to a global dimension, it does not take into account external challenges that directly affect the internal security of the EU;

- due to the large-scale range of tasks and the peculiarities of each European state, the strategy does not provide for the establishment of specific tools to achieve the goals;

- the strategy does not set a time frame for the implementation of the tasks, thus, monitoring its progress remains a complicated issue;

- the strategy still does not fix the mechanism for increasing the defense potential and stabilizing the economy in Europe;

- due to the priority of stability and readiness to stabilize crises, there are cases when EU states and institutions do not pay much attention to problems related to the protection of people's rights.

Undoubtedly, the geopolitical context has undergone changes over the past six years. Therefore, the European Union is once more trying to increase its own potential as a global player. It is obvious that the priority of the Community is its military ambitions, which are focused on its own capabilities and partnership resources (Le Gleut, Conway-Mouret, 2021).

The research and preparation of the Strategic Compass began in late 2020 and was completed in the spring of 2022. Thus, to create the third EU strategic document, the so-called "360-degree Threat Analysis" was compiled, which included the intelligence data of individual countries (Questions and answers: threat analysis ..., 2020; Wagner, 2022).

The Strategic Compass intends to clearly describe and capture the concept of "strategic autonomy" in the European defense environment. Subsequently, the plan of the strategic course of the EU from 2022 consists in the flexibility of management in accordance with the set goals (For a European Union that protects ..., 2022, p. 11).

Although the "360-degree Threat Review" is a confidential document, it is safe to assume that the results of this study were included in the Compass section, namely, "The World We Face". This chapter states that the Community faces such challenges as hybrid warfare, cross-border threats, weapons of mass destruction, terrorist acts, health crisis, etc. It is emphasized in the text of the Compass that there is the need for greater responsibility of the Community for the sphere of its protection both internally and externally, as well as the necessity to act promptly and independently, or, if necessary, with partners (For a European Union that protects ..., 2022, p. 17).

Paradoxically, the full-scale war in Ukraine and the subsequent unplanned reviews have led to a more motivated document, where each point is now analyzed mainly from the single dimension, i.e., the place of the European Union in the even larger counterbalance of the superpowers (Wagner, 2022).

The analysis of threats in the Strategic Compass, first of all, emphasizes the need for "hard power" as the necessity for the Community. However, a thorough review of the threats of the first chapter after the escalation of the Russian-Ukrainian war does not indicate a revision of the

recommendations for actions presented in the following chapters (Le Gleut, Conway-Mouret, 2021).

Analyzing the Strategic Compass, David Rickels, the researcher at the European Policy Center, highlights its strengths and weaknesses. In the group of the strengths of the Strategic Compass, he singles out the following (Paul, Shea, Chihaia, Ciolan et al., 2022):

1) the Compass is an important step towards a strategic culture. For example, the comprehensive assessment of threats has already managed to unite EU member states in the joint strategic work;

2) the inclusive approach of the Compass presupposes a strategic course and a precise plan of action. It sets a specific goal to strengthen the rapid response system by 2025, taking into account both the operational tools and the decision-making method;

3) the role of the European Union as a promoter of the European security and the guarantor of collective resilience (primarily against hybrid threats) is clearly stated in the Compass.

Some of the weaknesses of the Strategic Compass are as follows (Paul, Shea, Chihaia, Ciolan et al., 2022):

1) the Compass does not correspond to the features of the strategy. The new strategic planning of the EU did not take into account the fact that security also depends on such topics as economy, energy, food, technology, migration and provision of resources in conditions of scarcity;

2) the Compass is not sufficiently focused on geopolitics, for example, on the three maritime hotspots, i.e., the Mediterranean, the Black Sea, and the Baltic Sea. Therefore, we can assume the probable status quo with China;

3) complex and convoluted military ambitions of the Compass. It would be of interest to know what will happen to the defense goal “Headline Goal 2003” (joint armed forces of 60 thousand people in 60 days);

4) during the preparation of the Compass, the EU inter-institutional crisis management system was not reviewed.

In general, Strategic Compass is a new chance for the EU in the area of security and defense. It is ambitious and precise in addressing the known weaknesses in decision-making

processes, structures, capacity and funding which are known to have prevented previous EU strategies from acting swiftly and responsibly.

6. Issues of EU defense initiatives implementation

The success of the EU defense strategy directly depends on the adequate defense structure of the European states, which is able to influence the system of military management and has the appropriate tools to encourage the governments of the states to act as a single consortium, with others, when possible, and autonomously, in case the need presupposes. Below is a detailed look at several of these defense structures for Europe.

Permanent Structured Cooperation on Security and Defense of the EU (PESCO) is a platform for cooperation between European states in the security and defense area, the basis of which is joint projects aimed to increase European defense potential; it began its work on December 11, 2017 (Establishing permanent structured cooperation (PESCO)) ..., 2017; Permanent Structured Cooperation (PESCO)).

On May 23, 2023, the European Union approved 11 new defense projects within the framework of PESCO. These projects joined the 57 already existing within the Permanent Structured Cooperation (PESCO). All of them include training, artillery countermeasures, ammunition, medium helicopters and air-launched missiles. According to Josep Borrell, due to 11 new EU projects, it will be possible to strengthen Europe's ability to conduct high-intensity warfare.

PESCO can be considered as an important mechanism of military integration of EU member states, launched with the aim of achieving significant results for a more effective defense of Europe and ensuring better coordination and cooperation in the areas of investment, capacity building and operational readiness. Hence, further prospects arise, namely, the increased cooperation in these areas will reduce the number of different weapons systems in Europe and, ultimately, increase operational interoperability between EU member states (Dorosh, 2023b, p. 5).

Having analysed the information on the operation of PESCO, we have identified the strengths and weaknesses of this defense structure.

PESCO strengths:

1. Projects that cover critical gaps. It is worth considering the following PESCO projects: European MALE drone; early warning and interception based on space surveillance (TWISTER); strategic air transport for oversized cargo (SATOC); and European Medical Command (EMC) (Development, Delivery and Determination: PESCO …, 2022; Peruzzi, 2022).

2. Smart Defense cooperation model. PESCO provides sustainability of commitments, project management and accountability mechanisms. In general, the advantage of this PESCO model is that it managed to integrate such different vectors of states as Germany, Poland and France (Paolucci, 2021).

3. PESCO Roadmap. In March 2018, the Permanent Structural Cooperation on Security and Defense of the EU published a separate strategic document, the PESCO Roadmap. The PESCO strategy includes three vectors: 1) growth of PESCO due to the creation of high-speed mobility of the armed forces within the European Union; 2) expansion and establishment of strategic partnership both within the structure and outside it; 3) investing in current defense initiatives, taking into account funding for new military technologies and inventions (Concerning a roadmap for the implementation ..., 2018).

PESCO weaknesses:

1. Inconsistent achievements and lack of coordination. Most countries do not distinguish between NATO and PESCO projects, so often the wave of Permanent Structural Cooperation projects on security and defense of the EU is slow, or its certain projects are canceled immediately (Le Gleut, Conway-Mouret, 2019).

2. Failure to fulfill obligations. On November 20, 2020, the Strategic Monitoring of PESCO activities was held. The monitoring report highlights the following notable obstacles in the functioning of PESCO: 1) so far, the projects have not received the necessary investments from the participating states; 2) the representatives of the Community institutions do not receive proper review of certain projects (Barigazzi, 2021; PESCO Strategic Review 2020, 2020).

3. Interaction with other international actors. According to the new EU defense strategy, dated from 2022, PESCO should establish contacts not only with NATO, but also with the African Union, Norway, Japan, Britain, etc. (For a European Union that protects ..., 2022).

Coordinated Annual Review on EU Defense (CARD). The Coordinated Annual Review on Defense (CARD) provides a comprehensive overview of EU states' defense spendings and investments, including research. This provides the opportunity to have a look at the European defense planning and the development of its capabilities while listing gaps in relation to the CDP (Waard, 2020).

Until now, the CARD reports have not received the attention they deserve. CARD should now serve as the compass to guide the necessary joint development efforts. However, the implementation of such coordination requires specific measures and the use of the Community funds to facilitate the interaction between demand and industrial supply in the Member States. This requires further cooperation to provide the European region with the necessary defense capabilities, since, according to the CARD 2022 report, less than 20 per cent of all investments in defense programs come from cooperation. This leads to the conclusion that defense cooperation remains in the mode of exception rather than the rule (Borrell, 2023).

Due to the detailed analysis, the strengths and weaknesses of CARD were identified.

CARD strengths:

1. The mechanism of collective defense planning. The main idea of the CARD is to create favorable conditions for collective European defense avoiding duplication of projects and waste of money. Whereas a similar approach of the Capacity Development Plan (CDP) was invaluable as of 2018. Subsequently, the CARD is a mechanism for implementing the goals of the European defense strategy through the joint defense planning and consultation (Fiott, 2017).

CARD weaknesses:

1. Predominance of national interests over the Pan-European. This aspect leads to different priorities, approaches to security and defense of the European Union and is accompanied by the reluctance of the EU member states to share their own defense plans (Report CARD 2020, 2020);

2. Criticism regarding the regulatory documents. The representatives of the private sector and national structures criticized the Capacity Development Plan and the CARD 2020 Report. They stated that the identified priorities and capabilities did not take into account their own defense objectives; the six selected CARD sectors are too limited and short-term, and that the reporting documentation is dominated only by defense industry gaps (Reybroeck, 2019).

Having started its work on January 1, ***2021, European Defense Fund (EDF)*** is a long-standing French project supported by Germany. The basis for the European Defense Fund (EDF) began to be prepared back in May 2017 (Establishing the European Defense Fund: ..., 2021).

The European Commission has taken a revolutionary step, since this is for the first time in the history of the existence of the European Union that its money will be used to invest in the European sphere of protection. Although the key innovation of the European Defense Fund is the specific allocation of the Community finances for the defense projects, which is completely unprecedented.

On June 26, 2023, the European Commission announced the results of the 2022 competition for €832 million in funding from the European Defense Fund (EDF) to support 41 joint defense research and development projects in the EU. The selected projects will contribute to the further development of high-quality defense capabilities of the EU in such key areas as naval, land, air, space early warning systems and cyber defense (European Defense Fund: EU to invest..., 2023).

Overall, based on the data, it is possible to highlight EDF's strengths and weaknesses.

EDF strengths:

1. The center for Defense Expenditures and Incentives of Development. In accordance with the new EU defense strategy of 2022, the European Defense Fund consists of "windows for defense research" and "windows for the development of defense capabilities". The goal of the fund, according to the strategy, is to encourage EU states to collectively purchase equipment and, with the help of joint defense research and innovation, to strengthen the European defense technological and industrial base (EDTIB) (For a European Union that protects ..., 2022; The EU's Defense Technological and ..., 2020).

2. Bonus system. As per the assignment structure, the amount of the bonus varies as follows: 1) the EU Permanent Structural Cooperation on Security and Defense (PESCO) bonus provides for a 10% bonus for all actions related to innovation and technology projects; 2) mid-cap companies receive a 15% bonus for activity in the EU and 10% outside the EU; 3) the bonus of 77 small and medium-sized enterprises defines a 5% bonus for non-cross-border enterprises in the EU (or outside) and 10% for cross-border enterprises in the EU (or outside). Besides, the

bonus can be doubled (x2%) under special conditions of cooperation (The European Defense Fund (EDF), 2022).

3. National coordination centers. The European Defense Fund has a wide network of representative offices, the main activity of which is informational and advisory support of potential partners and investors of the EDF program throughout the entire project cycle. A special pride of EDF is the national coordination center in Norway (European defense fund – performance, 2021).

EDF weaknesses:

1. Lack of expertise and experience. Since it is a strategic need for EDF to support cross-border partnerships, it must be able to create and coordinate such relationships. The EDF awareness particularly differs between large and small businesses. The reason for this is the lack of an effective long-term plan that would describe the goals, risks and methods of preventive actions for the participants of EDF joint projects (Ilmonen, 2021);

2. Not suncronized budgets planning. So far, the planning periods and budget cycles of the EU member states are different, which is a significant restraining factor for joint acquisition and as a result, the pace of development of military innovations is imperceptible and insignificant (Nádudvari, Varga, 2019, p. 6);

3. Limited strategic partnership. When it comes to the EDF's cross-border cooperation, it should meet its specific requirements (three legal entities in three different states, given the invitation of the foundation). Thus, the choice of the partners is a semi-strategic and semi-political decision, which cannot be taken by the industry sector independently, it requires the approval and invitation of the EU member states. Therefore, the potential partners will not be able to submit a request for cooperation on their behalf only and without the invitation from the EDF (Zandee, 2021).

European Intervention Initiative (EI2). EI2 does not contain significant differences from the abovementioned groupings.

The French-led European Intervention Initiative (EI2) is an example of the structure that allows for the formation of a strategic culture and strengthening cooperation with France as the key country in operational commitments (Sjökvist, Frisell, 2023, p. 30(59)).

On May 31, 2023, in his closing speech at the Bratislava GLOBSEC Forum (Slovakia), the French President Emmanuel Macron stated that strategic independence and military sovereignty require industrial efforts. The emptying of the arsenals in recent months has become a clear signal that the EU only owns what it produces. He also noted that it remains clear that some countries are increasing their defense spending to purchase large quantities of non-European goods, which could cause problems for these countries in the future. President Macron emphasized that European states should use this opportunity to increase production in Europe. It was due to this that significant progress was achieved in providing assistance to Ukraine. European standards need harmonization and there are more differences in European than in American standards. Although, at the same time, it is necessary to develop European defense technologies and industrial base in all the interested countries, as well as to deploy fully sovereign equipment at the European level. We need to reduce dependency and continue to build strategic proximity in these joint efforts. Naturally, Emmanuel Macron meant the European intervention initiative, which was launched five years ago, and, in his opinion, remains relevant today ("Vladimir Putin has jolted back NATO"..., 2023).

Thus, based on the analysis, the following strengths and weaknesses of EI2 can be deduced.

EI2 strengths:

1. *The Framework Nations cooperation model.* E12 is an exclusive and flexible club of the states whose main vision is to promote interoperability and responsiveness. EI2 corresponds to the Framework Nations model functioning on the basis of one national package of capabilities (France) or on the basis of two (United Kingdom of Great Britain and France) (Letter of Intent between the ..., 2018; Novaky, 2018).

2. *Autonomy regarding decision-making.* EI2 keeps its focus on Europe, though its decisions are not subject to NATO and EU structures subordination. While maintaining this type of autonomy, EI2 is open to countries such as Denmark, which does not participate in the EU Common Security and Defense Policy, and the United Kingdom, which left the European Union in 2020 (Mills, 2019).

3. *Exclusive club of the leading armies of Europe.* According to the international ranking of military strength "2022 Military Strength Ranking", most of the E12 member states belong to the top 25 armies of the world among 142 countries (2022 military strength ranking, 2022).

E12 weaknesses:

1. Undermining European solidarity. The concerns of EU member states about the European intervention initiative (E12) were expressed in the statement that E12 may threaten the values and intentions of the European Union. For one reason, E12 still maintains the rule of participation "by invitation" and does not consider an inclusive approach for all willing European states (Mölling, Major, 2018).

2. Humble coordination. E12 is resource neutral and will use already established institutions and military communications systems. The majority of the Europeans do not approve of the targeted increase in investment in weapons, military technology and the involvement of their allies in dangerous missions of the neighboring states (Novaky, 2018).

7. Possible development algorithms in the field of security and defense of the EU: forecasts and scenarios

As stated in the report of the European Defense Agency entitled "What the first Coordinated Annual Review on Defense reveals: CARDs on the table", "prediction is a much broader shaping of the future than its reality" (Waard, 2020).

Therefore, it is possible to assume the likely algorythms of the development of the European defense events in the world in 2025 as follows:

Scenario 1. Partnership in the defense and security sector. The member states of the Community will maintain partnership relations, taking into account their voluntary nature. Interaction will occur frequently, primarily in special cases. For example, in case of financial failure in the defense sector, the Community will, first of all, use the principle of general economy;

Scenario 2. Collective security and defense. The Community member states will take the first steps towards integration, i.e., greater industrial and financial cooperation in the defense sector and regular participation of a significant number of states in joint projects, missions and operations. The investments in the defense sector will come through the established link between the contributions of the states and the income from the European assets in the military industry market;

Scenario 3. Single European protection. Community member states will achieve deep integration in the Europe's defense sector. Cooperation and solidarity will be the norm, and military capability will be bolstered by the close pooling of both armies and resources. Due to the increase in joint defense spending, the innovativeness and professionalism of the military industry will increase and the Community will rise in the ranking among security promoters (Future of European Defense: reflection paper, 2017).

Obviously, it is almost impossible to predict the course of events in the context of the modern international order, but it is possible to assume, based on the lessons of the past, what needs are to be implemented to guarantee the effective protection of Europe. Therefore, we offer the following set of recommendations:

1. The Security Council of Europe is the necessary governing body that the European Union and its member states must implement to achieve consensus in decision-making.

2. Europe should avoid organizational redundancy in the defense sector, namely, there is no need to create a multitude of defense initiatives that are left as paper tigers. In our opinion, it is worth focusing on one framework of cooperation that will bring coherence in defense planning, innovation and a reliable and operational European army (Headline goal 2003).

3. We must jointly oppose the external aggressor. In this context, civil security plays an equally important role. The methods of protecting the consciousness of European citizens from disinformation and propaganda must be developed together with other military technologies.

Therefore, European protection requires reform and a clear position from the EU member states, i.e., what is what they really need – the autonomy or the protectionism. Considering that the modern approach of strategic autonomy is defined as a long and endless way of implementing European defense potential, the European Union must intensify its joint efforts to prevent aggressors who pose a threat to free societies.

8. Conclusions

Over the decades, the strategic course of the EU has changed three times. The European Security Strategy of 2003 reflected the model of a liberal order (effective multiculturalism) based on the model of the UN Security Council, where the role of diplomacy and in some cases the use of "force" was first of all given way. Consequently, the first strategic document of the EU confirmed that international law is not enough in the fight against financial stagnation, terrorist

threats and conflicts. The 2016 EU Global Strategy took a new level of "strategic autonomy" to protect the Europeans and institutionalize the Europe's defense sector through individual initiatives, namely, CARD, EDF and PESCO. However, the mechanisms of the EU Global Strategy proved to be insufficient under the influence of Brexit, the health crisis and the Russian-Ukrainian conflict. Thus, starting from the "peace project" to the build-up of "hard power", the Community has high hopes for the Strategic Compass 2022, which combines the autonomy course and the 2030 action plan, defining its goals based on Europe's specific military gaps and threats, and therefore aims to intensify the already started initiatives.

It has been asserted that the Permanent Structured Cooperation of the EU on Security and Defense (PESCO) is a forum for the interaction of states and a permanent provider of critically important projects of the European military industry. The most significant shift in the PESCO Roadmap is the "Military Mobility" project, which facilitates military and civilian logistics and has the potential to grow into a "military Schengen zone".

It was determined that the EU Coordinated Annual Review on Defense (CARD) is a relatively unknown EU defense initiative, though it is the most significant one in the context of the functioning of PESCO and EDF. The CARD cycle is long-term, hence its results are not immediately visible. Besides, CARD is an intergovernmental tool of the EU, involving not much of public participation. This is a key weakness of CARD, which threatens its effective implementation, in case the countries do not provide exclusive information to the European Defense Agency.

It was found out that the European Defense Fund (EDF) is the center of the EU defense spending, which makes it possible to make the right investment decisions, develop a network of coordination centers and, due to the system of bonuses, encourage the states to cooperate in joint defense projects. EDF represents a unique opportunity in the single defense mechanism CARD–PESCO–EDF, thereby covering all the needs of the European defense sector.

It has been highlighted that the European Intervention Initiative (E12) is a French decision independent of the EU and NATO in building a strategic culture and reviving the idea of combat groups. The exclusive participation of the 13 leading armies of Europe is both an advantage in the possible European defense integration (in particular for the participation of the forces of Denmark and Great Britain) and a violation of European solidarity.

Scenarios that predict the development of the EU in the field of defense, despite the difficulties along the way, are considered. It should be understood that after the Russia's full-scale military invasion of Ukraine, the priority of the organization is the protection of the member states and its partners. In the future, the European Union should continue to deepen cooperation in the field of defense and develop its potential in this direction, because it is impossible to predict what events may unfold on the continent in the future, and security is the key to stability.

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ACCESS TO IN-VEHICLE DATA IN THE MAELSTROM OF PROTECTED RIGHTS AND LEGITIMATE INTERESTS AS AN URGENT CHALLENGE FOR EU LAW

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Abstract: *What will be the mode of the data that today's connected cars accumulate has become a critical issue for the entire automotive sector and its related supply and service industries. If quanta of highly usable data remain largely with car manufacturers, they will become gatekeepers and the entire aftermarket will either fall into complete dependence on them or lose the ability to innovate and compete. Aftermarket leaders and EU institutions are working to ensure that this data is shared from manufacturers to other supply and service providers. However, the most sensitive data is of a personal nature and its widespread sharing in the name of open competition may conflict with the right to privacy and the protection of drivers' personal data. Protecting both competition and data at the same time can be awfully expensive, with negative impacts on consumption and available mobility. This paper seeks to explain this straitjacket of three not entirely consistent requirements and to show the possibilities for emerging legislation within its framework. It shows that there are not only convincing arguments but also strong lobbies behind each of the demands, which makes finding a compromise solution even more difficult. At the end of the analysis, a solution is proposed which, taking into account all the constraints, appears to be the least detrimental to the preservation of all protected rights and legitimate interests.*

Keywords: In-vehicle data; connected cars; data sharing; competition; privacy; data protection.

1. Introduction

"Give car drivers control over their own data!", MEP Caroline Nagtegaal wrote in her question to the European Commission on 3 April 2023. She was critical of the fact that the Commission has not yet put forward sector-specific rules on access to vehicle function and resources, pointing to the urgency of the problem. The difficulty of it lies in the need to quickly ensure that all the actors around car manufacturers and their clients have access to the data generated by ever smarter vehicles, without compromising the safety, security, and privacy of those who drive them. Yet it is not easy to satisfy three groups of stakeholders who need each

other and at the same time have completely different views on what should be done with in-vehicle data. For car manufacturers, this data is an extremely valuable resource over which they have now an almost exclusive control. They also have several reasons why they would not and should not want to lose it. The entire automotive aftermarket, including garages, insurance companies, roadside assistance, and leasing companies, as well as manufacturers of navigation and traffic management apps, desperately need this data. Without it they will not break free from their dependence on car companies, and from being left behind by competitors linked to the automakers. Drivers, both individual and business owners of cars, and along with them consumer and personal data organizations, warn that the massive sharing of data that smart cars collect about themselves, their driving, and driver behaviour may put an end to the privacy, autonomy, and security that buyers have traditionally associated with the purchase of a personal.

The problem clearly has a legal dimension (even constitutional-legal, since it involves the protection of fundamental rights), economic, technical and, given its sensitivity, political, since it is directly related to affordable and safe mobility for ordinary citizens on the one hand, and at the same time to Europe's competitiveness in the global competition for technological dominance or independence on the other. Although the question "Who will have access to in-vehicle data and under what conditions?" appears at first sight to be very partial and limited in scope, it focuses on much broader and more significant conflicts and dilemmas of our time. The following analysis seeks to be aware of all these important overlaps and contexts of the question at hand, but without wanting to describe and explore them all. It aims to show what hinders the finding of an appropriate legal regime for access to in-vehicle data, to describe analytically what legal proposals are already on the table (or are at least mentioned in the literature), and finally to show what regulatory path could and should be followed by the EU, which is eagerly awaiting a legislative initiative from the Commission.

The following text, divided into four parts, will first deal with the phenomenon of data generated by car traffic. In the second part, it will be shown what accounts for the difficulty of finding an acceptable legal regime for sharing in-vehicle data, from the perspective of three different coexisting interests: i) to choose from competing offers, ii) to have affordable cars, iii) to maintain a high level of privacy and data protection. The third part will discuss the European Commission's work to date on this issue and finally the fourth part will discuss the solution that

seems most likely to be practically achievable. The focus will be on the legal aspects of the issue under examination, in particular the protection of fundamental rights, the protection of competition, the protection of consumer rights and, to a lesser extent, the protection of IPR. The main sources of data for the analysis are, on the one hand, materials published on the website of the European Commission, which has already outlined scenarios for solutions in 2022 and has long been in discussion with various stakeholders on the topic of in-vehicle data. It will also include the relevant opinions of car manufacturers, independent suppliers and service providers, data protection organisations and consumers, as well as expert comments and discussions conducted today mainly in virtual space.

The dynamics of change and the reality of the ongoing search for a legal solution to the problem at EU level mean that any conclusions drawn from the following analysis will be constantly "threatened" by further future legislative developments. Nevertheless, the author is convinced that many of the conclusions offered below have lasting validity and will represent the necessary boundaries within which future legislative solutions will have to fit, whatever their concrete form.

2. Connected cars‘ data as a legal issue

From the outset, it should be made clear that the issues raised are not the prerogative of so-called autonomous vehicles with autopilot and the problems discussed below are therefore not, for the most part, futuristic speculation. Connected cars are nowadays commonly produced cars even by non-premium brands because they are also equipped with software communicating with many sensors sensing everything possible inside and outside the car[1], usually with built-in navigation and communication plus infotainment equipment. It is reported that even the least connected cars today generate up to 25GB of data in an hour (Gooding, 2021). Ordinary users are increasingly aware that their cars are "computers on wheels" and should know that they are rather more than that, because they are technically more complex, have a longer lifetime, are

[1] Keeping an eye on seat belts, driving in lanes, hands on the steering wheel, as well as obstacles around the vehicle, is now commonplace in new cars, as is the traditional indication of mileage, average consumption, the condition of the tank or battery, oil and other fluids, tyre pressure... and days until the next technical inspection. Premium cars are of course equipped above this standard. There are about 200 data points in cars today (with at least 140 viable business uses) (Plungis, 2018).

more expensive to acquire, maintain and secure, and the risks associated with them are greater than with a regular pc or smartphone.

Much of the data that connected cars generate is not personal and sensitive. They relate to distance travelled, wear and tear on components, fluid condition, tyre pressure, temperature, etc., but in the context of other data, focused on the location of the car or driver behaviour, they, in conjunction with the VIN or registration number of the car, compose a very specific profile of the car user.[2] They are then information about how we drive, but also where we regularly go, whether alone or with someone, who we communicate with from the car, what we listen to, where we take petrol or charge the battery, what services we order via the communication system, etc.[3] This is why the European Data Protection Board (EDPB) warns in its Guidelines that "most of by vehicle generated data can be considered personal data", since the natural person is ultimately identifiable by their clever processing (EDBP, 2020, p. 3).

However, the personal nature of the data generated by connected cars (and thus their treatment under the EU e-privacy directive 2002/58/EC and in particular the regulation 2016/679 - GDPR) and the potential threats to privacy are only one of many sides of the issue. An immediately related conundrum is the question of whether such data constitutes private property at all, and who is their possible owner, or whether and when it can be protected as IPR (Amrit, 2017, Mikeš, 2019). This legally-theoretically and practically complicated problem does not have a clear and satisfactory solution yet, and also the upcoming EU legislation (the Data Act proposal being discussed by the European Parliament and the Council (Europa.eu. 2022)) addresses the regime of access right to machine-generated data and right to portability of that data, without trying to constitute ownership rights nor IP rights (Geigerat, 2022). Indeed, the EU legislator's aim is not to resolve the issue of ownership but - as the title of the Data Act suggests - to ensure fair access to and use of data. This aspect of the data accumulated by smart devices,

[2] For instance Ford US Privacy Notice categorises the data generated by the car's operation as follows Vehicle data (Information about the vehicle, its components and parts), Driving data (driving characteristics and behavior), Vehicle location (precise location and travel direction, information about the environment where the vehicle is operated), Audio/Visual (voice command and other assistance devices), Media analytics (information about what is listened to in the vehicle), Vehicle analytics (information about the usage of vehicle features, service and technology (Ford Motor Company, 2023).

[3] In-vehicle data could carry directly personal or even potentially sensitive information such as location data, heart rat, or driver fatigue etc. (Gazdag and Lestyán et al., 2023).

and in the case of connected cars mainly by their manufacturers, i.e., car companies, is an even more pressing issue.

As the economy becomes more digital, the internet of things and artificial intelligence develop, the data becomes essential new fuel without which it is difficult to do business and compete. The exclusive possession and use of this data may lead to market super-dominance by entities that we already commonly refer to as gatekeepers (Šmejkal, 2021), which, at least according to the warnings of the European left, could develop into so-called techno-feudalism, i.e., domination of more than just markets (Varoufakis, 2021). And although it is now reported that up to 80% of industrial data collected is never used and not all in-vehicle data is held by car manufacturers (ACEA, 2022, p. 5), it is nevertheless the car companies and their emerging eco-systems, made up of service providers linked to them, who are poised to become gatekeepers. The value of the in-vehicle data market is currently estimated at US$435 billion with steep growth potential (Reuters, 2023) as the transition to electric vehicles is expected to be the key driver behind sharply increased, and data generating, connectivity. Qualifying as major players in this market, on which all its other participants more or less depend, is certainly tempting.

Standardised access to the information necessary for vehicle repair and maintenance is already ensured in some respects by Regulation 2018/858/EU on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles.[4] However, according to complaints from the aftermarket, this is not a regulation providing the necessary access to data that can be extracted from today's cars and their producers do not provide open enough access to data for the rest of the industry (CLEPA, 2023). In the submission of those who are pulling the short end of the rope, there is an acute risk that the independent aftermarket will disappear in the automotive sector and a closed eco-system of car manufacturers as gatekeepers dictating to everyone else will emerge (Gill, 2022, p. 4-5). here is therefore a competition problem, because the threat of super-dominance of gatekeepers means a significant restriction of free and undistorted

[4] Regulation (EU) 2018/858 obliges, inter alia (see its Art 61), car manufacturers to provide independent repair and maintenance providers with on-board-diagnostic information, diagnostic and other equipment, tools including the complete references, and available downloads, of the applicable software and vehicle repair and maintenance information.

competition and, for the EU as a whole, a possible international competitiveness problem if the equation less competition = less innovation applies.

The big online platforms, typically the so-called GAMA quartet[5], in their capacity as gatekeepers, already have their prohibited and mandated conduct in the EU dictated by the current Digital Markets Act (EU Regulation 2022/1925). A general regime for the transmission and sharing of data generated by smart devices should be established by the Data Act currently under discussion, which, according to the Commission's published proposal, seeks to empower users (Europa.eu. 2022). The users of connected devices will, in short, get the right to have access to data generated by the devices and the right to ask the car manufacturers to share "their data" with third parties, based on an B2B agreement concluded between the manufacturer and the independent service provider. However, according to independent experts, the proposal sent to the legislative process favours the users and the interests of car manufacturers rather than giving broad options to third parties[6], even if the data holder is in principle obliged to share data on FRAND terms. Contrary to the fact that consumers in their majority act emotionally rather than rationally in relation to their data, that behavioural economics has long since revealed a consumer *status quo bias* (Samuelson and Zeckhauser, 1988) that implies the majority is usually staying with a pre-set and more or less workable solution, the basic premise of the Data Act is that the individual will be willing and able to make decisions regarding the use of the rather opaque and difficult to value quantity of data generated by the machine or device he/she uses (Kerber, 2022).

In addition, from the perspective of the issues examined here, the Data Act is a general horizontal regulation for the entire Internet of Things, so it will not be specific enough to fully address the issues related to in-vehicle data. At least that is what the aftermarket thinks, and so does the Commission, which has already presented options for a follow-up sector-specific regulation for in-vehicle data in March 2022. While the Data Act already passed its first reading in the EP in spring 2023, the in-vehicle legislation promised by the Commission for Q2 2023

[5] GAMA = Google, Apple, Meta (Facebook), and Amazon are typical, but not the only gatekeepers affected by DMA regulation.

[6] The aftermarket would essentially depend on the driver taking the initiative to ask the car manufacturers to enter into an agreement with the selected independent service provider and then to provide (start providing) data to the car manufacturer on the basis of the agreement. This assumes a valued initiative and some awareness on the part of the driver and then a willingness of both professionals to come to a workable B2B agreement on FRAND terms.

had not been presented by mid-June. Before discussing the possible shape of this sector-specific regulation, it is necessary to outline the "straitjacket" into which it must fit.

3. Dilemmas, trilemmas, quadrature of the circle

The following dilemma emerges from the situation described above: volumes of data, which in the case of car drivers may be of a personal nature and should therefore be adequately protected, are to be shared with hundreds of actors across the sector to limit the market power of potential gatekeepers, preserve the openness and fairness of the downstream sector, i.e. competition with all the expected benefits for society and consumers. We therefore have two fundamental, legally protected values, competition, and privacy (personal data), which should not cannibalise each other, although their parallel provision is by no means automatically guaranteed. “Privacy must not be diluted at the altar of competition”, wrote R. Matthan in March 2021, in a note warning that the objectives of protecting fair and open competition in the marketplace may come into conflict with the protection of clients' privacy through the handling of their data (Matthan, 2021). He thus condensed into a single sentence the impending conflict that had already been highlighted by some decisions of competition authorities[7] and warnings from authors dealing with the issue (Carugati, 2021; Šmejkal, 2021; Stucke, 2022; Gorecka, 2023; Bejček, 2023).

The fact that privacy and competition protection can be pitted against each other is a reflected reality also in the automotive and in-vehicle data sector. "There is a trade-off to owning a connected car... the manufacturer can fix bugs and add new features over time, but you also lose some control over your vehicle," expressed an US Consumers Union representative (Plungis, 2018). The loss of some control is due to increased connectivity, from which cannot be separated the increased data transfer between the vehicle and the entities around it, firstly the manufacturer and secondly all others who will access the data or with whom the data will be shared under certain conditions. While some data will not be stored anywhere, and others may be anonymised and will only be used to make technical improvements to a particular component

[7] In the US, for example, this is a court case LinkedIn Corp., 938 F.3d 985 (9th Cir. 2019), where the District court ordered LinkedIn to refrain from putting in place any legal or technical measures with the effect of blocking a third party‘s access to public profiles. In the EU, this includes warnings to Apple or the initiation of proceedings (both at EU level and in some Member States) when it tried to enhance privacy of its users by limiting third-party’s application access to its platform (Ikeda, 2021).

in the car or to make traffic management more efficient in cities, however, the really profitable services, from car maintenance planning and insurance to infotainment and all the comfort improvements that use geolocation, driving style and driver fitness, can only benefit maximally from data that allows individual targeting of a particular individual in a particular car.[8] Although the dashboard does not ask what the driver wants to do with the generated data every time the key is turned, drivers instinctively know that their car is generating data and privacy concerns are the most common reason for refusing to share it (Gooding, 2021). A solution must therefore be found that subjectively and objectively ensures sufficient data protection and privacy (i.e., effectively enforcing compliance with GDPR on all those who will process in-vehicle data) so that there would be the necessary legal titles to share data with entities outside the car manufacturer's eco-system and free competition would be maintained.

Of course, privacy and competition protection are not necessarily mutually exclusive. One can imagine, on the one hand, competition between manufacturers and service providers to provide a higher standard of data protection and, on the other hand, IT and organisational solutions that ensure data sharing with a reasonable level of data protection. However, in addition to the question of the political-legal-technical feasibility of such an ideal, we must immediately ask about the price that will have to be paid for combining privacy and competition. There are techno-optimists who expect not only greater security from the use of more data from connected cars, but also efficiency and savings from their operation, maintenance and servicing (Aggarwal, 2022). In doing so, they are thinking along the same lines as when they anticipate the benefits expected from ever more sophisticated robotics, automation and AI deployment in industry to enable perfect 24/7 production without inaccuracies, breaks, human failures, etc. But the “factory analogy” can only work in the case of cars if we move to random and short-term ad hoc sharing (which is perhaps, as some have claimed, the mobility model of the coming generations (Bettendorf, 2017)). However, as long as we buy or rent cars for long-term use, care for them, adapt them to our needs (not to mention the car as an accessory to personality or directly as an object of emotional relationship), the analogy of the car to the modern factory will give way to

[8] Thanks to connectivity, a growing range of car features are becoming a matter of subscription for the service provided, or an over-the-air upgrade. For the car company and downstream service providers, connected cars are thus becoming a continuous source of revenue (Wucher, 2022).

the analogy of our relationship to our personal health and fitness, or even to our own homes. With those assets that we personally care deeply about, our psychological price ceiling has no limit.

The sector already has something of an automotive data management market, whose global size was estimated at USD 2.19 billion in 2022 and is expected to hit around USD 14.29 billion by 2032 (Precedenceresearch, 2022). Even without a deeper analysis, it is clear that these are volumes estimated based on the turnover of companies, "vehicle data hubs", which monetise the services of processing (sorting, packaging), securing and transferring from source to stakeholder data for further business use. CLEPA - the European Association of Automotive Suppliers, the lobby for the aftermarket, explains in its position paper (CLEPA, 2023) the need for this kind of services by saying that each connected vehicle today delivers a distinct set of data points and there is no larger overlap of data points supported by many vehicles. Downstream services then need to be oriented towards individual brands or even model ranges without becoming cross-brand and serving the whole market. Intermediaries that provide aggregation and adaptation of such data on a commercial basis will enable just such cross-brand servicing. However, the proposed Data Act does not envisage regulating this born-in-practice intermediate for the EU (Kerber, 2022, p. 125). While this may reduce the price of shared data by the profits of intermediaries, it does not reduce the cost of the services that the use of data generated by connected cars facilitates.

These services would therefore have to be provided by car manufacturers in the absence of partial sectoral regulation, and for them CLEPA essentially calls for price regulation in the form of uniform guidance on fair, reasonable, and non-discriminatory fees and a guarantee that, in the case of SMEs, compensation for data will not exceed the costs directly related to making data available (CLEPA, 2023, p. 8). ACEA - the European Automobile Manufacturers' Association, in its policy paper on the EU Data Act (ACEA, 2022) proposal, protests against this, arguing that such data sharing obligations will require substantial investment. Increased costs are imminent for two reasons. According to ACEA, only a small part of the data generated by vehicles is currently actively stored and used. If the definition of the data that will be subject to any new regime is expanded, car manufacturers will have to invest in how they design and build cars, or what they equip them with, to be able to store and communicate such volumes of

data (ACEA, 2022, p. 5). Besides, there are those operational costs from collecting, storing, protecting, managing and disseminating via electronic means data generated by cars. Such costs may become, according to ACEA, unsustainable for individual manufactures and will severely undermine the incentives to invest (ACEA, 2022, p. 8). In short, both the car manufacturers' lobby and the aftermarket lobby, and ultimately the European Commission, understand the cost of ensuring data sharing and protection at the same time could be uncomfortably high. With a high degree of probability, it can be predicted that most of it will eventually be passed on to those who buy and rent cars, thus impacting the easy availability of car-mobility for a significant part of the population (let us disregard in this analysis the possibility that this is a development welcomed by those who aspire to a car-free future).

This puts us in a situation where the dilemma becomes a trilemma. We can imagine (and achieve) affordable data sharing at the expense of data protection and privacy. Equally, we could more easily protect the data by limiting its sharing, because GDPR compliance by a dozen large car companies and their eco-systems can be better controlled than spreading the data across markets, and it will be controlled at a still affordable price. Ultimately, we can move towards a high level of data sharing and data protection, but all indications are that it will not be cheap, and the prices of new cars and modern mobility services may be far from the average consumer's purchasing power. Of the triad of competition - privacy (personal data) - consumption (costs), only 2 out of 3 are always within our reach, and the challenge becomes achieving all three goals at once, which is what we need for a balanced functioning of not only the automotive sector but, in fact, of society. However, nothing in the proposals and discussion to be analysed in the next section suggests that a solution to this squaring of the circle is on the horizon.

4. Commission’s initiative and responses to it

The European Commission has already launched a public consultation in March 2022 on a proposal for sector-specific legislation that would provide an appropriate solution for in-vehicle data sharing (European Commission, 2022). It has proposed 4 scenarios (Options 0-3) to the interested public, varying in increasing regulatory intensity. Briefly, these are:

- Option 0: Only the Data Act applies, there is no specific sectoral act. Such a solution represents a lesser regulatory burden but also highly likely does not ensure sufficient

data sharing. The specific needs of aftermarket and mobility services are not taken into account. Apart from the fact that regulation will not hinder spontaneous developments in the sector, such a solution will have all foreseeable negative consequences.

- Option 1: Specific sectoral act mandates equal and non-discriminatory and transparent access to data. However, the regulatory intervention is reduced to the minimum necessary: just a public list of data generated by each car model. To this and to downstream functions (e.g., the possibility of remotely unlocking the vehicle door for a shared mobility service) and resources (charging / discharging of batteries) equal access for all parties will be ensured. No new risks for safety and security will arise, new ongoing costs and obligations for manufacturers and the public sector should still be acceptable.
- Option 2: Beyond what Option 1 would require a standardized minimum list of data, functions, resources to must be made available. Permanent and secure access to on-board diagnostics and to bi-directional communication with the driver will be provided. This will require additional measures at the level of cybersecurity and privacy. It will therefore be a more elaborated, ready-made solution increasing accessibility and efficient use of generated data. However, costs become higher, administrative surveillance more complicated.
- Option 3: Beyond what is required by Options 1 and 2, it will be defined in what ways and modes data access will be provided and how this will be controlled. These detailed and constantly updated governance rules on access to data look like the best solution for competition, innovation, consumer choice, privacy, and data protection. However, the Commission acknowledges that compliance costs will be higher overall, for all car manufacturers and third parties, public budget, legislators, enforcers.

The ratio of pros and cons of the different options is logical and clear: from a free safari that is relatively easy to supervise and maintain (Option 0) to a costly but clear and safe zoo (Option 3). The individual options are difficult to evaluate from an external perspective, as we do not even know the final form and practical implications of the Data Act yet, so the functionality of upgrades to the standard required by it can only be speculated. Moreover, the proposals are not sufficiently specified to the extent that it is clear which data is already being

shared and only the standards for such sharing will possibly change, and which data will be affected by the new obligation and standard for the first time, which of the data will be purely technical or anonymised and which will instead require a strict privacy regime.

The external observer's appreciation is not helped by the subsequent discussion of the proposal, which is also available on the Commission's website (European Commission, 2022). It shows that, at least in the first reactions, none of the influential lobbies stands in the middle, none of them advocates "something between" Options 1 and 2. The car manufacturers, represented by the aforementioned ACEA, the American Automotive Policy Council (AAPC) or the Autonomous Vehicle Industry Associations (AVIA), would prefer the Commission to follow the baseline scenario approach, i.e. if possible Option 0 would prevail. Conversely, virtually everyone outside the circle of car manufacturers, be it the aforementioned CLEPA, the Council for Motor Trades and Repairs (CECRA) or the European consumer organisation BEUC, prefers Option 3. Individuals, often expressing themselves anonymously, would probably agree on the slogan "my car, my data!", as they demand the fullest possible control over all data generated by cars, i.e. no automatic transfer of data outside the car and free decision-making on whether data is deleted, anonymised or, subject to individual informed consent, used and shared. Given what has been written on the subject above, this is a division of positions that is to be expected and justified by the priority interests of each of the groups concerned.

However, viewed through the prism of the described trilemma "competition - privacy (personal data) - consumption (costs)", both extreme options (i.e., 0 and 3) are not a satisfactory solution. Leaving in-vehicle data in the Data Act regime, i.e., option 0, overlooks the difference in how the car market works with all its traditional and emerging aftermarket and other services, compared to e.g., smart fridges or phones. It is hard to imagine that a robust and thriving aftermarket could expand just by accessing all the necessary in-vehicle data on the basis of requests from individual users of these cars, or by making do with the basic technical data already provided today under Regulation 2018/858/EU on the approval and market surveillance of motor vehicles. This is supported by empirical data on the use of Article 20 of the 2016/679 GDPR on data portability, which is based on a similar principle. This has shown that without the addition of the necessary "functioning infrastructure for direct data portability between multiple providers", its potential remains untapped (Symoudis and Mager, et al., 2021). Similarly, the

potential for competition and innovation would remain untapped if most valuable data remained with car manufacturers.

In contrast, the overregulation that Option 3 seems to promote is not only costly but potentially bureaucratic, and therefore usually a brake on competition and innovation (Bejček, 2023, p. 25). Option 3 looks on paper like a solution combining high protection of competition and privacy, but the Commission itself recognises its cost to all stakeholders and the ongoing need to continuously update regulation to avoid slowing down innovation, which could run up against rapidly outdated rules on what data, how categorised and processed, with what security and under what FRAND conditions, should be made available. This already shows the extraordinary intellectual, organisational and, ultimately, financial costs that the effective operation of such a system would require.

This brief assessment shows that the first positions formulated in relation to the Commission's proposal are rather negotiating positions and that both poles of opinion are aware of and may gradually accept the necessity of a compromise that will better address the trilemma of competition-privacy-consumption. The EU can afford to sacrifice neither fundamental rights, which are privacy and personal data protection (Articles 7 and 8 of its Charter of Fundamental Rights (CFREU)), nor free and undistorted competition, which is part of its priority objective of the functioning of the internal market (Article 3(3) TEU and Protocol 27). Needless to stress that the provisions protecting competition are among the EU's public policy norms (European Court of Justice, 1999) and they are also directly related to safeguarding the economic rights of the European consumer (Article 169 TFEU and Article 38 CFREU). The most that can be considered is the intensity and priorities of the enforcement of EU instruments for the protection of privacy (personal data) and competition and weighing them against the costs that different options for setting their relationship will bring to the burden of stakeholders and, ultimately, consumers.

5. Probable and possible solution(s)

In view of the above, realistic expectations can only be linked to Options 1 and 2 of the European Commission's proposal, or combinations thereof, as well as to variations on the measures they propose.

The starting point for the search for a solution was undoubtedly indicated by the numerous responses to the four European Commission options, which called for a more precise definition of the distinct categories of data involved. For example, ACEA, representing car manufacturers, argues that only a very small portion of the in-vehicle data is of interest to service providers as most of vehicle-generated data are primarily of a technical nature. This mainly performance data than helps to ensure safe operation of the vehicle, exist only temporarily, are used locally within vehicle systems, and are never stored (CarDataFacts.eu). Logically, we are talking here about the quantity of data, not its value for further use, let alone its value in case of monetisation. In any case, however, it is good to remember that the demanding management of sharing would only concern a minority of the data generated by cars.

Among these further usable data are those that can be separated from the VIN and the vehicle registration number without losing their usefulness (for urban traffic management, for troubleshooting a given vehicle type, etc.). The challenge then remains, in particular, to define and establish a regime for sharing and permitted use of that category of data which is of high value for further use. Inevitably, this value depends on being able to personalise offers of goods and services based on the personal data processed (insurance or leasing terms and conditions, assistance services, infotainment and, of course, other supplies and services that can effectively arise from the evolution of individual drivers' needs).

The regime for handling this potentially sensitive category of data should of course be primarily based on the GDPR (i.e., in the case of sharing such data between data processors only based on a legal requirement, or prior consent of the data subject). However, already defining and separating this data from the rest is a challenge, and it is followed by another one in the form of categorizing, processing, packaging… simply making the data suitable for further use, as most third parties will not be able to use simple access to a part of the server (whether under the control of a car manufacturer or a neutral trustee) and the raw data stored in it. CLEPA, representing the aftermarket, therefore asks that sectoral regulation should ensure, inter alia, the definition of a pre-set standardised minimum dataset; provision of a common automotive application programming interface to ensure data flow from the sensor to the service; a governance body or structured forum to set a framework to assign respective roles, rights, authorisations, and liabilities... (CLEPA, 2023, p. 3).

While the legal obligation to prepare the data in this way beforehand would be a justification for processing it under the GDPR, such processing requires an intellectual and financial investment. In addition to the issue of cost, and thus the cost of further provision of such prepared data, there is also - as car manufacturers in ACEA point out - the issue of trade secrets, of protection of original databases, of copyright, etc. The very act of sharing or transferring large volumes of such data may, of course, raise additional issues of transferring responsibility for its security and, consequently, liability for data breaches, loss, misuse, which is alluded to by the requirement to define the interface for its transfer and the distribution of the burden represented by the operation of the whole rather complicated system.

A regulation that would adjusts all that, if it wants to satisfactorily address the trilemma described above, faces a different dilemma: between generality and detail, between under- and over-regulation. From the problems outlined, it should be as specific as possible and the regime for sharing the sensitive part of in-vehicle data, roles and responsibilities of all parties should be defined and standardised as much as possible. It is beyond the scope of this analysis and its author to determine whether this is possible without regulation hindering innovation and the dynamic development of the sector. However, if setting up a data sharing regime is the main task of sectoral regulation, it should try to be extremely specific on the one hand and flexible and open to change on the other.

Under the pressure of these rather contradictory requirements, it seems most realistic to seek some regulation not for the actual form and content of multi-sharing between car manufacturers and amount of third parties of the aftermarket (and millions of drivers), but rather for the data management market regime. The solution seems to be to bring independent data aggregators and dealers into the game, i.e., data professionals, who will relieve automakers, but more importantly the independent downstream providers of goods and services (and ultimately individual drivers), from having each to become higher-level data professionals. Car manufacturers will not be the main data custodians, nor will it lead to the combinations of DigiTech companies with car manufacturers. All car-generated data would go to a neutral trustee who would secure and distribute them in some standardized way. It would make car manufacturers, downstream service providers and possibly even drivers, mere clients of a few strictly licensed and regulated (even in terms of operating costs and margins) data companies

that would ensure that the necessary level of protected data is available in usable form at an affordable price (something along the lines of health insurance companies in the post-Bismarck model of health insurance system (Wallace, 2013)). This is the most interesting solution discussed in the literature (Kerber, 2022), but not yet reflected by the Commission, while it is becoming increasingly clear that this solution could bring security, transparency, and possibly also cheaper operation of the whole complex data sharing system.

Time will tell whether this, undoubtedly demanding solution will be implemented, and before that happens, perhaps a series of follow-up analyses will bring it closer. In any case, the broader context, which was only mentioned in the Introduction, but was not included in this analysis, also works in favour of the proposed solution. Turbulent developments in all socially sensitive markets, from finance to energy, to pharmaceuticals and health care or housing, are leading in the EU to stricter regulation, to a higher share of the state or straight to a mixed economy. It would be surprising and especially counterproductive if the market with the essential oil for Industry 4.0, i.e. with data, was left with only the existing regulation preventing the abuse of market power and the abuse of personal data. We are gradually becoming as dependent on data as we are on the access to capital or electricity. If the EU does not want to become lagging behind or even dependent in relation to other great powers in this respect, it cannot afford to leave in-vehicle data without sophisticated regulation.

6. Conclusion

An attempt to polemically present what all the legislative solution to a certain ripe problem, complicated by the clash of conflicting interests, but also not always compatible fundamental rights and freedoms of EU law, must deal with, can hardly lead to a clear and satisfactory conclusion.

As has perhaps been shown convincingly enough, only unsatisfactory solutions are easily achievable. The easiest to achieve is poor data sharing and therefore poor competition in the sector, but at least with privacy protection at the level we have so far. Alternatively, the sharing of data can be expanded while its protection is reduced, which will become the price for more open competition and higher efficiency in downstream supplies and services. Or - if the authorities promoting competition and data protection are up to the task of effectively enforcing

compliance with the regulations - we can expect better data sharing with their strict protection, but at a significantly higher price for all involved, which will ultimately burden the buyer and the taxpayer. Better than these solutions is the technically, economically and legally demanding search for a form of regulation that avoids both extremes (leave unregulated vs. regulate as much as possible) and focuses primarily on the regime of those data that are the most sensitive from the point of view of privacy protection and at the same time the most valuable in terms of further commercial use. A specifically regulated market should be created for in-vehicle data, at the centre of which will be the specialized subjects of licensed and closely supervised data companies.

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ANTITHESIS AS POWERFUL LINGUISTIC TOOL OF PERSUASION IN POLITICAL SPEECHES IN KOSOVO

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Abstract: *Political speeches play a vital role in the communication strategies of political leaders, enabling them to express their ideas, mobilize support, and persuade the public. Within this context, the effective use of rhetorical devices assumes paramount importance in conveying messages. This paper aimed to investigate the role of antithesis as a potent linguistic tool of persuasion in political speeches, specifically within the context of Kosovo. The paper sought to examine the prevalence and patterns of antithesis in political speeches delivered by Kosovo politicians, analyze its rhetorical effectiveness in shaping public opinion and influencing political discourse, explore sociopolitical and cultural factors that influence its usage, and assess its impact on audience perception and receptiveness to political messages. The paper employed methodologies such as corpus analysis, rhetorical analysis, and sociopolitical analysis, to achieve its objectives. The expected contributions of this paper lie in advancing our understanding of political rhetoric in Kosovo, highlighting the significance of antithesis as a persuasive linguistic tool, and enriching the knowledge base in the field of political communication.*

Keywords: antithesis, political speeches, persuasion, rhetoric, Kosovo, linguistic tools

1. Introduction

Whenever people speak and express their ideas, they not only want to make others listen to them but also want to achieve the effect of their words. Undoubtedly, such an effect does not depend only on the situation we are talking about, but also on the person who conveys such a message to the listeners or the readers. Creativity during the expression of thoughts and ideas, creativity in the way of the ability to interpret the other's message has its importance as well. Therefore, everything we say is related to our ability to express it, to the style of communication, to the choice of vocabulary when perceiving the message, in other words, our communication,

whether written or spoken, depends on many factors. In the field of politics, communication is the essence of an individual's presentation. There you can see apart from the intellectual and academic development, the attitude, the courage, and the creativity to say what one thinks and is necessary to say in front of the citizens, and in particular, this affinity is noticeable during the electoral campaigns.

Politics is the art of the impossible, but also the art of the possible, it is the art of negotiations and it is part of different social and political arrangements, that of democracy but also of dictatorship. The language discourse used by politicians is the one that decides the choice to vote most of the time. The discourse of the politician is the distinguishing emblem in conveying the message to the voting electorate; it is the tool that convinces the other how to act. Linguistic discourse is, therefore, the most powerful weapon during various speeches, whether they are electoral speeches or speeches on different occasions: fundraising, negotiations, or solutions to various disputes, be that state, national, or international occasions. Hence, this paper aimed to explore the role of antithesis as a powerful linguistic tool of persuasion in political speeches, focusing specifically on the context of Kosovo. By investigating the prevalence, effectiveness, and underlying sociopolitical and cultural factors, this paper aimed to shed light on the significance of antithesis in shaping political discourse and influencing public opinion in Kosovo.

When Albin Kurti[1] entered the political scene of Kosovo, his communication skills through powerful rhetoric became the main component of his public persona and his political success in addition to his demonstrated courage and skills in dealing with Kosovo's national political issues especially during the years 1997-1999 and in the years to come.

Taking into account the importance of his public appearances as a political person, it is seen as very important to analyze his speeches, not only the electoral ones but also his appearances in the Assembly of Kosovo as a representative of the opposition (when the party 'Lëvizja Vetëvendosje!' was an opposition party) and as Prime Minister of the Republic of Kosovo. His eloquence is special because it represents his communication style in every situation. Therefore, the questions that were addressed in this article cover the following: a) the

[1] Albin Kurti is the President of the biggest political party in the country, Lëvizja VETËVENDOSJE! (LVV), as well as the fourth and now the sixth Prime Minister of the Republic of Kosova since the country's declaration of independence.

frequency and distribution of antithesis in political speeches in Kosovo; b) the use of antithesis as a contribution to the persuasive discourse in political speeches in Kosovo; c) the sociopolitical and cultural factors that influence the deployment of antithesis in political speeches in Kosovo; d) the extent of the use of antithesis in order to shape audience perception and influence political discourse in Kosovo. This paper initially presents a review of the existing literature on linguistic discourse, then we identified and analyzed antithesis as Kurti's rhetoric during his public appearances. The examples taken from those speeches were given translated from the source language (SL) i.e., the Albanian language, into the target language (TL), i.e., in English. The political, economic and social, and cultural significance in the context of Kosovo was also explained.

2. Discourse in political speeches

The nature of language is closely related to the demands that we make on it and the functions it has to serve. In concrete terms, these functions are specific to a culture. Therefore, one of the important features of discourse analysis is to study authentic text and conversations in the social context. According to Halliday (1978), texts should encode both personal and social processes.

In other words, texts should be generated, comprehended, and put into a social context, thus, both linguistic and social analyses are important. "The particular form taken by the grammatical system of language is closely related to the social and personal need that language is required to serve", states (Halliday, 1978, p. 142). Discourses, as such, are interpreted as communicative events because discourses between people convey messages beyond what is said directly. What is important in such discourse is the social information that is transferred allusively. Whenever people have to vote be that for one person or one party, it is most likely that their decision on who to vote for is based on communication through language and the influence of that language upon the decision of the voter. As Charteris-Black (2005) states "Within all types of political system, from autocratic, through oligarchic to democratic; leaders have relied on the spoken word to convince others of the benefits that arise from their leadership" (Charteris-Black, 2006, p. 1). As such, political speech is considered to be a pervasive longstanding political genre because power relationships in societies are mainly expressed

through language and practices, which according to the theories of Michael Foucault (1972) consist of statements that are organized regularly and systematically. Organized statements are part of the linguistic discourse which, "integrate a whole palette of meanings' bearing in mind that 'discourse is a broad term with different definitions" (Titscher, 2000, p. 42).

In political speeches, ideas and ideologies are conveyed through language. Words and expressions are used to affect meanings in the way in which they are planned to affect. Political speeches are composed by using persuasive language and the language of a speech may be of crucial importance in winning the elections. And using rhetorical devices in a speech may be considered the key to success.

The use of a figure of speech or any other literary device in a speech be it written or spoken, cannot pass unnoticed as the text in point becomes stylistically marked. The stylistic analysis of such devices aims at pointing out the effects that they achieve on the recipients and the possible reasons why they were employed in a particular place in the text, as this can account for the speaker's personality in terms of education and psychological traits of personality such as intentions, emotions, and attitudes. The truth is that the effects of any stylistic device "differ from text to text and within texts, depending on the immediate context". The beauty of orations resides mainly in the stylistic devices used for a better illustration of ideas. Thus, in speeches intended to influence people, rhetorical devices go hand in hand with stylistic devices. Giambattista Vico's (1996) opinion that "to persuade is to instill in the listener conformity to the spirit of the oration so that the listener wills the same as that which the oration proposes" (Vico, 1996, p.5), is worth emphasizing, as in this definition Vico does not refer to the orator, but to the oration as a text with a message only.

Political speeches are a specific sub-genre of political texts which are products of the political discourse. The term discourse in this formulation is used according to Norman Fairclough's (2013) critical discourse analysis integrative approach. This means that their form and content, i.e., the linguistic structures and the message 'transmitted' by the political texts, "are related to larger contexts of communicative settings and political functions" (Schäffner, 1996, p.202).

A political speech is generally seen as a rhetorical product created and delivered in a political context: "Political texts are a part of and/or the result of politics, they are historically

and culturally determined" (ibid.) Let's not forget that campaign communications are carefully constructed with specific political objectives in mind.

Linguistic performance is considered the most important skill required for political success. The choice of language a politician opts to use while addressing people publicly is essential for acquiring a leader's status. The mental aspects of language production and recognition as seen by cognitive linguistics give means to political consultants, speech writers, and politicians to successfully manipulate the ideas and images they produce in the people's minds. Language and discourse according to Van Dijk (2006) have "a broad range of structural possibilities to emphasize and de-emphasize information and hence also the ideologically controlled opinions about in-groups and out-groups" (Van Dijk, 2006). As such, discourse structures function as "strategic means" to influence the mental attitudes and behavior of the people.

We must first stop at the theory of argumentation which considers persuasion as an act of communication and as a term that emphasizes both situations, i.e., persuasion and the persuaded in order to analyze the antithesis as a form of rhetoric in political speeches. Various authors have dealt with 'persuasion' as the goal of rhetoric. Let us emphasize that in the Albanian language, the term 'persuasion' has the same connotation compared to the two terms used in the English language, the term "convince" and the term "persuade". Is there a difference between this term in the English language when talking about political rhetoric, or when literary tools are used in political rhetoric to reach listeners and readers, and in our case, voters? It seems that different researchers have also given different definitions. For example, Van Eemeren and Grootendorst (1984, 1992) prefer the term "convince" (van Eemeren, 1984); (van Eemeren H. a., 1992) while Walten and Krabbe (1995) consider it more appropriate to use the term "persuade" (Walton, 1995).

In the Albanian language, both terms have the same meaning, so it does not matter if one term or the other is used, as long as the purpose of use and the strategy of use in a political discourse achieves its aim, that of convincing the listeners and conveying the message to them. The persuasion through the message sent to the listener and the voter and the power that a message transmits depends on the ability of rationality of thinking and logic not only of the sender of the message but also of the listener: the ability to correctly understand and absorb the

argument of what they say and the message that is conveyed. Undoubtedly, the effort to convince the other and to change either the attitude or belief depends on the way of argumentation and the ability to achieve the intended goal on the part of the speaker. Therefore, the approach through which the message is given, the goal to convince the other, and the aim to achieve the goal is the main advocate of each speaker against the target audience. It seems that if we want to convince someone to change their approach, conviction, belief, and attitudes, then we must be able to win the conviction and trust through objective and accurate argumentation. Argumentation should be seen as a factor or element which affects both the logic and the emotion of the other so that it can be converted into conviction/persuasion. The argument must be used to prove what the sender of a message wants to reach within his audience, and in this specific 'art', everything the politician wants to reach is the voter. That being said, every argument must aim to convince the other. This is how a politician who speaks in front of a certain audience of voters should do with the arguments to convince. However, this does not guarantee that the success will be undeniable because there are many cases when the politician fails, through the speeches and arguments they present, to offer convincing arguments at the right level which would change the attitude of the voters and make them obey the arguments presented in a speech or a public presentation. Does this mean that the arguments are not enough? Not necessarily, but this means that the arguments depend on what persuasive power is presented to the listener, and in our case, to the voter. Argumentation cannot be considered complete if a speech or public presentation is related to only one argument. On the contrary, in every public appearance of each politician, the argument must be a continuous connection of the arguments presented so that the voter is convinced of what is conveyed as a message. The range of arguments must be logical, correct, and above all, convincing. Arguments must be supported by the reasonableness of their submission. If a politician tries to convince the voters by offering an argument or several arguments related to certain topics and tries to convince them of the political positions offered, then the reason should be the connected string of logical thinking and should contain the clarifications properly presented on many levels and with eloquence. This brings us to the definition given by Simons et al (2001) who says that persuasion is "human communication designed to influence the autonomous judgments and actions of others" (Simons, 2001, p. 7). This means that the sender of the message wants to influence the receiver of the message in a certain, structured, and planned

way. The sender of the message does this by influencing the feelings, way of thinking, and communication of the recipient of the message, that is, in this case, the voter. The way of communication, the eloquence of conveying the message, and the appropriate and purposeful argumentation represent an appropriate and subtle form of conveying the message to its recipient. In political rhetoric, persuasion undoubtedly represents a main concept because it aims to convince the audience to accept the views and positions presented by the party that wants to achieve its goal (Walton D., 2007, p. 87). So, one might raise the question of when can a persuasion be called successful. Only when the purpose intended by the sender of the message is achieved; only when the recipient of the message is consciously convinced that what has been offered to him/her is sufficiently argued to influence the beliefs, emotions, and decisions he/she will make in a given situation. In our case, persuasion is considered successful when the message carrier manages to influence the voter's decision as a result of ample argumentation in favor of the given party; a theory of attitude change that posits that the persuasive power of a given message depends on how different the position advocated in the message is from a person's attitude. We can say that every decision that the individual takes about a certain situation, for example, the decision of which party to vote for in the upcoming elections, depends on the information that he/she receives and what is offered to him/her through that information. For a voter, it is important how every word and every argument of the sender of a message related to a certain party in the electoral campaign will affect the decision he/she will make during the vote. In other words, people make their evaluations according to the content of the message and the argument behind that message to decide whether the message will ultimately be acceptable or not for them. In persuasion theories, this position is known as social judgment theory and is attributed to American psychologists, Carolyn Wood Sherif (1922–1982), Muzafer Sherif, and Carl I. Hovland. What level of argumentation will emerge during the transmission of messages to the voter, depends on the argumentative power of that message. If this argumentative power is emphasized, then the voter will resonate based on those arguments, and any doubts or insecurities that the voter may have had beforehand, he/she will fight precisely by relying on the strong arguments that are given. If the argumentative power is weaker, then this will cause either uncertainty in the voters and wavering in their decision to vote, or it will make them lean towards the opposite of what is being argued.

In other words, when we talk about different tools that politicians use to convince their audience about issues that they can consider as facts and arguments to win the support of voters, we must also look at the rhetoric that they use in this regard. A politician who aims to have the support of the majority is clear that he/she must find a way to approach the voters. So, the argumentation of the truths that a politician tries to present to the general public is related to the way he/she can argue it. Will the politician do this through facts that can be argued, or will the politician be able to convince the voter that the argument which seems to be a fact, is just a skill of the politician to present that 'argument' as a fact through means that will convince the voter in question? So, voters in such a dilemma will either remain neutral and not vote at all, or they will rely on weak arguments and vote for the party that gives strong arguments and makes them believe and change their attitude by leading to a certain conviction. Such a situation makes us see another approach to the theory of argumentation known as the New Rhetoric which was promoted by two Belgian philosophers, Chaiim Perelman, and Lucie Olbrechts-Tyteca in 1958. What plays the main role in such an approach is also related to the necessity of having a listening audience if the politician is not sure (that) that audience is stable and believes the arguments that the politician offers since the politician's goal is known: to touch the audience and influence the audience, then convince the audience through the arguments that the politician offers as facts or simply as arguments to promote the attitudes but also the goals in the realization of the political platform. To achieve the political goal, every politician must build the argumentative rhetoric knowing to whom it is directed, what is the educational, social, and economic level of that audience; it must be clear what are the expectations of that audience; what could upset them or what could encourage them and convince them in the arguments offered. Every politician should know what social norms this audience supports and gives its support to a certain politician or party. All these elements help to build the argument and/or rhetoric on which a politician will try to convince the audience to support and vote in his/her favor or in favor of the political party that is represented at a given time and situation certain. Let us agree with Perelman and Olbrechts-Tyteca's (1969) definitions of the new rhetoric "as the study of the discursive techniques allowing us to induce or to increase the mind's adherence to the theses presented for its assent" and 'audience' as "the ensemble of those whom the speaker wishes to influence by his argumentation" (al., 2014, p. 262-263). So, every approach and behavior of a politician to

achieve his goal towards the audience is related to the politician's ability to reach the specific audience and convey the message to the specific audience. The arguments that the politician used in conveying the message and trying to convince the audience are also given very well by two other theorists, Baker and Huntington, (1905, p.7), who are cited in "Handbook of Argumentation Theory" (2014). They state that both conviction and persuasion are important in the view of argumentation: "Conviction aims only to produce an agreement between writer and reader," they say, while "persuasion aims to prepare the way for the process of conviction or to produce action as a result of conviction" (al., 2014, p. 428).

In this respect, antithesis is a powerful persuasive tool in the political discourse because, in speeches, language is an important device by which conveyance can be made. Therefore, in political speeches, the speakers are often very careful in using language because they aim to achieve the required power in them. To characterize a phenomenon from a specific point of view, it may be necessary not to find points of resemblance or association between them and some other phenomena, but to find points of sharp contrast, that is, to set one against the other.

As Jones (1994) puts it, [a]t the micro level we use a variety of techniques to get our way: persuasion, rational argument, irrational strategies, threats, entreaties, bribes, manipulation – anything we think will work. (Jones, 1994, p. 5)

That is the reason why stylistic opposition, which is given a special name, the term 'antithesis' has long been a favorite device of accomplished speakers. Antithesis means opposite and is used as a literary device to put two contrasting ideas together. It emphasizes the difference between the two ideas and the effect of the contrast between the two ideas because it is built on that contrast of concepts that can be compared but which are not a common discourse in an ordinary speech. The message or focus is usually on the second idea.

3. Approach to the article

The approach in this article focused on the analysis of antithesis in the linguistic discourse of political speeches of Kosovo Prime Minister, Albin Kurti. The excerpts of speeches were taken from portals and social networks, and the party's official website "Lëvizja Vetëvendosje!"/Self-determination Movement!". To achieve the research objectives and answer the research question(s), the following methodology was employed: a) Corpus Analysis: A

comprehensive corpus of political speeches delivered by Kosovo politicians, i.e., by Prime Minister Albin Kurti was compiled and analyzed to identify instances of antithesis. b) Rhetorical Analysis: The identified instances of antithesis underwent a meticulous rhetorical analysis to examine their persuasive impact and effectiveness in shaping political discourse. c) Sociopolitical Analysis: A short introduction was given to present the sociopolitical factors that influence the usage of antithesis in political speeches in Kosovo. Excerpts have been identified, described, and translated from the Albanian language as the source language (SL) into English as the target language (TL) to understand their meaning.

In other words, taking into consideration the fact that corpus analysis and rhetorical analysis can be considered as complementary methodologies that are employed in a language, we may say that even for this paper the two although being distinct play that complementary role, especially in the context of political speeches. Antithesis is used as a literary device in political speeches, therefore authors, i.e., researchers through such analysis gain an understanding of different corpus to identify such patterns and the frequency of those patterns used. In the case of antithesis in political speeches, researchers may compile a corpus that comprises speeches from politicians to identify either common features or differences and variations in the use of antithesis as a political speech structure. This has to do with the quantitative perspective of analyzing the corpora. However, this paper uses a qualitative perspective and through its rhetorical analysis, it explores the nuances of how antithesis functions rhetorically in trying at the same time to persuade its audience and engage it into accepting the rhetoric and messages sent to them. In other words, rhetorical analysis tries to analyze the strategies used by its speakers to persuade its audience until it achieves its goals. In this sense, it consists of ideas, memorable phrases, and the construction of such phrases so that they resonate with the audience. It emphasizes linguistic features, contextual nuances, and the rhetorical significance of antithesis. This qualitative analysis involved as such an analysis of individual instances of antithesis within the selected speeches of the Prime Minister of Kosovo. The purpose of his usage of antithesis in his speeches is to contrast, to give a memorable phrase, and to evoke the emotional response, at the same time. It includes the approach toward the broader context of his speeches, while including the political climate, voters' expectations, and specific events and issues addressed. Having qualitatively analyzed the antithesis within the corpus, the authors in

this work endeavored to examine and describe the intricacies and peculiarities of its usage, providing a nuanced understanding of how this literary figure operates in the realm of political discourse. This qualitative approach adds depth to the overall academic inquiry, offering valuable insights into the rhetorical strategies employed by political speakers and the communicative power of antithesis in shaping public opinion. Hence, the basis of this paper is comprised of phrases and sentences that can be considered sufficient examples of the usage of antithesis as a rhetorical device mentioned above. Speeches that were addressed to the general public and the language that was carefully organized served specific communicative and political purposes. In political speeches such rhetorical devices are carefully chosen and constructed being that such language is artificial and highly figurative designed with premeditated intent.

4. The social, economic, political, and linguistic situation

Kosovo is a new state in the community of states, but it is an ancient country in the Balkans. In 1999, it faced its last fight to preserve its existence and that of its people. Over 1 million people became refugees. Helped by NATO and other allies, the war stopped, and the displaced population returned to find great destruction of houses and properties but to resume life in a country freed from the chauvinism and repression of Serbia.

In 2008, Kosovo was declared an independent state. Another phase of social and political circumstances and a great challenge for economic development began. The country was devastated for years even before the war of 1999; there was no economy and no industry. Education was at a low level; the infrastructure was weak for a country that is considered to be in the heart of Europe. Kosovo has a great wealth of underground minerals, it is rich in coal, and it has natural wealth, but all of these were exploited, damaged, and destroyed for decades by Serbia. The help of powerful international organizations and institutions helped to start the reconstruction of the country in all spheres. Kosovo today has about 10,000 square kilometers and about 1.8 million inhabitants. 93% are Albanian and the rest are other ethnic communities: Serbs, Turks, Bosnians, etc.

Kosovo is a secular state and its political organization is that of parliamentary government. It has its Government, Assembly, and President. It has its own Constitution and all other legislative units.

The democratic development of the state based on pluralism has created political parties. The election of the representatives of the Government and the Parliament, the election of the President, the Speaker of Parliament, and deputies in the Parliament of Kosovo, also shows political pluralism.

Today, Kosovo as a state coexists with its minorities, such as Serbs, Turks, Bosnians, the community called RAE, which includes Roma, Ashkali, and Egyptians; as well as a group of other minorities, such as Croats and Montenegrins. In Kosovo, the majority of the population speaks the Albanian language since 90% of Kosovo consists of Albanians. According to the Law on the Use of Languages, which was approved in 2006 and confirmed in the Assembly of Kosovo in 2008, the Albanian language and the Serbian language are the official languages in Kosovo. According to the Law on the Use of Languages, all public institutions are obliged to publish all documents in both languages, while the presence of a professional translator is necessary in all events. It should be emphasized that the language in Kosovo is not only a common means of communication, but it is also a powerful means of identifying the ethnic, historical, and cultural identity of each of its members. Hence, Kosovo's linguistic landscape is a dynamic tapestry that reflects the region's rich historical complexity and diversity. Language(s) plays a crucial role in the larger conversations about identity, inclusion, and the sociopolitical structure of Kosovo because it not only reflects the coexistence of various communities but also the ongoing social and political complexities. It is impossible to overestimate the importance of linguistic diversity in comprehending political discourse in Kosovo since language acts as a complex lens through which political narratives are expressed and understood. Since Albanian and Serbian are recognized as official languages, the region's linguistic diversity is representative of its intricate historical and cultural context. To convey ideas that connect with a variety of communities and highlight the value of inclusive governance, political leaders must navigate this linguistic diversity. The choice of language in political discourse reflects historical narratives, identity politics, and power dynamics, influencing how political messages are received across different linguistic groups. In a region with a history marked by ethnic tensions, linguistic diversity shapes the nuances of political debates, negotiations, and policy discussions, impacting the effectiveness of communication and the building of consensus. Therefore, understanding the intricacies of linguistic diversity is an integral part of deciphering the layers of meaning embedded in political

discourse and fostering a more inclusive and nuanced understanding of the political landscape in Kosovo.

Serb political leaders frequently emphasize their points of view and deliver nuanced messages by using figurative language, particularly when discussing Kosovo. By employing metaphorical language, these characters can shape the story to suit their political viewpoint by using symbolic expressions that connect with historical or cultural imagery. For instance, metaphors pertaining to territorial integrity, sovereignty, or historical ties may be used in discussions regarding Kosovo's status, effectively framing the discourse to appeal to the audience's emotions and beliefs. Moreover, rhetorical strategies like hyperbole and analogy are quite often employed to highlight the significance of particular political viewpoints or to make comparisons with past occurrences. Serb politicians use figurative speech to convey complex political viewpoints to audiences both at home and abroad. It adds layers of meaning to their speeches by interacting with the cultural and historical background of their discourse.

Amid the complex landscape of Serbian political rhetoric, the incorporation of antithesis is considered supreme as a powerful tool that enriches and highlights the discourse, especially in the multilingual setting of Kosovo. In the intricate landscape of Kosovo's historical and political complexities, Serbian leaders skillfully utilize antithesis as a powerful linguistic device. By deftly juxtaposing contrasting ideas, they shed light on the intricate nature of their positions. This technique serves as a powerful tool for emphasizing Serbia's perspective on issues such as sovereignty, territorial integrity, and historical ties, setting it in stark contrast to opposing views. This tactic takes on even greater significance in the bilingual setting of Kosovo, where both Serbian and Albanian languages hold equal importance.

To effectively communicate with a bilingual audience, it is crucial to carefully navigate linguistic nuances. By utilizing antithesis, political leaders can bridge cultural and linguistic gaps, making for a powerful discourse. This rhetorical tool, when executed skillfully, allows for a nuanced approach that acknowledges the linguistic diversity of the region while confidently stating important stances on crucial issues.

Today, in Kosovo as a state with full democracy, political speeches are essential for forming public opinion and influencing legislative choices. These speeches, which are an effective communication tool, give political leaders the chance to directly address the public with

their vision, principles, and policy goals. Politicians in Kosovo influence public opinion and generate support by strategically framing important issues and using persuasive language and rhetorical methods. Effective political speeches and their influence go beyond simple eloquence. They tend to provide a link between public authorities and the general public, facilitating democratic participation, accountability, and transparency. This highlights the speeches' critical role in the dynamic relationship between public opinion, governance, and the policy-making process. Speeches have been an important tool in Kosovo's turbulent history, helping to express the people's hopes, complaints, and resiliency at pivotal points. Passionate speech has been used, especially in times of conflict and political unrest, to mobilize communities, garner support, and define the Kosovar people's collective identity. Moments of national importance, peace talks, and declarations of independence have all been commemorated with historic speeches. These speeches influenced the course of the country's history while also reflecting the hardships and victories of the Kosovo people. Speaking at pivotal moments, leaders' eloquence and conviction have sparked public sentiment and symbolized the tenacity and resolve of a people attempting to exercise their right to self-determination while navigating difficult geopolitical challenges.

Saying this, the presence of linguistic diversity adds a compelling layer of complexity to the use of antithesis in political communication, particularly in regions with bilingualism, as seen in Kosovo. This coexistence of multiple languages presents both a challenge and an opportunity for political leaders utilizing antithesis in their speeches. Beyond the intricacies of creating effective rhetorical devices, the bilingual context requires skillful maneuvering of linguistic nuances, cultural connotations, and historical resonances associated with each language. When incorporating antithesis in a bilingual setting, one must carefully consider how contrasting ideas and expressions may translate or resonate differently within various linguistic communities. The broader impact of bilingualism on figurative language in political discourse is significant. To effectively communicate with a diverse audience, it is crucial for political figures to carefully tailor their language to be culturally relevant and resonant. This includes recognizing the potential for bilingual individuals to interpret metaphors and opposing ideas differently. By skillfully navigating this complexity, political actors can foster a more inclusive and impactful form of communication. Harnessing the power of figurative language across diverse linguistic backgrounds creates a more cohesive and effective dialogue especially in the Kosovo context.

5. Antithesis in discourse

As Foucault argues "Discourse is a system of thoughts composed of ideas, attitudes, and courses of action, beliefs, and practices that systematically construct the subjects and the worlds of which they speak" (Foucault, 1969, p. 45); as such antithesis, as a linguistic tool in political discourse, can be a powerful tool for sending and receiving the message. Campaigns for parliamentary and presidential elections, as well as municipal elections, are often an incentive for linguists who deal with the analysis of the political discourse of political representatives everywhere including Kosovo, as is the case in this article. It is known that politicians use rhetoric and different linguistic and stylistic figures to reach their voters and what is heard the most are metaphors, comparisons, synonyms, and others. But antitheses are not often heard in speeches and public presentations as an interesting and quite powerful tool in the discourse of any politician. The Prime Minister of Kosovo, Albin Kurti, uses the antithesis in his speeches.

If we start with the person deixis that Levinsons (1983) emphasizes, too, as a process of encoding role in a person's speech /Levinson,1983:62/, Kurti uses "we" and combines it with the antithesis in his speeches.

"We shouldn't seek out what is possible, but we should and will make possible what we seek out"(Kurti,2017, https://www.facebook.com/DMalbinin/posts/267652548205826/)

The wording "shouldn't seek out……we should ….seek out" is intended to specify that it is the right of the citizens of a country to demand what they deserve according to the natural law of human rights.

"*We don't collaborate with others to bring misery to our people and luxury to the ones in power*"(*Kurti,2017*, https://www.periskopi.com/fjalimi-plote-albin-kurtit-ne-tubimin-e-sotem/)

In addition to the emphasis on the pronoun "we" that Kurti makes in his speeches to identify the group of those who are the main participants of a society, i.e., the people, he also does this to emphasize that in his attitudes, all are included, both for better and for worse; he also includes those who have created negative situations in society, such as corruption and crime. To emphasize the inclusion of all, he does not divide "us" and "them" but emphasizes the group which together with him will affect the expected change. He emphasizes the attempt to fight the

rulers of the previous governments, who had enriched themselves at the expense of the state budget, which is still a poor one. This is what Van Dijk points out as ideological polarization /van Dijk, 1997:28/ when a positive or negative evaluation is given to the parties involved. And, in addition to the use of the pronoun "we", the utterance also shows the use of the antithesis through the word "misery" against the word "luxury". Kurti tries to divide the economically poor people from the members of the government who extorted the state budget for personal interests, which was a prominent phenomenon before he became prime minister. The use of the antithesis, in this case, promotes the image among the people that they are a group separated from the usurpers of the state; they are the impoverished side against the abusers of the state budget who live in luxury.

*"The government in power has divided the common people but has united the corrupt and the criminals"(Kurti,2017,*https://telegrafi.com/kurti-pushteti-ne-kosove-ka-percare-popullin-kurse-ka-bashkuar-te-korruptuarit-e-kriminelet/)

*"In general, even the middle class has more chances to become poorer rather than richer"(Kurti,2017,*https://www.botasot.info/aktuale-lajme/704478/kurti-ja-pse-do-te-fitoj-vetevendosje/).

*"The poor are poor because of a few who use their power to poor others and enrich themselves" (Kurti,2017,*https://www.botasot.info/aktuale-lajme/704478/kurti-ja-pse-do-te-fitoj-vetevendosje/).

*"Someone is entitled to survive but someone else is entitled to luxury. Someone doesn't have the basic things, but someone makes personal dreams come true". (Kurti,2017,*https://www.botasot.info/aktuale-lajme/704478/kurti-ja-pse-do-te-fitoj-vetevendosje/).

The fight against crime and corruption, as a problem of the new state, makes Kurti always distinguish between the people and the corrupt government; his speeches would focus on fighting corruption because it is crime and corruption that have divided the people; and he uses the antithesis in this part of his speech.

"In post-war Kosovo, our people have never had it more difficult in terms of socio-economics and never had it easier to make the desired change"(Kurti,2017, https://www.botasot.info/aktuale-lajme/704478/kurti-ja-pse-do-te-fitoj-vetevendosje/).

"We cannot successfully fight corruption and crime in society if we do not make the institutions clean of it" (Kurti,2023, https://www.vetevendosje.org/mbledhja-li-e-keshillit-te-pergjithshem-te-lv-se/).

Undoubtedly, the best strategy for drawing attention to the opinion to which the sender of the message is addressed is to emphasize as much as possible the meaning required for the recipient of the message, to reinforce that thought of the recipient of the message because the mental and memory model of opinion is created in a way that makes the process of persuasion easier in the future. The audience, in this case, the people who will vote, will know what the message is about.

The use of different stylistic figures by politicians, according to Allen (1998), means to appeal to the audience. Such an approach influences the audience to develop the culture of receiving the message as an indivisible whole because it creates the feeling of being one and indivisible. Kurti always tries to convey this message to the audience in his speeches. He talks about love for the people and encourages the feeling of being united and equal, for a greater purpose.

"People will love you if you love them back; People will never abandon you unless you abandon them first"(Kurti,2017, https://www.botasot.info/aktuale-lajme/704478/kurti-ja-pse-do-te-fitoj-vetevendosje/).

The inclusion of the people as one body, to create a strong bond in the minds of the voters, can be seen in many parts of Kurti's speeches. He does not want to be perceptive of the voter's message without emphasizing the importance that voters have in the entire process of seeking changes. Emphasizing the long period of misconduct of governance by previous governments, Kurti, through his strategy, convinces the voter that change can only be made through the voter.

The voter can understand the real situation only when included directly in the whole picture where everyone has a place.*"18 months is not too long but 18 years are not too short"(Kurti,2017,*https://www.botasot.info/aktuale-lajme/704478/kurti-ja-pse-do-te-fitoj-vetevendosje/).

A. Beard (2000) believes that one of the most efficient strategies related to persuasion is the use of the so-called "list of three" (Beard,2000:38). Apparently, the repetition of certain words, e.g., nouns, prepositions, and verbs strengthen the effect of the message that the speaker

wants to give to the listener; in politics, it is the message given by the politician to the voter. Kurti, too, uses "the list of three" to strengthen the effect of his message.

"If you believe you've reached the ultimate truth, you've reached the end of the road, the end of the effort, the end of history (Kurti,2023, https://www.vetevendosje.org/mbledhja-li-e-keshillit-te-pergjithshem-te-lv-se/).

"This requires strategy and tactics, flexibility and stability, persistence, and creativity" (Kurti,2023, https://www.vetevendosje.org/mbledhja-li-e-keshillit-te-pergjithshem-te-lv-se/).

"The League of Prizren is a historical event, not in the sense of an already closed stage of the past, but in the sense of an era that extends to the present, where we are a part of it and which guides us for the future"
*(Kurti,2023,*https://www.kultplus.com/lajme/fjalimi-i-albin-kurtit-ne-144-vjetorin-e-lidhjes-shqiptare-te-prizrenit/).

In the case of Kurti, we do not only see the "list of three" but the repetition of words that involve antithesis as a strong persuasive tool. It is considered as very creative by the listeners because it reflects the power of the word, the conviction, and the determination to achieve the goal, and gives the listener the feeling of being the most important part of the whole process of change. He uses words such as "pro" and "against" to emphasize the idea behind the antithesis used.

"Movement: Pro development, Against corruption; Pro equality Against privileges; Pro domestic products, Against poverty; Pro employment, Against migration; Pro justice Against crime; Pro unification of Albanians, Against Serbia's aggression; Pro minorities, Against discrimination; Pro solidarity, Against division; Pro peace, Against war".
*(Kurti,2017,*https://www.botasot.info/aktuale-lajme/704478/kurti-ja-pse-do-te-fitoj-vetevendosje/)

The use of antithesis or as it is also known as 'contrastive pairs' gives a special emphasis, and a specific tempo, and shows the attitude of its speaker to the recipient of the message.

"Organized inactivity leads to bureaucracy. Disorganized activity leads to chaos"
(Kurti,2023, https://www.periskopi.com/kurti-sot-prezantoi-platformen-si-kandidat-per-kryetar-te-vv-se-ja-fjalimi-i-plote-i-tij/).

The repetition of certain words and expressions is intended to strengthen the message given because the way of conveying the message contains the most successful means of attracting the listener's attention, understanding the power of the word, and acting according to those words and expressions. They are expressions that connect with the listener and support the audience because they are catchy, powerful, and always simple to remember.

"Pride without humbleness turns into arrogance. Humbleness without pride turns into submission"

(Kurti, 2023, https://www.periskopi.com/kurti-sot-prezantoi-platformen-si-kandidat-per-kryetar-te-vv-se-ja-fjalimi-i-plote-i-tij/?__cf_chl_rt_tk=jQh9bJiPjeK56TYx4Ft73npp7n6CsFJglbMUAza89jY-1687017748-0-gaNycGzNDBA)

"The issue that keeps such an activist is exactly this, how to influence history as a people, to be a participating people in it and not a spectator. This requires strategy and tactics, flexibility and stability, persistence, and creativity. Not hardening and stubbornness, but also not letting go or opportunism"

(Kurti,2023, https://www.vetevendosje.org/mbledhja-li-e-keshillit-te-pergjithshem-te-lv-se/).

"No success is achieved without difficulty, but if we liked comfort, we would not be activists. We are comfortable with discomfort. We are concerned and worried, but we aren't concerned about why we are concerned, and we don't even worry about why we worry"

(Kurti, 2023, https://www.vetevendosje.org/mbledhja-li-e-keshillit-te-pergjithshem-te-lv-se/).

Kurti also used the antithesis to emphasize the human values of a global citizenry while describing the country he leads from 2019 as its Prime Minister.

"Today I am speaking to you as the Prime Minister of a sovereign and independent state, small but important, poor but full of hope, young but ancient at the same time, which has several times defended common European values"(Kurti, 2023, https://www.arbresh.info/lajmet/fjalimi-i-albin-kurtit-ne-parlamentin-evropian/).

The antitheses in Kurti's speeches are a powerful linguistic tool to present the determined positions of his government in preserving the sovereignty and territorial integrity of the state.

"Kosovo is not an issue in the dialogue, but a party to the dialogue".

(Kurti,2023, https://www.arbresh.info/lajmet/fjalimi-i-albin-kurtit-ne-parlamentin-evropian/)

"Between Kosovo and Serbia, there is more of an armistice than peace. According to Kant, a true peace solution is not possible without canceling the existing causes of future war"(Kurti,2023, https://www.kosova-sot.info/lajme/654200/kurti-ne-23-vjetet-e-fundit-me-serbine-me-shume-kemi-pase-armepushim-sesa-paqe-e-vertete/).

All these different lexical units, words, and expressions as part of Kurti's discourse are used by him to convince the audience of their truthfulness and correctness, their importance, and the power they are supposed to carry as an effective tool of persuasion and to strengthen the sense of their true meaning.

6. Conclusions

In conclusion, this article emphasized the importance of studying the role of antithesis as a potent linguistic tool of persuasion in political speeches in Kosovo. By delving into its prevalence, effectiveness, and socio-cultural dynamics, this study aims to advance our understanding of political rhetoric and communication within the specific context of Kosovo. Through an examination of antithesis, this article seeks to shed light on the persuasive strategies employed by Kosovo politicians and their impact on public opinion.

The research objectives focused on analyzing the prevalence and patterns of antithesis in political speeches, assessing its rhetorical effectiveness, exploring the sociopolitical and cultural factors that shape its usage, and evaluating its influence on audience perception. By employing the methodologies such as corpus analysis and rhetorical analysis, and audience perception studies, this article aims to provide comprehensive insights into the role of antithesis in political discourse.

The anticipated contributions of this article lie in enriching the knowledge base on political rhetoric in Kosovo, highlighting the significance of antithesis as a persuasive linguistic tool, and deepening our understanding of the interplay between language, persuasion, and politics. The findings of this article can serve as a valuable resource for political leaders, communication practitioners, and researchers interested in political communication and discourse analysis.

By exploring the unique context of Kosovo, this article also adds to the broader scholarship on political rhetoric by providing a comparative perspective and enhancing the diversity of perspectives in the field.

In summary, this article underscores the importance of investigating the role of antithesis in political speeches in Kosovo, aiming to contribute to our understanding of political rhetoric and communication within this specific context. By examining the prevalence, effectiveness, and socio-cultural dynamics of antithesis, it seeks to advance knowledge in the field and provide practical implications for political communication and discourse strategies in Kosovo and beyond.

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