

**“CAROL I” NATIONAL DEFENCE UNIVERSITY
CENTRE FOR DEFENCE AND SECURITY STRATEGIC STUDIES**



STRATEGIC IMPACT

No. 3 [76]/2020

Academic quarterly acknowledged by CNATDCU,
open access indexed in CEEOL, EBSCO, ProQuest,
WorldCat and ROAD international databases

**“CAROL I” NATIONAL DEFENCE UNIVERSITY PUBLISHING HOUSE
BUCHAREST, ROMANIA**



EDITORIAL COUNCIL

Dorin-Corneliu PLEȘCAN, “Carol I” National Defence University, Romania – Chairman
Daniel DUMITRU, PhD, Professor, “Carol I” National Defence University, Romania
Daniel GHIBA, PhD, Professor, “Carol I” National Defence University, Romania
Valentin DRAGOMIRESCU, PhD, Professor, “Carol I” National Defence University, Romania
Ion PURICEL, PhD, Professor, “Carol I” National Defence University, Romania
Marius ROȘCA, PhD, Associate Professor, “Carol I” National Defence University, Romania
Florian CÎRCIUMARU, PhD, Lecturer, “Carol I” National Defence University, Romania
Florian RĂPAN, PhD, Professor, “Dimitrie Cantemir” Christian University, Romania
Florin DIACONU, PhD, Associate Professor, University of Bucharest, Romania
Robert ANTIS, PhD, National Defence University, USA
John L. CLARKE, PhD, Professor, “George C. Marshall” Centre, Germany
Pavel NECAS, PhD, Professor Eng., University of Security Management, Slovakia
Strategic Studies Institute, US Army War College, USA
Adrian GHEORGHE, PhD, Professor Eng., Old Dominion University, USA
John F. TROXELL, Research Professor, Strategic Studies Institute, US Army War College, USA
Igor SOFRONESCU, PhD, Associate Professor, “Alexandru cel Bun” Military Academy, Republic of Moldova
Péter TÁLAS, PhD, National University of Public Service, Hungary

SCIENTIFIC BOARD

Mirela ATANASIU, PhD, Senior Researcher	Dan-Lucian PETRESCU, PhD, Lecturer
Cristian BĂHNĂREANU, PhD, Senior Researcher	Marius-Titi POTÎRNICHE, PhD, Researcher
János BESENYŐ, PhD, Associate Professor	Alexandra SARCINSCHI, PhD, Senior Researcher
Cristina BOGZEANU, PhD, Senior Researcher	Gabriel STOENESCU
Crăișor-Constantin IONIȚĂ, PhD, Researcher	Dănuț TURCU, PhD, Professor
Ecaterina MAȚOI, PhD, Assistant Professor	Elena ȘUȘNEA, PhD, Lecturer
Veronica PĂSTAE, PhD, Lecturer	Mihai ZODIAN, PhD, Researcher

EDITORS

Editor-in-Chief: Florian CÎRCIUMARU, PhD, Lecturer
Deputy-Editor-in-Chief: Daniela RĂPAN, PhD, Researcher
Editor: Andreea TUDOR
Editorial Secretary: Iulia COJOCARU

CONTACT ADDRESS

Șos. Panduri, no. 68-72, Sector 5, București, 050662
Phone: +4021. 319.56.49; Fax: +4021. 319.57.80
Website: <https://cssas.unap.ro>
E-mail: impactstrategic@unap.ro

Disclaimer:

Opinions expressed within published materials belong strictly to authors and do not represent the position of CDSSS/ “Carol I” NDU. The accuracy of the English version of the articles falls entirely in the authors’ responsibility.

Authors are fully responsible for their articles’ content, according to the provisions of Law no. 206/2004 regarding good conduct in scientific research, technological development and innovation.



CONTENTS

EDITOR'S NOTE

Florian CÎRCIUMARU, PhD 5

POLITICAL-MILITARY STRATEGY

*The U.S. Foreign Policy in the Middle East. The Evolution
of the Strategic Partnership with Israel*

Daniel ȘOIMARU 7

SECURITY AND MILITARY STRATEGY

*Adapting Mosaic Warfare Specific Capabilities to the
New Technological Developments*

Crăișor-Constantin IONIȚĂ, PhD 22

GEOPOLITICS AND GEOSTRATEGY: TRENDS AND PERSPECTIVES

*Water Wars – the Practical Expression of Environmental Conflicts.
Hydropolitics in Central Asia*

Cristian ISTRATE 35

*Perspective on Turkey's Cultural Policy in Hungary:
Symbolism of the Ottoman Heritage*

Jordan PETRÖCZ 52

INFORMATION SOCIETY

Information in Cyberspace – Actuality and Challenges

Costinel Nicolae MAREȘI 76



STRATEGIC DIALOGUE

***Romanian Air Force – 16 Years Since NATO Accession, Complying
with Current Challenges and Preparing the Future Force Structure***

Major-General Viorel PANĂ, PhD 89

Romanian Land Forces – Tradition, Resilience and Innovation

Major-General Iulian BERDILĂ, PhD 97

Romanian Naval Forces – 16 Years of Existence

Rear Admiral Mihai PANAIT 100

GUIDE FOR AUTHORS 110



EDITOR'S NOTE

The third edition of 2020, number 3 (vol. 76) comprises five articles written by both Romanian and foreigner authors, to which is added the heading *Strategic Dialogue*, with three interviews, given by the chiefs of staff of the Romanian Armed Forces.

In the first section, ***Political-Military Topicality***, Mr. Daniel Șoimaru conducts a research addressing aspects of security and *foreign policy of the United States in the Middle East*, while analysing the landmarks of *the strategic partnership between the US and Israel*, as well as its importance for the stability of security dynamics in the region.

In the rubric **Security and Military Strategy** you can find the paper written by Colonel (r) Crăișor-Constantin Ioniță, PhD, *Adapting Mosaic Warfare Specific Capabilities to the New Technological Developments*, represents a continuation of the study undertaken by the author in the previous edition of the journal; the article presents the developments made so far by the US armed forces in order to put into practice the “mosaic” type war, by using the great innovations in robotics, artificial intelligence, nanotechnology and unmanned systems.

The third section, ***Geopolitics and Geostrategy: Trends and Perspectives***, consists of two articles: thus, Mr. Cristian Istrate raises the issue of *Water wars – the Practical Expression of Environmental Conflicts. Hydropolitics in Central Asia*, by demonstrating that the war for water can be a certainty of the future only when this type of resources will become a vector of power design, but also by highlighting the fact that armed conflict erupted for such reasons cannot offset the costs such an action would involve. The second article in this column, *Perspective on Turkey's Cultural Policy in Hungary: Symbolism of the Ottoman Heritage*, emphasizes the importance of the Ottoman past and the restoration of imperial monuments, the author – Jordan Petröcsz –, wanting to highlight elements of Turkish cultural and architectural policy in Hungary.

In this edition, we have also included the ***Information Society*** rubric, with an article written by Lieutenant Costinel Nicolae Mareș, entitled *Information in Cyberspace – Actuality and Challenges*. It describes the way information disseminated in the virtual environment can be intentionally “corrupted” through cyber-attacks.

Next, for the ***Strategic Dialogue*** heading, we had the privilege of interviewing the leaders of the three categories of forces. Thus, Major-General Viorel Pană, PhD, Chief of Staff of the Air Force, Major-General Iulian Berdilă, Chief of Staff of the Land Forces and Rear Admiral Mihai Panait, Chief of Staff of the Naval Forces, presented their perspective regarding the activity of categories of forces in the context of the COVID-19 pandemic.



At the same time, we mention the International Scientific Conference “Strategies XXI” on the *Complex and Dynamic Nature of the Security Environment*, that, given the current pandemic context, is organized online, on November 5-6, 2020. For more details, please access the platform <https://www.strategii21.ro/index.php/en/conferences-strategies-xxi/the-centre-for-defence-and-security-strategic-studies-conference>.

For those who read *Strategic Impact* for the first time, it is an open-access peer reviewed journal, edited by the Centre for Defence and Security Strategic Studies and published with the support of the “Carol I” National Defence University Publishing House, and, according to the National Council for Titles, Diplomas and Certificates (CNATDCU), the publication is a prestigious scientific journal in the field of military sciences, information and public order.

Strategic Impact is being printed in Romanian language for twenty years and in English for fifteen years and approaches a complex thematic: political-military topicality; security and military strategy; NATO and EU policies, strategies and actions; geopolitics and geostrategies; information society and intelligence. Readers may find in the pages of the publication analyses, syntheses and evaluations of strategic level, points of view which study the impact of national, regional and global actions dynamics.

Regarding international visibility – the primary objective of the journal – the recognition of the publication’s scientific quality is confirmed by its indexing in the international databases CEEOL (Central and Eastern European Online Library, Germany), EBSCO (USA), ProQuest (USA) and, in addition, WorldCat and ROAD ISSN, but also its presence in virtual catalogues of libraries of prestigious institutions abroad, such as NATO and of universities with military profile in Bulgaria, Poland, Czech Republic, Hungary, Estonia etc.

Strategic Impact is printed in two distinct editions, both in Romanian and English language. The journal is distributed free of charge in main institutions in the field of security and defence, in the academia and abroad – in Europe, Asia and America.

In the end, we would like to encourage those interested to publish in our journal to prospect and evaluate thoroughly the dynamics of the security environment and, also, we invite the interested students, Master Students and Doctoral Candidates to submit articles for publication in the monthly supplement of the journal, *Strategic Colloquium*, available on the Internet at <http://cssas.unap.ro/ro/cs.htm>, indexed in the international database CEEOL, Google scholar and ROAD ISSN.

Editor-in-Chief, Colonel Florian CÎRCIUMARU, PhD
The Director of the Centre for Defence and Security Strategic Studies



THE U.S. FOREIGN POLICY IN THE MIDDLE EAST. THE EVOLUTION OF THE STRATEGIC PARTNERSHIP WITH ISRAEL

*Daniel ȘOIMARU**

The background for this research is represented by the importance of the regional security complex of the Middle East in international relations. In this context, the article approaches the aspects of the United States of America's security and foreign strategy in the Middle East, between 2016-2020. Through this study we want to highlight the main concepts that guided the foreign policy strategies implemented by Trump administration in the Middle East. Moreover, we want to highlight the characteristics of the strategic partnership between the United States of America and Israel and its importance for the Middle East's stability. From a methodological point of view, we used the discourse analysis.

Keywords: *United States of America; Israel; Middle East; foreign policy; security; strategy.*

Introduction

The context of this research is represented by the evolution of the regional security complex in the Middle East and the impact it has on the security dynamics of the international system. Because the United States is one of the most influential state actors in this region, it is necessary to understand the security and foreign policy strategies adopted by its policy makers and to analyse the geopolitical implications they have in the Middle East.

*** Daniel ȘOIMARU is a Master Student in the field of Leadership and Communication in International Organizations, within Babes Bolyai University, Cluj-Napoca, Romania. E-mail: dani.soimaru@gmail.com**



It is also important to note that currently, the United States of America's main ally in the Middle East is Israel, due to the fact that both state actors share the same vision on how to operate the regional complex security in the Middle East. Moreover, analysing the evolution of the bilateral relations between the two states, it can be seen that there were two important stages in this process, determining the transition from friendship to alliance.

Thus, although the United States have actively supported the founding of the modern Jewish state, due to the common values and principles that the two societies share, starting with the American political and military decision-makers have begun to grant a privileged status to Israel. As a result of the geopolitical implications of the Six Day War, the United States has changed its foreign policy strategy in the Middle East and has chosen Israel as its main strategic partner in this region, in order to materialize its security objectives. However, President Donald Trump's election has led to the strengthening of the strategic partnership between the two actors and the reconfiguration of security dynamics in the Middle East, from Israel security interests' perspective.

Therefore, the aim of this paper is to highlight the main objectives of the US presidential administration led by Donald Trump in the Middle East, but also to analyse how the Strategic Partnership between the United States and Israel has influenced the security dynamics in that region.

According to the information presented above, the research question that allowed this study to take shape is: *How did the foreign policy strategies implemented by US policy makers influence the Middle East regional security complex in 2016-2020?* The research methodology is based on a systematic approach that has a double dimension – a historical narrative, from the perspective of the motivations that led the United States to get politically, economically and militarily involved in this region, as well as the analysis of security and foreign policy strategies implemented by the US policy makers, between 2016-2020. Therefore, the essential elements used for this purpose are represented by the analysis of official documents, speeches, but also the consultation of books and specialised articles dealing with this subject. The paper also presents a case study that aims at highlighting the evolution of the strategic partnership between the United States and Israel, in the 2016-2020 period.

1. General Concerns on the United States of America's Foreign Policy in the Middle East

From the standpoint of security dynamics, the Middle East has a unique character, being defined by a structural status of insecurity, which led international specialists allege that this region is a “volcano in activity of geopolitics (...) whose uninterrupted eruptions (...) destabilizes the region (...) and makes it the most



virulent outbreak of religious, civil and/or interstate and terrorist wars”.¹ Within this regional volatile security complex, the United States enjoys a privileged status, and its actions influence the distribution of power in the Middle East.

Analysing the United States’ foreign policy strategies adopted for the Middle East since the end of World War II to the present day, one can notice that the US government has often seemed unable to materialize its security objectives associated with this region.² The US diplomacy in this region has not been consistent, due to the fact that the presidential administrations that led the US government during this time have had different geopolitical views on the Middle East.

For a better understanding of the United States of America’s foreign policy evolution in the Middle East, clarifying certain historical aspects needs to be done. Therefore, there have been several stages in the involvement of the United States in this region, each having a significant impact on the evolution of the security climate in the Middle East. The first stage aims at the period between 1947 -1967 and had the main objective of increasing United States’ influence in this region to the detriment of the Soviet power. In this regard, US policy makers initiated a remarkable number of diplomatic negotiations in the Arab-Israeli conflict, which had as their main objective the transformation of the United States of America into the main mediator in this region. Moreover, the United States has succeeded in materializing its security interests by supporting the formation of a regional politico-military alliance consisting of Turkey, Israel and Iran.

The second stage, between 1967 and 1979, was a tense period, characterized by escalating regional tensions: The Six Day War (1967), the Civil War in Jordan (1970), the Iranian Revolution (1978-1979), and The Yom Kippur War (1973) that led to the reconfiguration of foreign policy and security strategies implemented by US policy makers in the Middle East. In this sense, starting with this period, Israel has become the main ally of the United States of America in the Middle East, the American political decision-makers offering large amounts of money and military weaponry to this state. Moreover, given the marks of the 1973 oil crisis, generated by the United States’ attitude in relation to the Yom Kippur War, but also by the attitude of post-revolutionary Iran, American diplomats tried to ease the improvement of diplomatic relations with the Arab states.

The third stage, between 1979 and 1990, was marked by the United States’ growing political and military role of in this region, mainly due to the implementation of Reagan doctrine, which led to a decline in the Soviet influence in the Middle East. Thus, the US presidential administrations managed to intensify

¹ Pascal Lamy, Nicole Gnesotto, Jean Michel Baer, *Where is the world going?*, Niculescu Publishing House, Bucharest, 2018, p. 105.

² William Quandt, “American and the Middle East: A Fifty-Year Overview”, in *Diplomacy in the Middle East: The International Relations of Regional and Outside Powers*, 2004, pp. 59-75.



the Arab-Israeli peace process, by signing the Peace Treaty between Israel and Egypt (1979). The United States also became actively militarily and diplomatically involved in Israel's invasion of Lebanon (1982), forcing the actors involved in the conflict to cease war operations. Another important event during this time was the war outbreak between Iraq and Iran (1980-1988), in which the American political actors initially supported the Iraqi army, significantly contributing to the signing of the peace agreement between the parties involved in the conflict.³ Moreover, during the Soviet invasion of Afghanistan (1979-1989), the United States provided support to the mujahedeen, and this war proved to be one of the main causes that led to USSR's dissolution. However, as it will be later seen, the United States has not been aware of the domino effect it has stimulated by promoting such an approach, and the consequences are still being felt today.

The fourth stage took place starting with the end of the Cold War up to the attacks of September 2001, representing a period in which American dignitaries tried to stabilize the region by implementing comprehensive political (peace negotiations) and military (military interventions) mechanisms. However, the hegemonic tendencies of some regional actors such as Iraq, which generated the outbreak of the First Gulf War (1990-1991), but also Iran's actions to destabilize the region through its proxy terrorist groups (Hezbollah, Hamas), were major setbacks to achieve an American Pax in the region. Moreover, the outbreak of the Second Intifada highlighted the difficulty of resolving the Israeli-Palestinian conflict and the failure of the American mediation. Also, after the end of the war in Afghanistan and implicitly the collapse of the USSR, the United States was perceived by certain terrorist organizations (e.g.: Al Qaeda) as the main enemy, because of the fact that their presence in the region was related to the manifestation of imperialist interests.

In the fifth stage, which began in 2001 and continues to this day, US policymakers have led to the full engagement of the United States in the Middle East. In this sense, from a political perspective, the Americans tried to implement strategic partnerships with the main state actors in the region, in order to obtain economic advantages, but also the legitimacy to militarily intervene in this region. According to these considerations, this period is marked by the United States' military interventions in Afghanistan (started in 2001), Iraq (2003), as well as the leadership of the international coalition in the fight against the Islamic State. Also, through the political approach, it can be seen that the United States of America played an important role in intensifying the process of resolving the Israeli-Palestinian conflict, but it also successfully promoted a policy of isolation for Iran. Moreover, the American political leaders have succeeded, through their special relationship with the Arab states from the vicinity of the Persian Gulf, in materializing their economic interests in this region. However, unlike the previous period, the United

³ *Ibidem.*



States is facing the increasing influence of other state actors in this region (e.g.: The Russian Federation, China, the European Union), and their interests are cohesive.

Thus, it can be noted that the United States' interests in the Middle East have remained stable but different over time, being influenced by significant structural changes regionally and locally, as well as by numerous significant conflicts in the region. This is why, at the moment, the American policy makers are forced to find optimal solutions to enable the United States to control the access to oil resources in the Middle East, to materialize strategic partnerships with various state actors, to assume the role of mediators in the existing conflicts in this region and counter the terrorist phenomenon⁴. Therefore, the US presidential administration led by Donald Trump has undertaken the fulfilment of these goals through the implementation of the reconfiguration of security and foreign policy strategies in the Middle East. From the beginning of his terms of office, Trump has elaborated the next directions of action of his administration in the Middle East: destroying the Islamic State, improving the strategic partnership with Israel and denouncing the Iranian agreement.⁵

2. The Evolution of the Strategic Partnership Between the USA and Israel, between 2016-2019

The relationship between the two strategic partners has varied over time, depending on the degree of compatibility between the political views of American and Jewish policymakers. Thus, the US presidential administrations, led by Democratic Party representatives, have tried to promote a conciliatory policy in the Middle East. Through the foreign policy strategies adopted by these policymakers, the aim was to materialize the United States' strategic interests by improving bilateral relations with the Arab states and implicitly with Iran, which led to the dissatisfaction of Israeli dignitaries. A relevant example in this regard is the way in which the presidential administration led by President Barack Obama managed the United States' foreign policy in this region, supporting the implementation of the two-state solution regarding Palestine and signing the Nuclear Agreement with Iran.

On the other hand, the US presidential administrations, controlled by the Republican Party, have implemented pro-Israeli security and foreign policy strategies. One of the key factors in determining this position of Republican politicians in relation to Israel lies in the great influence that the representatives of the evangelical

⁴ Marc Lynch, "Belligerent Minimalism: The Trump Administration and the Middle East", in *Washington Quarterly*, 2016, pp. 127-144.

⁵ Dave van Zoonen, "Trump's Foreign Policy in the Middle East: Four Key Issues", in *Middle East Research Institute*, vol.3, no.18, pp. 1-3.



community have on them.⁶ According to the principles and values promoted by the evangelical community, the United States must unconditionally support Israel because of the special relationship between Christians and Jews. There is also a cooperation relationship between the representatives of the American conservative political right and the Israeli ones, due to the political vision they share on how to resolve conflicts in the Middle East. Unlike Democratic Party representatives, Republicans did not pressure Israel to solve the “Palestinian problem” in a way that would harm its security interests and supported the initiatives of Israeli decision-makers against Iran. Therefore, Donald Trump’s winning of the January 2017 presidential election led to a shift of the US foreign policy in the Middle East and an improvement in the strategic partnership with Israel.

During the first official meeting between Donald Trump and Benjamin Netanyahu in Washington (February 15, 2017), the US President was asked by a reporter if he supports the two-state solution in Palestine, and his reply was: “I am looking at two-state and at one-state options and I like the one that both parties like.”⁷ Also, unlike Obama, who forced Netanyahu to stop building Jewish settlements in the West Bank for ten months, Trump suggested to the Israeli prime minister, “Hold back on settlements for a little bit.”⁸ This preferential approach to Israel was also generated by the US president’s lack of confidence in the Palestinian Authority. During a meeting with Mahmoud Abbas, the president of the Palestinian Authority, Donald Trump stated that “peace can never take root in an environment where violence is tolerated, funded and even rewarded.”⁹

Moreover, in December 2017, Donald Trump announced the relocation of the United States’ Embassy from Tel Aviv to Jerusalem. Through this proclamation, the US administration stated that “it is time for the United States to officially recognize Jerusalem as the capital of Israel”¹⁰ and “this long overdue recognition of reality is in the best interests of both the United States and the pursuit of peace between Israel and the Palestinians.”¹¹ Unlike Donald Trump, his predecessors avoided doing so

⁶ Simon Sebag Montefiore, *Jerusalem The Biography*, Trei Publishing House, Bucharest, 2012, p. 490.

⁷ Anshel Pfeffer, *BIBI The Turbulent Life and Times of Benjamin Netanyahu*, Basic Books, New York, 2018, p. 362.

⁸ *Ibidem*.

⁹ Zaki Shalom, Kobi Michael, “From Obama to Trump: Continuity versus Change in Middle East Policy”, in *Institute for National Security Studies*, June 2017, no. 938, pp. 1-4.

¹⁰ Presidency of the United States of America, *Presidential Proclamation, Recognizing Jerusalem as the Capital of the State of Israel and Relocating the United States Embassy to Israel to Jerusalem*, Washington, 2017, p. 1, URL: <https://www.whitehouse.gov/presidential-actions/presidential-proclamation-recognizing-jerusalem-capital-state-israel-relocating-united-states-embassy-israel-jerusalem/>, accessed on 08.08.2020.

¹¹ *Ibidem*.



because they would have made it impossible to maintain a mediating position in the Israeli-Palestinian conflict and did not want to harm diplomatic relations between the United States and the Arab states. However, President Donald Trump decided to implement this decision in order to strengthen the Strategic Partnership between the United States and Israel, which was one of his main foreign policy goals, but also because of his personal belief in the legitimacy of Jews to control this multicultural city.¹²

Another important moment that determined the strengthening of the Strategic Partnership between the United States and the state of Israel consisted of the common vision that President Donald Trump and Prime Minister Benjamin Netanyahu had in relation to the Nuclear Agreement signed with Iran. From the perspective of the Obama-led presidential administration, economic sanctions imposed on Iran were not a timely tool to disrupt its nuclear program. Also, the prospect of a military confrontation was not a viable solution, due to the multiple negative consequences that would have been generated by such a decision, as well as the unfavourable international political context. Therefore, the Barack Obama administration, together with the other representatives of the P5 + 1 group (China, France, Russia, Great Britain, Germany), intensified the political dialogue with Iran and, in November 2013, reached an interim agreement, which aimed at preventing or delaying the development of Iran's nuclear capabilities.¹³ However, Prime Minister Netanyahu criticized the terms of the agreement with Iran, saying, in a speech to the United Nations (October 1, 2015), that "this deal does not make peace more likely. By fuelling Iran's aggression with billions of dollars in sanctions relief, it makes war more likely".¹⁴ However, Donald Trump's rise to the White House led to the repositioning of the United States on the Iran Agreement, which the US president symbolically called "the worst deal ever".¹⁵ As a result of this political vision, Donald Trump mentioned that "number one priority to dismantle the disastrous deal with Iran"¹⁶, and the main reason why the American President considered that this agreement should be annulled was that the Tehran regime did not respect its commitments and is one of the main terrorist threats in the Middle

¹² Zaki Shalom, Kobi Michael, "From Obama to Trump: Continuity versus Change in Middle East Policy", *op. cit.*

¹³ Chintamani Mahapatra, "US-Iran Nuclear Deal: Cohorts and Challenger", in *Contemporary Review of the Middle East*, 2016, pp. 36-46.

¹⁴ ***, Full text of Netanyahu 2015 addressed to the UN General Assembly, *Times of Israel*, 01.10.2015, URL: <https://www.timesofisrael.com/full-text-of-netanyahu-2015-address-to-the-un-general-assembly/>, accessed on 08.08.2020.

¹⁵ ***, Viewpoint: How US can reach new Iran deal-after Trump, *BBC*, 11.11.2018, URL: <https://www.bbc.com/news/world-middle-east-46146806>, accessed on 08.08.2020.

¹⁶ Dave van Zoonen, "Trump's Foreign Policy in the Middle East: Four Key Issues", in *Middle East Research Institute*, vol.3, no.18, pp. 1-3.



East. In this regard, during an official visit to Riyadh, the American President claimed that: “From Lebanon to Iraq to Yemen, Iran funds arms and trains terrorists militias and other extremist groups that spread destruction and chaos across the region”¹⁷, thus suggesting that the regime from Tehran poses a threat to regional security in the Middle East.

In view of these issues, the US President decided, in May 2018, to withdraw the United States from the nuclear deal with Iran. The official reasons given by the US administration for this decision were that “the United States participation in the JCPOA failed to protect America’s national security interest”¹⁸ and “the JCPOA enriched the Iranian regime and enabled its malign behaviour, while at best delaying its ability to pursue nuclear weapons and allowing it to preserve nuclear research and development”¹⁹. Benjamin Netanyahu supported the US President’s decision and said: “Israel is deeply grateful to President Trump for his bold decision to withdraw from a disastrous nuclear deal with Iran. Many, many of our Arab neighbours are also grateful. And everyone who cares about the peace and security of the world should also be grateful”²⁰. The Israeli Prime Minister also stressed that the relationship between the United States and Israel has never been stronger.²¹ Therefore, Donald Trump, along with Benjamin Netanyahu, managed to undermine the Iranian nuclear deal and promote a policy of diplomatic isolation of Iran.

The partnership between the two leaders became even stronger in March 2019, when President Donald Trump signed a decree by which the United States recognized the Golan Heights as the territory belonging to Israel.²² The decision of Israeli political and military decision-makers to annex the Golan Heights is due to security considerations. Given that the northern border is Israel’s main strategic vulnerability because there is no natural buffer zone, controlling the Golan Heights

¹⁷ Zaki Shalom, Kobi Michael, “From Obama to Trump: Continuity versus Change in Middle East Policy”, *op. cit.*

¹⁸ Presidency of the United States of America, *President Donald J. Trump is Ending United States Participation in an Unacceptable Iran Deal*, Washington, 2018, p. 1, URL: <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-ending-united-states-participation-unacceptable-iran-deal/>, accessed on 08.08.2020.

¹⁹ *Ibidem.*

²⁰ ***, Prime Minister Benjamin Netanyahu’s 2018 UN General Assembly Speech, 27.09.2018, *Haaretz*, URL: <https://www.haaretz.com/israel-news/full-text-benjamin-netanyahu-s-2018-un-general-assembly-speech-1.6513185>, accessed on 08.08.2020.

²¹ ***, Full text of Netanyahu’s speech at the opening of the US Embassy in Jerusalem, *Times of Israel*, 14.05.2018, URL: <https://www.timesofisrael.com/full-text-of-netanyahus-speech-at-the-opening-of-the-us-embassy-in-jerusalem/>, accessed on 08.08.2020.

²² Presidency of the United States of America, *Proclamation on Recognizing the Golan Heights as Part of the State of Israel*, Washington, 2019, p. 1, URL: <https://www.whitehouse.gov/presidential-actions/proclamation-recognizing-golan-heights-part-state-israel/>, accessed on 08.08.2020.



has become crucial to the security of the Jewish state.²³ The control over this region also represents a geostrategic advantage for Israel, as it can be used as a bargain tool on the possibility of negotiating a peace treaty with Syria.

3. Deal of the Century

As stated at the beginning of the article, one of the main objectives of the US presidential administrations in the Middle East was the need to implement strategies to intensify the Middle East peace process. Thus, the US administration led by President Donald Trump, in order to demonstrate its respects to this political vision, has developed a peace plan called: “Peace to prosperity – A vision to improve the lives of the Palestinian and Israeli People”. In order to improve it, this year, President Trump and Prime Minister Benjamin Netanyahu made public another peace plan entitled “Deal of the Century” at the White House news conference, on January 28, 2020. The Israeli Prime Minister said at the meeting the fact that Donald Trump represents “the greatest friend that Israel has had in the White House”²⁴ and “the deal of the century is the opportunity of a century, and we are not going to pass it by”²⁵.

According to this peace plan, the United States supports the materialization of the two states’ solution in the Middle East, but believes that “a realistic solution would give the Palestinian all the power to govern themselves but not the power to threaten Israel”²⁶. This provision is the essence of the peace plan, as it conditions the possibility of founding a Palestinian state according to Israel’s need for security. Prime minister Benjamin Netanyahu, who believes that “peace without security is a shame”²⁷, would not have agreed to the possibility of implementing the two-state solution if such an option had had negative consequences for Israel’s security. Thus, given the political vision of the Israeli leader, it can be seen that he does not perceive peace as a product of mutual recognition and accommodation, but rather a relationship of power, discouragement and domination.²⁸ Moreover,

²³ ***, “The geopolitics of Israel and the Palastinians”, *Stratfor*, Texas, 2009, pp. 13-14.

²⁴ B. Netanyahu, “Trump Middle East peace plan “deal of the century””, *BBC*, 28.01.2020, URL: <https://www.bbc.com/news/av/world-middle-east-51289277/netanyahu-trump-middle-east-peace-plan-deal-of-the-century>, accessed on 08.08.2020.

²⁵ *Ibidem*.

²⁶ Presidency of the United States of America, *Peace to prosperity – A vision to improve the lives of the Palestinian and Israeli People*, Washington, 2020, URL: <https://www.whitehouse.gov/peacetoprospersity/>, accessed on 08.08.2020.

²⁷ Benjamin Netanyahu, *A durable Peace, Israel and it’s place among the nations*, Warner Books , New York, 2000, p. 9.

²⁸ Aronoff Yael, “Benjamin Netanyahu Battling the World”, in *The Political Psychology of Israeli Prime Ministers: When Hard-Liners Opt for Peace*, 2014, pp. 43-77.



the peace plan promoted by the US presidential administration highlights the fact that the borders between the state of Israel and the Palestinian state must meet the security needs that Israeli political and military decision-makers have called for. Therefore, unlike other peace initiatives that sought to materialize an agreement between Israeli officials and Palestinian community leaders in accordance with UN Security Council Resolution 242, the Trump administration's peace plan states that: "the United States do not believe the State of Israel is legally bound to provide the Palestinians with 100 percent of pre-1979 territory"²⁹. Thus, the US administration has tried to find a formula for territorial compromise that would satisfy the Palestinians' desire for self-determination, but also to provide security guarantees to Israel.

From a geopolitical view point, Benjamin Netanyahu highlighted the strategic importance of the West Bank in the defence strategies of the State of Israel and concluded that important territories in this region must be annexed.³⁰ Thus, through the diplomatic initiative of President Donald Trump, which stipulates that "The Jordan Valley, which is critical for Israel's national security, will be under Israeli sovereignty"³¹ and "Israeli enclaves located inside contiguous Palestinian territory will become part of the State of Israel"³², Israel can maintain military control over the strategic areas of the West Bank. Another security guarantee that the US presidential administration had to give to Israel was to control water resources (the Sea of Galilee and Jordan River). These resources are vital for the security of Israel, as they ensure the supply of drinking water to the Israeli population, and if left unchecked, would lead to great risks to national security (cessation of drinking water supply, destruction of infrastructure transportation of water resources, water poisoning, government blackmail and so on).³³ However, the peace plan also satisfies this desideratum of Israel, through a clause stating that: "The State of Israel will retain sovereignty over territorial waters, which are vital to Israel's security and which provides stability to the region"³⁴.

²⁹ Presidency of the United States of America, *Peace to prosperity, op. cit.*, accessed on 08.08.2020.

³⁰ Benjamin Netanyahu, Benjamin Netanyahu, *op.cit.*, p. 237.

³¹ Presidency of the United States of America, *Peace to prosperity, op. cit.*, accessed on 08.08.2020.

³² *Ibidem.*

³³ Benjamin Netanyahu, *op.cit.*, p. 258.

³⁴ Presidency of the United States of America, *Peace to prosperity, op. cit.*, accessed on 08.08.2020.

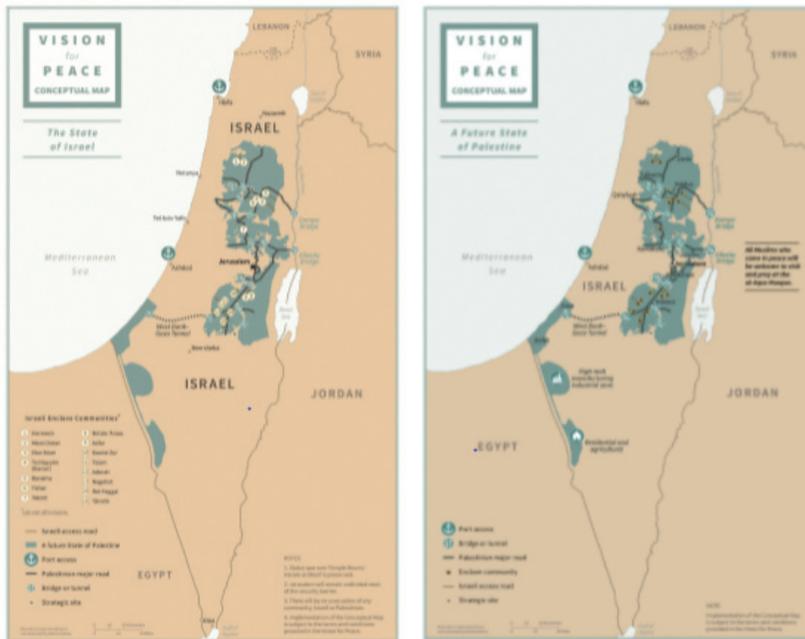


Figure no. 1: Vision for Peace Conceptual Map – The State of Israel and A Future State of Palestinian³⁵

In accordance with the peace plan, Israel can annex 30% of the West Bank and should yield a small area of the Negev region. Moreover, in order to increase security guarantees for Israel, the future Palestinian state must be demilitarized, noting that “the State of Israel will maintain overriding security responsibility for the State of Palestine, with the aspiration that the Palestinians will be responsible for as much of their security as possible”³⁶. Should this peace plan take shape, the demilitarization of the Palestinian state would be an important strategic advantage for Israel, as it could avoid launching hostile Palestinian actions, but could also control the region from a military point of view. Also, given that the territory bordering Jordan River should be annexed by Israel, the risks and threats posed by the emergence of the Palestinian state would be significantly reduced.

Another important issue discussed in the peace plan is the political status of the city of Jerusalem. The document states that “Jerusalem will remain the sovereign capital of the State of Israel, and it should remain an undivided city”³⁷, which would lead to the materialization of an important goal of Israeli policy makers. It should be noted that although the Israeli Parliament adopted in 1980, “The Jerusalem Law”,

³⁵ *Ibidem.*

³⁶ *Ibidem.*

³⁷ *Ibidem.*



which provides that “the complete and united Jerusalem is the capital of Israel”³⁸, the United Nations Security Council issued Resolution no. 478, which did not recognize the provisions of the law adopted by the Israeli institution.³⁹ However, through the current peace plan, the possibility of founding a Palestinian state is conditioned by the reunification of Jerusalem as the capital of Israel. Therefore, although the peace plan states that “the sovereign capital of the State of Palestine should be in the section of East Jerusalem located in all areas east and north of existing security barrier”⁴⁰, Palestinian policymakers must recognize Israel’s sovereignty over Jerusalem to be able to benefit from this privilege. Of course, analysing the political vision of the Palestinian Authority’s representatives, but also of the Israeli political decision-makers, we can state that they do not agree with the materialization of a compromise solution regarding the status of Jerusalem.

From the refugees’ point of view, the peace plan states that “the rights of Palestinian refugees to immigrate to the State of Palestine shall be limited in accordance with the agreed security arrangements”⁴¹, representing a new security guaranty offered by Israel. Jewish policymakers opposed the possibility of the return of all Palestinian refugees because of the demographic imbalance that such a decision would generate in the region. Currently, the birth rate of the Palestinian community is much higher than that of the Jewish community, and the return of refugees would further widen this gap.

Analysing the provisions of the peace project, it can be seen that, unlike other diplomatic initiatives on the settlement of the Israeli-Palestinian conflict, this project gives the state of Israel all the security guarantees it has requested. However, the possibility of materializing the peace plan proposed by the Trump administration is almost impossible, because of the opposition of Palestinian representatives. In this regard, the President of the Palestinian Authority, Mahmoud Abbas, criticized the action of the presidential administration, stating that “all our rights are not for sale and are not for bargain”⁴². Given the clauses of the peace plan, but also the increased feeling of Palestinian repulsion in relation to the work carried out by the Palestinian Authority, it determined Palestinian political leaders not to accept the initiative of the US presidential administration. However, the peace plan has a major impact on the security of Israel, due to the fact that Jewish political and

³⁸ ***, *Basic Law: Jerusalem the capital of Israel*, Knesset, Jerusalem, 1980, p. 1, URL: <http://knesset.gov.il/laws/special/eng/BasicLawJerusalem.pdf>, accessed on 08.08.2020.

³⁹ *Resolution 478*, United Nations, 1980, p. 1, URL: <https://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/IP%20SRES%20478.pdf>, accessed on 08.08.2020.

⁴⁰ Presidency of the United States of America, *Peace to prosperity, op. cit.*, accessed on 08.08.2020.

⁴¹ *Ibidem*.

⁴² ***, “Trump Middle East plan: Palestinians reject “conspiracy””, *BBC*, 29.01.2020, URL: <https://www.bbc.com/news/world-middle-east-51292865>, accessed on 08.08.2020.



military decision-makers will be able to invoke the clauses of the document to give legitimacy to actions such as annexing new territories, increasing the number of Jewish settlements in East Jerusalem and the West Bank etc. Moreover, in the event of Donald Trump winning a new term as President of the United States, Israeli policymakers will benefit from US diplomatic support to unilaterally activate certain clauses of the peace plan.

Conclusions

Given the foreign policy decisions taken by the US presidential administration led by Donald Trump, it can be seen that the strategic partnership between the United States and Israel has been strengthened, due to the fact that both state actors share the same vision on how to operate the regional complex security in the Middle East.

Therefore, we must emphasize that the main beneficiary of this partnership is the Israeli state, which by collaborating with the United States, has managed to obtain many strategic advantages such as: symbolic recognition of the legitimacy of the Jewish state formation over Jerusalem (moving the US embassy from Tel Aviv to Jerusalem); the withdrawal of the United States from the nuclear agreement with Iran; recognition of territorial sovereignty over the Golan Heights as well as the reconfiguration of the Palestinian peace process in accordance with the provisions enunciated by the American administration in the document “Peace to prosperity – A vision to improve the lives of the Palestinian and Israeli People”. Thus, from a geopolitical perspective, we can conclude that the state of Israel has managed to externalize its main regional security objectives and strengthen its political and military influence in the Middle East. On the other hand, the foreign policy strategies undertaken by the presidential administration led by Donald Trump in the Middle East have had a major impact on the regional security climate in this region. Through decisions such as the withdrawal of the United States from the Nuclear Treaty with Iran, but also the relocation of the embassy to Jerusalem, US policymakers have abandoned the multilateral approach to security issues in the region and implemented a unilateral vision.

Last but not least, the current American and Israeli political leadership is trying to stabilize this region by adopting a strategy of “containment” over Iran and solving the “Palestinian problem” in a way favourable to Israel’s security interests. For these two desideratum to be materialized, the two state actors use both diplomatic instruments (peace initiatives on the settlement of the Israeli-Palestinian conflict) and coercive ones (military actions directed against Iran and its proxy actors). Thus, we can conclude that the partnership between the two states is currently based on an interdependent relationship and determines the reconfiguration of security dynamics in the Middle East.



BIBLIOGRAPHY:

1. ***, “Full text of Netanyahu’s speech at the opening of the US Embassy in Jerusalem”, Times of Israel, 14.05.2018, URL: <https://www.timesofisrael.com/full-text-of-netanyahus-speech-at-the-opening-of-the-us-embassy-in-jerusalem/>
2. ***, “Full text: Prime Minister Benjamin Netanyahu’s 2018 UN General Assembly Speech”, *Haaretz*, 27.09.2018, URL: <https://www.haaretz.com/israel-news/full-text-benjamin-netanyahu-s-2018-un-general-assembly-speech-1.6513185>
3. ***, “Netanyahu: Trump Middle East peace plan “deal of the century””, *BBC*, 28.01.2020, URL: <https://www.bbc.com/news/av/world-middle-east-51289277/netanyahu-trump-middle-east-peace-plan-deal-of-the-century>
4. ***, “Peace to prosperity – A vision to improve the lives of the Palestinian and Israeli People”, Presidency of the United States of America, Washington, 2020, URL: <https://www.whitehouse.gov/peacetoprosperity>
5. ***, “President Donald J. Trump is Ending United States Participation in an Unacceptable Iran Deal”, Presidency of the United States of America, Washington, 2018, p. 1, URL: <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-ending-united-states-participation-unacceptable-iran-deal/>
6. ***, “Proclamation on Recognizing the Golan Heights as Part of the State of Israel”, Presidency of the United States of America, Washington, 2019, p. 1, URL: <https://www.whitehouse.gov/presidential-actions/proclamation-recognizing-golan-heights-part-state-israel/>
7. ***, “Viewpoint: How US can reach new Iran deal – after Trump”, *BBC*, 11.11.2018, URL: <https://www.bbc.com/news/world-middle-east-46146806>
8. ***, *Resolution 478*, United Nations, 1980, p. 1, URL: <https://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/IP%20SRES%20478.pdf>
9. ***, *The geopolitics of Israel and the Palestinians*, *Stratfor*, Texas, 2009.
10. LAMY, Pascal; GNESOTTO, Nicole; BAER, Jean-Michel, *Where is the world going?*, Niculescu Publishing House, Bucharest, 2018.
11. LYNCH, Marc, “Belligerent Minimalism: The Trump Administration and the Middle East”, in *Washington Quarterly*, 2016.
12. MAHAPATRA, Chintamani, “US-Iran Nuclear Deal: Cohorts and Challenger”, in *Contemporary Review of the Middle East*, 2016.
13. MONTEFIORE, Simon Sebag, *Jerusalem The Biography*, Trei Publishing House, Bucharest, 2012.
14. NETANYAHU, Benjamin, *A durable Peace, Israel and its place among the nations*, Warner Books, New York, 2000.
15. PFEFFER, Anshel, *BIBI The Turbulent Life and Times of Benjamin Netanyahu*, Basic Books, New York, 2018.



16. QUANDT, William, “American and the Middle East: A Fifty-Year Overview”, in *Diplomacy in the Middle East: The International Relations of Regional and Outside Powers*, 2004.

17. SHALOM, Zaki; KOBİ, Michael, “From Obama to Trump: Continuity versus Change in Middle East Policy”, in *Institute for National Security Studies*, June 2017, no. 938.

18. YAEL, Aronoff, “Benjamin Netanyahu Battling the World”, in *The Political Psychology of Israeli Prime Ministers: When Hard-Liners Opt for Peace*, 2014.

19. ZONEN, Dave, “Trump’s Foreign Policy in the Middle East: Four Key Issues”, in *Middle East Research Institute*, vol. 3, no. 18.



ADAPTING MOSAIC WARFARE SPECIFIC CAPABILITIES TO THE NEW TECHNOLOGICAL DEVELOPMENTS

*Crăișor-Constantin IONIȚĂ, PhD**

Among the new concepts for conducting future military actions being developed by American military theorists and scientific researchers is the Mosaic Warfare, a strategy aimed at integrating Military Science and Art's innovations and technological developments with the far behind operational doctrines and structural organisation.

The new projects developed by the US Air Force in this context could radically change the way in which future wars are prepared and conducted. By using high-tech innovations in robotics, Artificial Intelligence, nanotechnology and unmanned systems, cost-effective opportunities will be created to overwhelm the opponent, whilst multi-dimensional protection and loss of human lives among one's own forces will be achieved.

Therefore, this paper aims at presenting the developments achieved so far by the US Armed Forces to implement the concept of Mosaic Warfare.

Keywords: *Mosaic Warfare; Maven Project; Artificial Intelligence (AI); Advanced Battle Management System (ABMS); Joint All Domain Command and Control (JADC2); Defence Companies; System-of-Systems (SoS).*

Introduction

The complex and unforeseen events that took place worldwide, after 2014, demonstrated the need to change the way of thinking and conducting military conflicts. Thus, since 2015, US military leaders have considered that it is time for

*** Colonel (Ret.) Crăișor-Constantin IONIȚĂ, PhD is Researcher at the Centre for Defence and Security Strategic Studies (CDSSS) within "Carol I" National Defence University, Bucharest, Romania. E-mail: ionita.constantin@unap.ro**



a new strategy in terms of future wars, a strategy aimed at obtaining full victory in any kind of conflict.

Numerous attempts suggested by American military theorists have been attractive, beginning with strategic concepts – “Army After the Next” (2010), “Capstone Concept for Joint Operations” (2012), “Army Operating Concept” (2014), “AirLand Battle” (2015), or “US Marine Corps Operating Concept” (2016) and ending with “Battle Multi-Domain Battle” (2017). All these newly proposed concepts had in common the military leaders’ desire of changing the way of thinking and conducting future conflicts, after the operationalisation of Russian and Chinese Anti-Access/Aerial Denial systems (A2/AD), which prevents the US from intervening in regions controlled by Moscow and Beijing.

The main idea arising from this continuity of new operational concepts is the existence of a “man-machine” team to successfully fight in future wars. The idea was assumed from the book “Average is Over” written by the American writer, Tyler Cowen, in which machines always beat the great masters of chess, but a joint action of the chess player with the machine against another machine has a greater chance of success.

Another idea is to realise a real synergy between multi-domains of action, by ensuring the complementarity of defence capabilities and not by increasing their number, leading to an enhanced efficiency of their use whilst covering existing vulnerabilities, which, in turn, leads to the achievement of integrated actions of joint forces as one.

Unfortunately, all these new concepts have highlighted the fact that the American forces are not properly organised, equipped and trained to cope with the future modern operational environment, which is marked by the existence of complex and, sometimes, extreme geo-climatic conditions, the proliferation of advanced technologies, the Hybrid and Information Warfare, the need to protect or conceal real presence in the region and even the existence of impermissible areas. This might happen where there is a potential adversary who seeks to achieve their military objectives without triggering a military response, applying pressure in several areas to put our own forces and political leaders in front of an accomplished fact, against their interests.

Thus, starting from these inaccuracies and from the idea that the numerous types of high-tech platforms – currently existing or in different stages of development –, built to obtain certain goals and objectives, cannot achieve the wanted multi-dimensional synergy, scientific researchers from the US Government’s Agency for Advanced Defence Research Projects (DARPA) have suggested a new strategic approach, called the Mosaic Warfare. The purpose of this new strategy is to bring together individual battle platforms to establish a complete common picture of a quick and decisive victory against any aggressor, as well as to develop an appropriate capability package.



By taking over main innovative ideas of the other operational concepts developed so far, the concept of Mosaic Warfare clearly exceeds them, in that it ensures the possibility of all joint weapon systems to work together in order to realise a mass of fire and not of forces to solve the complexity of modern operational space and turn it into an asymmetric advantage. The transition of the new strategy into practice is easier and less expensive, as well, both by taking over the technologically developed platforms, already existing, and starting research and development for new, more advanced, ones. This will better meet the new requirements of Mosaic Warfare's capabilities package, within the three main elements of a System-of-Systems (SoS) approach: Surveillance and Reconnaissance/detection sensors; decision-making systems; and action/lethal platforms (sense-decide-act).

1. The Informationalised Warfare and the Development of ISR Sensors

One of the lessons learned from the development of innovative concepts about future wars was the efficient combination of smart ammunition with today's Informationalised Warfare. That means the possibility to destroy a target after transmitting electronic signals/signature, only.

In the military literature, the Informationalised Warfare (not to be confused with the Information War) is defined as an effective combination of elements of Electronic and Cyber Warfare with Information Operations, misleading and prohibition of the interruption of their own Command and Control (C2) systems, which could lead to a certain advantage for the opponent in the decision-making cycle¹. Thus, by using two of the three components of SoS – sense and act –, would fix and disrupt the opponent, with fast, decisive and lethal effects throughout the modern multi-domain battlespace ensuring a consolidated area, which would make any of his counter-action inefficient and dangerous.

Russia has managed to demonstrate, throughout the Ukrainian crisis, as well as in the Eastern European flank's following actions, that the Informationalised Warfare is a lethal one, using social networks and Trojan Horse applications with maximum efficiency. This electronic and cyber mode of action is accessible to all regional powers, as each blog, Facebook or Tweeter post, Instagram photo or TikTok access, telephone or radio calls, ensure the possibility of target signature, which can then be hit by lethal or non-lethal means from few hundred meters heights or tens of thousands of kilometres away.

Hence, there is a huge need to have capabilities/high-tech sensors to ensure the finding, discovering and warning functions of SoS about the existence and actions

¹ Kelly McCoy, "The Road to Multi-Domain Battle: an Original Story", *Modern War Institute at West Point*, October 27, 2017, URL: <https://mwi.usma.edu/road-multi-domain-battle-origin-story/>, accessed on 15.08.2020.



of opposing forces. Militarily named Information, Surveillance and Reconnaissance (ISR) capabilities, these sensors are the first and foremost dominant technology that tends to proliferate, increase its sophistication and enhance its multi-spectral nature in all areas of modern battlespace.

The sensory technology of the 21st century is marked by the enormous increase in processing power, exorbitant data storage capacity, extremely wide bandwidth in the network, as well as the possibility of merging multi-spectral sensors, which makes it available for both conventional and asymmetric conflicts. The role of these multi-spectral SRI sensors is to create a comprehensive Joint Operational Picture (JCOP) that provides all elements of the joint force with an adequate situational awareness in a multi-domain of modern battlespace.

For example, the Air Forces of regional powers already use, on a state-of-the-art multi-role aircraft (fourth and fifth generation), such as Eurofighter Typhoon and F-35 Joint Strike Fighter (JSF), numerous detection technologies – infrared scanning sensors and tracking (IRST), active vortex tracking, quantum radar, three-dimensional electronic active scanning antenna (EASA) radar, low earth orbit (LEO) infrared scanning and tracking techniques, capable of cross-referencing and internally analysing data collected by multiple sensors in real time before presenting a single coherent image to the operator². The Russian strategic forces use ground-based multi-static passive radars (Moskva-1 type) and the Russian Navy uses passive bi-static sonar (LTE), both systems exploiting the background echoes of the electromagnetic “noise” of mobile phones, television and radio (among others), to track “stealth” aircraft and submarines, without the need for a primary radar transmitter, allowing, at the same time, respective sensors to remain invisible³.

According to a study recently published by the US Department of Defence’s Center for Strategic and Budget Assessment (CSBA), by 2030 the US Air Forces are expected to continue to use unmanned aircraft (drones) of the MQ-9 Reaper type, but modified for new ways to use (civil or air bases defence), with advanced stealth technology and multi-role possibilities (including air or combat resupply) and networking – MQ-X or MM-UAS (Multimission Unmanned Aerial Systems). Also by 2030, the US experts plan to keep U-2 spy planes, RQ-4 Global Hawk drones and E-3 early warning aircraft in operation, while special mission aircraft

² Peter Roberts, “The Future Conflict Operating Environment Out to 2030”, *Royal United Services Institute for Defence and Security Studies (RUSI)*, Stephen Austin and Sons Ltd., Londra, 2019, pp. 61-62.

³ J.R. Wilson, “New Frontiers in Passive Radar and Sonar”, *Military and Aerospace Electronics*, February 8, 2016, URL: <https://www.militaryaerospace.com/communications/article/16709052/new-frontiers-in-passive-radar-and-sonar#:~:text=%22A%20passive%20radar%20system%20emits,in%20urban%20and%20rural%20landscapes.&text=Essentially%2C%20passive%20systems%20reverse%20the,and%20sonar%20from%20those%20platforms>, accessed on 02.09.2020.



can be re-operationalised and upgraded, by 2040, in gathering information from class RC-135 (River Joint or Cobra Ball). Moreover, the CSBA has proposed to the US Air Forces the development of an invisible spy sensor with the highest penetration capability (P-ISR) for its future global warning forces engaged in a potential conflict with Russia and China⁴.

The huge advances in sensor resolution, their post-processing power and multispectral fusion techniques, coupled with a growing variety of large and small platforms that can act in all areas as ISR nodes, demonstrate that survival in modern battlespace through hiding/non detection, only, will become an increasing risk. In addition, all joint forces' elements that have such advanced sensory technologies, also including the opposing forces, will have a multi-dimensional situational awareness, more evolved than ever. That will significantly diminish the advantage obtained over the opponent in the future. Thus, the concept of "observe first, act first", as a trait of modern warfare, may become less decisive, leading to the necessity to develop mixed capabilities, which could include high-performance weapon systems, active protection systems, stealth capabilities and high-end platforms, being technologically reinforced.

2. High-Precision Combat Platforms

The second major component of the Mosaic Warfare consists of action systems, represented by high-precision, technologically advanced combat platforms, such as: laser systems, ballistic missile systems, fighter aircraft and helicopters, combat ships, submarines, ground combat vehicles, cyber and electromagnetic attack systems, autonomous/unmanned combat systems and Artificial Intelligence (AI). Three significant trends characterise and will continue to mark the development of high-tech combat platforms in the future multi-dimensional battlespace, as follows: increasing the requirements for processing edges, surfaces and building materials to ensure full electromagnetic isolation, ensuring thus, a greater degree of stealth; increasing the operational distances and altitudes from where they can strike, achieving a superiority over the sensor systems; increasing the importance of strengthening combat platforms, their ability to avoid and equipping them with self-defensive means, as remaining undetected will no longer be sufficient to ensure survival and resilience. These will significantly change the way the military has to fight and combat platforms strike.

Currently, the US Air Forces are the most advanced in implementing this

⁴ Valerie Insinna, "What aircraft does the US Air Force need to beat China and Russia? This new study has an answer", *Defence News*, March 20, 2019, URL: https://www.defensenews.com/air/2019/03/20/what-aircraft-does-the-us-air-force-need-to-beat-china-and-russia-this-new-study-has-an-answer/?utm_source=clavis, accessed on 20.08.2020.



new strategy, by using existing high-tech platforms (such as F22 Raptor and F35 JSF), but also developing new, more efficient and responsive ones for future conflicts. One of the most secret projects being developed by the Pentagon is the AI program named “Maven”, started in 2018, which consists of increasing the lethality of combat drones by using machine learning and IT vision to analyse a large amount of data and information related to the presence and positioning of combat drones⁵. The project was initially stopped by Google and resumed this year, but the appearance and spread of the Coronavirus pandemic led to long delays in its completion. The initial operationalisation of the AI program is expected to be completed in September 2020.

Particular emphasis is placed on achieving synergy between human operators and autonomous systems (the so-called “man-machine” teamwork) in the modern multi-dimensional battlespace. Since autonomous combat platforms will have to act, on a temporary basis, with jammed or banned communications systems, which will make impossible the liaison with their human operators, it will be necessary to apply the principle of Mission Command that will create, in turn, many moral constraints in granting machines’ permission to make their own decisions. This is the case for stand-alone systems designed to achieve lethal effects, such as X-45, X-47B or Dark Sword, which will be designed to fulfil their mission without permanent control of the human factor, incorporating the most advanced processing techniques (edge-processing), automation at the highest level and lethal employment authority at the tactical level⁶.

Starting from the teachings of Sun Tzu “the one who control the heights, command the valley”, the American, Russian or Chinese aerospace forces launched the space control competition (particularly for the LEO), which is designed to ensure superiority on land and naval forces. But space factors are different from those on Earth and much more challenging and even dangerous – solar activity emitting radiation and high-energy particles, existence of nearly 2,000 military and civilian satellites and more than 170 million metal debris larger than 1 mm in diameter, existence and diversification of anti-satellite means to prevent adverse satellite activity (anti-satellite missiles, high-power lasers, electromagnetic waves and cyberattacks)⁷. The possibility to use the outer space in a major conflict, as well as the net advantages that this domain offers, demonstrates that, in the future, space capabilities will play a vital role in dominating two and three-dimensional theatres of operations.

⁵ Jackson Barnett, “Air Force moving Project Maven into Advanced Battle Management System portofolio”, *FedScoop*, August 10, 2020, URL: <https://www.fedscoop.com/project-maven-air-forces-advanced-battle-management-system/>, accessed on 04.09.2020.

⁶ Peter Roberts, *op. cit.*, p. 63.

⁷ Peter Roberts, *op. cit.*, p. 52.



The possibility of a space conflict is not yet envisaged. However, the development of highly technological space capabilities has become a competition between great powers. An example is the US trend to simulate, in joint exercises, increasing the effectiveness of electronic warfare on Global Positioning Systems (GPS) against some developed countries.

Another great significance stressed by military theorists to non-lethal advanced impact systems is represented by the increasing mix of information, electronic and cyber operations with conventional ones. Thus, the latest military actions carried out by Russia in Georgia and Ukraine have demonstrated the effectiveness of propaganda achieved by any means (print media, radio, television and social media), as well as the “lethality” of cyberattacks on state institutions and military installations. The use of Unmanned Aerial Vehicles (UAVs) and ground-based electronic warfare jammed and blocked satellite, radio and telephone transmissions and faked the GPS, rendering the Ukrainian Armed Forces and the Organization for Security and Cooperation in Europe (OSCE) inactive. Another particularly effective way was to use the “Fancy Bears” hacker group to neutralize and destroy Ukrainian artillery.

Russia has made great efforts to develop a wide range of electronic capabilities for blinding, degrading and faking Western sensors, thus harassing the Network-Based Warfare by banning access to its own databases and satellite connectivity. One of the most developed Russian electronic warfare platforms is Krashuka-4, already in operation and even in the sale stage.

But the greatest effort that Russia has made and continues to make is to achieve world supremacy in the hypersonic field. The range of hypersonic missiles developed by Kremlin, such as cruise missiles (with a projected speed of 3-5 Mach) or gliding vehicles propelled by ballistic missiles after launch (with a propulsion speed of 10-25 Mach) is the nightmare of any anti-missile defence system existing or in the design stage, due to the very short reaction time, the impossibility of tracking and the hypersonic speed. Thus, the Russian cruise manoeuvring missile 3M22 Zircon and the anti-ship DF-21D, developed together with China, are designed to strike the launch pads or disrupt the targeting system, instead of intercepting missiles in the flight stage⁸. But their price is higher and the distance is lower than super or sub-sonic missiles.

Meanwhile, China has repeatedly used cyber espionage and intellectual property theft efforts to develop its electronic and cyber warfare capabilities, alongside traditional combat capabilities (the fifth generation of fighter jets, aircraft carriers, rail guns and anti-aircraft ballistic missiles). One of his hidden desires is to become the world’s largest quantum power by launching, in 2019, the world’s first

⁸ Peter Roberts, *op. cit.*, p. 64.



quantum satellite – Micius⁹.

A special branch of high-precision striking platforms is high-energy laser and high-power electromagnetic pulse (EMP) weapons, experienced by both China and the United States, in order to change the balance of offensive and defensive actions at the tactical level in the multi-dimensional battlespace. In this area, China is already experimenting with laser weapon systems for area defence and with kinetically selected effects.

The US military commissioned Dynetics and Lockheed Martin to build a high-power (100 kilowatt) laser weapon system, called HEL TVD. This system will be tested in 2022¹⁰. This system will be able to interact with the Athena and Aladdin laser systems, designed for the US Air Forces and Navy.

Despite all these unprecedented developments in the development of high-tech platforms, it is clear that the current weapon systems were not built to solve the complexity of modern operational space and turn it into an asymmetric advantage, in which the deployment of a huge number of ISR sensors and combat platforms on a wide front, does not contribute to the achievement of the mass of fire to the detriment of that of the forces.

3. Decision-Making Systems

In order to achieve a unitary strategy for the future, based on the massive and correlated use of advanced technology, it is mandatory to incorporate in SoS the third component of the Mosaic Warfare – the decision-making systems – that is, the interface, communication links and software for accurate and synchronised navigation, which allows all sophisticated sensor systems and the multitude of combat platforms to act together in a multidimensional and cohesive operational space.

In order to achieve such an automated decision-making system compatible with the same level of technology as the other two components of future wars, American scientific researchers have proposed the introduction of autonomous systems – including unmanned vehicles and communications network management systems –, thus developing a system-of-systems which coordinates the networking of all capabilities made available and ensuring information exchange, mix collaboration

⁹ James Johnson, „China’s Vision of the Future Networked Battlefield”, *The Diplomat*, April 26, 2017, URL: <https://thediplomat.com/2017/04/chinas-vision-of-the-future-networked-battlefield/>, accessed on 04.09.2020.

¹⁰ Jen Judson, “Dynetics-Lockheed team beats out Raytheon to build 100-kilowatt laser weapon”, *Defense News*, May 15, 2019, URL: https://www.defensenews.com/land/2019/05/16/dynetics-lockheed-team-beats-out-raytheon-to-build-100-kilowatt-laser-weapon/?utm_source=clavis, accessed on 05.09.2020.



and joint team effort of all integrated “human-machine” elements. This will create a structure, which combines the command function performed by the human factor with the control one provided by AI machines – the binomial “man-machine”. Man will ensure flexibility and apply his creative ideas in the decision-making process, while AI will bring speed and proportionality in ensuring the ability of forces to cause multiple dilemmas to opponents. In short, commanders will review and evaluate recommendations from the control function of AI systems before submitting their orders, which will allow them to adjust and review their operational plans.

One of the Pentagon’s most advanced futuristic projects to build a networked communications system that incorporates Artificial Intelligence to connect operations in the air, land, sea, space, and cybernetics domains is “the Joint All Domain Command and Control” (JADC2). The aim of this project is to impose the American decision supremacy in all domains, allowing allies and partners to link in its practical applicability, like the Federated Mission Network (FMN). JADC2 is designed to create a network-of-networks to ensure the flow of information between each and every sensor deployed in the multi-dimensional battlespace and each combat platform, and AI has the ability to take on certain responsibilities for making quick decisions, based on sensors’ data and information and the transmission of action orders to the most indicated combat platforms¹¹.

Leaders at each Service level have begun to develop their own decision-making systems to collaborate with JADC2. The most advanced is the US Air Forces one, which is already in an experimentation phase – the Advanced Battle Management System (ABMS)¹². This system will incorporate already developed elements of the “Maven” project, in order to align AI efforts and bring new capabilities for data exchange between machines. The intention of the military decision-makers of the US Air Forces is to coordinate, through AI, the identification, location and striking of targets (kill chain), eliminating the human presence from the execution of unwanted tasks.

The main idea behind this system is for AI to process the primary data and information collected from the Joint Area of Operations (JOA), which it can turn into actionable perspectives and pass it on to chain decision makers who need this information. ABCD is thus a system of networks and communications between areas that support military operations. ABCD will also incorporate other key IT platforms, such as “Cloud One” and “Platform One”, creating a true “militarised Internet of Things” to ensure the speed of data transmission and processing.

¹¹ Jackson Barnett, “Gen. Hyten: Military’s vision for connected warfare must include allies”, *Fed Scoop*, August 14, 2020, URL: <https://www.fedscoop.com/another-job-for-jadc2-connect-with-allies/>, accessed on 05.09.2020.

¹² Ozana Mazilu, “Un proiect al forțelor aeriene ar putea schimba radical războaiele”, *Play Tech*, August 16, 2020, URL: <https://playtech.ro/2020/un-proiect-al-fortelor-aeriene-ar-putea-schimba-radical-razboarele/>, accessed on 04.09.2020.



The US military has not yet made the final decision on developing an AI-based system or creating “hyper-activated operators”¹³. The first step was to set up an Army AI Task Force, positioned at the Carnegie Mellon University in New York, to design “the Army Future Command”, in which to act, in team, people-led systems with the autonomous and AI needed for data exchange and software coding¹⁴. The most difficult issue that this group encounters is the possibility to make air drones communicate together with the terrestrial autonomous vehicles.

The US Army project that will connect to JADC2 is called “Project Convergence”. The aim is to exploit the huge competition in the civilian IT industry from Silicon Valley for AI products being developed at the highest technological level, which can be deployed where the presence of high-power processors is required, dispersed and not positioned in a central cloud-type system. Providing such high-tech computerised systems brings with it less reliance on communication systems that can be banned or disrupted by opposing forces. An example of such technology is the “augmented reality goggles” placed on the helmet and which can transmit very useful motion images to fighters in the multi-dimensional battlefield¹⁵.

The US Navy is looking for technologically advanced systems in terms of size, weight and power. The US Naval Research Laboratory is working on mini transistors that are not made of silicone, but from such materials very similar to human brain neurons, called “memristers” which can provide the so-called “neuromorph” (computer system similar to the human brain) needed to provide a higher power for more independent AI systems¹⁶.

To achieve these highly advanced computerised technologies, both American and Chinese researchers have developed 5G communications technology. 5G is the fifth generation of cellular networks, allowing large volumes of data transfer with a minimum lag¹⁷. This new communication technology brings new capabilities that will create opportunities for both military and civilian systems. The American Ericsson Company and the Chinese Huawei Company are the undisputed world

¹³ A.N.: The Special Operations Forces Command (SOCOM) defines as “*hyper-activated operators*” those fighters whose connectivity and technical skills are strengthened with high-power computers.

¹⁴ Jackson Barnet, “Army working to team its autonomous systems across domains with AI”, *Fed Scoop*, June 10, 2020, URL: <https://www.fedscoop.com/army-expanding-ai-teams-to-be-more-than-mannedunmanned-including-unmannedunmanned/>, accessed on 03.09.2020.

¹⁵ Jackson Barnet, “For military AI to reach the battlefield, there are more than just software challenges”, *Fed Scoop*, 19 June 2020, URL: <https://www.fedscoop.com/military-ai-hardware-in-battle/>, accessed on 07.09.2020.

¹⁶ *Ibidem*.

¹⁷ A.N.: As per the *Ericsson* site, “What is 5G?”, URL: https://www.ericsson.com/en/5g/what-is-5g?gclid=CjwKCAjwNf6BRAwEiwAkt6UQvGtPIexkTtR3oPErYMKP6zfB2HWgIpP5JWxn8v89bHAzMwvKXRC3BoCnEMQAvD_BwE&gclidsrc=aw.ds, accessed on 07.09.2020.



leaders in creating this new technology.

5G operates on the same radio frequencies (such as the Ericsson radio system) currently used for smartphones, Wi-Fi networks and satellite communications, but allows the technology to go much further. This new technology really connects systems everywhere – reliably, without delay –, so that operators can see, understand and manage actions in real time.

Decision-making systems achieve the synergy of joint actions of the other two components of the Mosaic Warfare – sensor systems and combat platforms –, thus ensuring the development of future military actions in a SoS approach (sense-decide-act). By connecting sensors with combat platforms, these systems can act against the opponent’s decision-making systems, causing them multiple dilemmas, difficult to solve.

Conclusions

The dependence of the American Armed Forces on expensive technological solutions to produce high-precision effects also has a side-effect – the financial aspect. Technological progress has increased military lethality and increased the accuracy of military actions at a huge financial cost. In an attempt to narrow so limited budgets, US researchers have sought and continue to seek solutions for the development of increasingly multifunctional defence platforms, with more roles embedded in fewer custom platforms.

Although these platforms are extremely capable, their cost and complexity limit their production, also because of their large manoeuvrability, endurance and regeneration possibilities. Likewise, high-tech platforms are highly dependent on networked-information (quite vulnerable), especially provided by satellite, from communications, navigation and, even, propulsion. Thus, disrupting or jamming satellite connectivity would have catastrophic consequences for the Mosaic Warfare.

A consequence of the AI rising cost is the requirement to make compensatory savings in other areas. In many cases, this has led to a reduction in the direct involvement of the human factor in the injury of machines, with potentially serious ramifications for tactics and action techniques in a volatile environment with banning/jamming possibilities by the opponent.

Equally sensitive are the moral and legal consequences of ensuring AI’s ability to transmit its own decisions to impact platforms, without any analytical inputs and approval from human decision-makers, when the communication link is lost or broken. It is the desired intent to transit the Mission Command to AI and automated systems.

Many of the US, Russian and Chinese military laboratories have programmes, at a certain level of development, to increase the efficiency of high-power computer



defensenews.com/land/2019/05/16/dynetics-lockheed-team-beats-out-raytheon-to-build-100-kilowatt-laser-weapon/?utm_source=clavis

9. MAZILU, Ozana, “Un proiect al forțelor aeriene ar putea schimba radical războaiele”, *Play Tech*, August 16, 2020, URL: <https://playtech.ro/2020/un-proiect-al-fortelor-aeriene-ar-putea-schimba-radical-razboarele/>

10. MCCOY, Kelly, “The Road to Multi-Domain Battle: An Original Story”, *Modern War Institute at West Point*, October 27, 2017, URL: <https://mwi.usma.edu/road-multi-domain-battle-origin-story/>

11. ROBERTS, Peter, “The Future Conflict Operating Environment Out to 2030”, Royal United Services Institute for Defence and Security Studies (RUSI), Stephen Austin and Sons Ltd., London, 2019.

12. WILSON, J.R., “New Frontiers in Passive Radar and Sonar”, *Military and Aerospace Electronics*, February 8, 2016, URL: <https://www.militaryaerospace.com>



WATER WARS – THE PRACTICAL EXPRESSION OF ENVIRONMENTAL CONFLICTS. HYDROPOLITICS IN CENTRAL ASIA

*Cristian ISTRATE**

The abundance of water is one of the greatest illusions of mankind. Although it seems a trivial resource, available to anyone, reality tends to contradict this impression. Thus, drinking water becomes, in certain circumstances, the central element of some international political and economic configurations.

One first objective of this article is to prove that the war over water can be a certainty of the future only when this type of resources will become a vector of power. A second objective is to demonstrate that an armed conflict that has erupted for such reasons is nothing more than useless. The potential benefits cannot compensate for the costs that such an action would entail. The third objective is to identify the likelihood of an environmental conflict in Central Asia and to formulate proposals to avoid this grim scenario.

Keywords: *water; water wars; hydropolitics; conflict; conflictology; Central Asia.*

Introduction

The post-Cold War international security environment remains marked by a perpetual struggle for resources in which states are engaged for understandable reasons. This is by far one of the few clear things in the current international disorder. Therefore, states “seek to constantly realign themselves in such a manner that they can extract enough benefits from the geopolitical environment, as can be seen at the

*** Cristian ISTRATE is PhD Student in the field of Sociology within The University of Bucharest, Romania. E-mail: cristian.istrate@gmail.com**



moment, under the circumstances of the struggle for resources, economic problems and other current challenges.”¹ According to more or less grim studies, water could become the new oil and the main cause of armed confrontations specific to the not very distant future. The freshwater crisis is a certainty of the present, and its failure will profoundly destabilize human communities, ultimately leading to military confrontations.

The issue is not in terms of the likelihood of an armed struggle to break out for such a reason, but must focus on providing an answer to the following question: “What can the international political elite do to avoid such a scenario?”

1. General Elements of Conflict Theory

The attempt to define the conflict has materialized in numerous scientific approaches belonging to several branches of social sciences. Philosophy, psychology, sociology, communication sciences, military sciences and even biological sciences have tried to theorize this concept, especially since it is undoubtedly a major phenomenon in any type of organization, regardless of size. Etymologically, the term *conflict* comes from the Latin *confligo*, which means *to fight* or *fight among themselves*. Conflict can be considered one of the most resilient roots of humanity. People engage into tense situations with others from the desire to impose their points of view and to validate their beliefs. The lack of willingness to listen and the fear of losing highly valued things are two strong features of human conflict.² Although, as a rule, people deny that they would not be willing to take part in debates and interact with people who are hostile to their grounded points of view, the reality tends to contradict this. The fear of disintegrating the illusion of one’s own infallibility is stronger and darkens the reason, determining the triggering of pointless conflict situations.

Conflict can be defined as “an interactive process manifested by incompatibility, disagreement or dissent between social entities (e.g. individual, group, organization etc.)”³. These contradictions can occur both at the level of the entity’s objectives and at the level of the organizations’ strategies. Disagreements can also occur between individuals who form a certain entity, which, in the medium and long term, can affect the proper conduct of activities and, implicitly, goals’ achievement. By reference to a much larger scale, nationally and internationally, we can talk about confrontations

¹ Cristian Istrate, *Relațiile politico-diplomatice și militare dintre SUA și Federația Rusă în perioada post Război Rece*, Sitech Publishing House, Craiova, 2019, p. 207.

² Marian-Valentin Grigoroiu, *Crizele și conflictele contemporane*, Ministry of Internal Affairs Publishing House, Bucharest, 2006, p. 13.

³ Dan Safta, *Managementul conflictelor în organizație*, Trei Publishing House, Bucharest, 2016, p. 13.



between ethnic, religious or national groups, institutions, social classes and states.⁴ Usually, conflict is a destabilizing element of an organization, regardless of the category to which it belongs and the field of activity, but not resolving it in due time can jeopardize the existence of the entire entity. Solving such a situation involves educational aspects and it is called *conflict civilization*.

The civilization of conflict involves that set of actions whose purpose is to temper people's emotions, using various social mechanisms, namely overcoming impulsivity and seeking a rational solution to meet the needs of the organization. By a slightly broader comparison, a conflict can be thought of and studied like a living organism. It has a certain lifespan, it springs from a certain source, it has its own development, it reaches a climax, the necessary resources are found to defuse it, after which it disappears. However, even a good resolution of a conflict can be misleading because it does not guarantee that it will not reappear, even in a more potentiated form than initially. Therefore, the solution must be, as far as possible, satisfactory and advantageous for the central actors in the conflict situation. The apparent solution based on coercion is not an optimal one and it will allow the smouldering situation that triggered the collision to be maintained.

Being similar in definition and development to a crisis, the conflict has a similar life cycle, staged as follows: reduction and resolution, settlement or postponement of an outcome, analysis of the consequences of the conflict⁵. The state preceding the collision itself is called the *conflict situation*, being composed of the object of the conflict and its reason. In psychology, the peak state of the conflict is called the *incident*, being triggered by factors such as opponents and the purpose of the conflict. In the military organization, the causes of disputes may be the following: "the negative attitude towards military service, the gaps in terms of character, the insubordination of some militaries, the vanity, the mistrust in the abilities of the subordinates, the non-objective attitude towards subordinates, the indifference towards the job, the existence of unofficial micro-groups, some technical and national issues, the uncivilized customs"⁶. The rigor of the military organization is particularly important in order to be able to fulfil the political-military objectives, so that any turbulence, any internal conflict will do nothing but endanger the mission or even jeopardize it completely. The army must be convinced of their place and role within the military organization in order to have the morale necessary to carry out any type of mission. Their character must be in full accordance with military norms and regulations, being oriented towards discipline and objectivity. They must show

⁴ Dorel Bușe, *Managementul crizelor și conflictelor regionale*, România de Măine Foundation Publishing House, Bucharest, 2006, p. 32.

⁵ Vasile Simileanu, *Conflicte asimetrice*, Top Form Publishing House, Bucharest, 2011, p. 92.

⁶ Teodor Frunzeti, *Coordonate ale psihologiei militare aplicate*, Centrul Tehnic Editorial al Armatei Publishing House, Bucharest, 2009, p. 172.



respect not only for their superiors, but also for their subordinates, for the social, political and cultural values of the country and for the mission they have to fulfil.

Conflictology is defined as the way of understanding conflicts taking into account all related areas, such as conflict resolution, transformation and management.⁷ Conflictology, as a discipline in full coagulation, is based on several principles of operation, as follows: the principle of determinism, the principle of dynamism, the principle of objectivity, the principle of ascending-descending correlation and the principle of systemic interaction and relationship.⁸ The principle of determinism refers to the observation and description of all those surface aspects of the conflict, as well as the identification of the causes that generate it. The principle of objectivity involves two aspects: the objectivity of the information gathered about how the conflict was triggered, but also about those who participate in it and enhance it, the balanced and equidistant attitude that the analyst who puts together the information must have. The principle of dynamism refers to the evolution of the conflict, starting from the moment of “incubation”, until the moment of producing the effects and, possibly, of the lessons learned. According to the principle of systemic interaction and relationship, conflict must be understood as a relational psychosocial phenomenon. The systemic relationship refers to the conflict evaluation by studying its connections with the particularities of the system. The principle of ascending-descending correlation involves avoiding, as much as possible, hasty generalizations, as well as basing them on objective facts, verifiable from multiple perspectives of any generalization and explanatory theory. Adherence to this principle and its implementation are undoubtedly the essential conditions for reducing divergences in the issue of conflicts.

The study of international conflicts has various influences depending on the School of Thought, which decisively influences the approach of theorists/analysts. For example, the behaviourist current argues that the nature and role of conflict can be understood only in a close correlation with the way the human being behaves in its actions to procure what is necessary for survival and for ensuring prestige within the community.⁹ Some of the conflicts causes are related to the degradation of the natural environment, the reduction of food resources etc.

⁷ Eduard Vinyamata, “Conflictology: A Multidisciplinary Vision”, *Journal of Conflictology*, Volume 1, Issue 1, 2010, p. 1.

⁸ Mihai Golu, *Conflictologia - disciplină de graniță*, URL: <https://andreivocila.files.wordpress.com/2010/10/tema20i20tema20i20conflicte20si20negocieri20c38en20organizatii.pdf>, accessed on 02.08.2020.

⁹ Constantin Hlihor, Ecaterina Hlihor, *Comunicarea în conflictele și crizele internaționale. Secolul al XX-lea și începutul secolului XXI*, Comunicare.ro Publishing House, Bucharest, 2010, p. 55.



2. Water Wars. Hydropolitics – Conceptual Delimitations

Water is, for most, an essential, fundamental resource, but having it every day, they are not aware that it can be a key element in different political and economic configurations. Although water covers three-quarters of the Earth's surface, drinking water is a relatively scarce resource. It becomes an increasingly valuable resource given the fact that pollution increases and drought strikes. According to studies conducted by the United Nations, there are many women who spend hours every day looking for water and more than two million people, most of them children, die from diseases caused by lack of water.¹⁰ In some situations, water can become a national security issue given the particularities of competition for limited natural resources. This is certainly one of the strategic resources, as the problem of the deficit arises when the drinking water supply is divided between several states or regions.¹¹ However, the issue of conflicts that could result from the limitation of water resources is a relative and exacerbated issue not only in terms of political discourse, but also in terms of the academic approach. As things are standing now, it is very difficult for us to identify a single international conflict that has had water as its main cause, but this does not mean that the *rush* for this type of resource has not been a secondary element in starting many wars. Most of the time, analysts do not take this issue into account, preferring to think of a crisis or a war in the traditional terms of security, power maximization or territorial claims.

The awareness of water as a cause of potential conflicts was achieved in stages. In a first phase, which lasted from 1970 to 1980, the approach of the social sciences on war was made from the perspective of the effects of armed struggle over the environment. At the time, researchers argued that there was a link between changing the availability of natural resources and security.¹² In other words, a high level of consumption will cause the deterioration of water resources, which will lead to a shortage of resources that will train the actors in a permanent competition and will increase the risk of violence. A second stage can be framed between the 1980s and 1990s, with research addressing water-related conflicts in a much broader sense. The main visions of this period bring to light the fact that environmental changes do not necessarily lead to violent conflicts, being only an element in a whole causal network that also includes socio-economic problems. The third phase begins somewhere in the mid-1990s, when researchers established connections between

¹⁰ "Factsheet on Water and Sanitation", *UN*, URL: www.un.org/waterforlifedecade/factsheet.html, apud ***, *Natural Resources, Conflict, and Conflict Resolution*, United States Institute of Peace, Washington, DC, 14 September 2007, p. 3, accessed on 02.08.2020.

¹¹ Peter H. Gleick, "Water and Conflict: Fresh Water Resources and International Security", in *International Security*, Volume 18, Number 1, Summer 1993, pp. 84-85.

¹² Stephan Stetter, Eva Herschinger, Thomas Teichler, Mathias Albert, "Conflicts about water: Securitizations in a global context", in *Cooperation and Conflict*, Volume 46, Issue 4, 2011, pp. 443-444.



environmental aspects of human security and water conflicts.

Conflicts resulting from having control over water resources are called environmental conflicts. The environmental conflict involves an incompatible interaction between two or more actors and refers to the use of a natural resource, in which one of the actors is affected by that interaction and the other ignores the damage.¹³ Oceans, seas, lakes and rivers can always be triggers for wars because of cultural issues, the contribution they can make to the development of a state, and the strategic role they can play in transportation. For example, the population's dependence on activities such as fishing, and the existence of offshore oil fields can always be reasons for conflicts. The most widespread manifestation of water-related violence is the deprivation of access to safe drinking water and hygiene, a situation that affects millions of poor people around the world. According to a study, there is a good chance that more water-related conflicts will be triggered in certain regions of the Danube basin, especially in the southern and eastern areas.¹⁴ Economic dependence on agriculture can also be, in some contexts, a real catalyst for water-related conflicts.

Conflicts whose source is water can occur at the local level (between social groups fighting for water resources in a certain area or between a state and its citizens in a certain area), national (the struggle between various interest groups and those who set the ground for national water resources management policies), internationally (between states on the shared use of water resources) and globally (between marginalized and tributary populations, when water resources are distributed from populations marginalized to those privileged sectors). Effective water management must start from the consideration of those dimensions that potential conflicts can reach. Cross-border conflicts arising from such cases involve hostile verbal, economic or military actions between the parties interested in those internationally shared resources.¹⁵ Recently, researchers have laid the foundations

¹³ Cristian Iojă (coord.), *Managementul conflictelor de mediu*, University of Bucharest Publishing House, Bucharest, 2015, p. 14.

¹⁴ Fabio Farinosi, Carlo Giupponi, Arnaud Reynaud, Guido Ceccherini, César Carmona-Moreno, Ad De Roo, David González-Sánchez, Giovanni Bidoglio, "An innovative approach to the assessment of hydro-political risk: A spatially explicit, data driven indicator of hydro-political issues", in *Global Environmental Change*, Volume 52, September 2018, p. 292, apud Ana Moca-Grama, *Studiul: conflictele legate de apă se vor intensifica în jurul lumii*, 5 April 2019, URL: <https://www.green-report.ro/conflicte-apa>, accessed on 03.08.2020.

¹⁵ Jacob D. Petersen-Perlman, Jennifer C. Veilleux, Aaron T. Wolf, "International water conflict and cooperation: challenges and opportunities", in *Water International*, 2017, p. 2, URL: <https://transboundarywaters.science.oregonstate.edu/sites/transboundarywaters.science.oregonstate.edu/files/Publications/Petersen-Perlman%20et%20al.%20-%202017%20-%20International%20water%20conflict%20and%20cooperation%20chal.pdf>, accessed on 02.06.2019.



for the concept of water security¹⁶, which involves those threats that endanger the sustainable and safe use of water resources. Water security refers to the ability to ensure that the population has access to this type of resources, which is sufficient and of an acceptable quality for human, economic and environmental well-being.

Research has also shown that there are fairly clear links between severe water scarcity, migration and state instability. One such example could be Syria. Severe drought can lead to sudden movements of people from rural areas to cities or across borders.¹⁷ Of course, the conflicts in Syria are another factor, even decisive, for which the population migrates across borders.

Political decision-makers can resolve subnational conflicts by following a few reasonable rules:

1. Local policy must be taken seriously: Specialists in the field tend to not take into account with sufficient meticulousness the conflicts that arise at local or regional level. According to several studies, conflicts over water resources occur more often at the regional and local level than at the international level.

2. The involvement of external groups is needed: Water conflicts are a sensitive topic for politicians, which is why they are reluctant to encourage the external involvement of NGOs or multilateral institutions. These external actors can come with valuable expertise and resources in order to solve the problems.

3. Creating inclusive structures to address water governance issues: Creating local, regional and national institutions to bring stakeholders together. For example, in France, water resources management agencies include not only the factory owners, farmers, ordinary citizens, but also government officials.

4. Supporting water users with information, accurate data and expertise.

5. The involvement of state leaders in the management of local or regional water conflicts is very important, although they are often reluctant when it comes to engaging in this kind of situations. The example of American leaders, who have been involved in the Colorado Basin for the past 25 years, should be followed. The role of the leader can be one of coagulation. It can appeal to the parties involved in the conflict, acting as intermediaries.¹⁸

Former UN Secretary-General Boutros, Boutros Ghali, is convinced that water

¹⁶ Simona Frone, Dumitru-Florin Frone, “The Importance of Water Security for Sustainable Development in the Romanian Agri-Food Sector”, in *Agriculture and Agricultural Science Procedia* 6, 2015, p. 675.

¹⁷ Scott Moore, “The Water Wars Within: Preventing Subnational Water Conflicts”, *New Security Beat*, 30 May 2018, URL: <https://www.newsecuritybeat.org/2018/05/water-wars-within-preventing-subnational-water-conflicts>, accessed on 03.08.2020.

¹⁸ *Ibidem*.



will be the main cause of the next war in the Middle East.¹⁹ The reasoning behind this assumption is closely related to the growing population of the planet in a world of limited resources, which will automatically lead to violent water conflicts. This argument is impossible to be proven empirically. However, international wars triggered by the need for renewable resources are less likely, as their use cannot be transformed into power easily or quickly. Constructing a valid reasoning, we can say that the war whose main cause would be water resources is nothing but useless. The costs of starting and sustaining an armed struggle would be equivalent to the costs of building water desalination plants.

Water confrontations tend to manifest locally. Competition for this type of resource is constantly rising between farms and cities, states and provinces, ethnic groups and economic interests.²⁰ The escalation of these tensions is a serious problem, which can lead to humanitarian crises, loss of life and even civil wars.

Currently, water scarcity has a high degree of relativity, given the fact that the volume of water available for consumption becomes closely linked to the social availability and economic rationality of state and private actors to develop new technologies in order to purify water that is not drinkable. In addition to the example of the construction of desalination plants, the devices can be assembled based on the principle of drip irrigation or the development of several plants that allow the use of wastewater.

The problems that water can raise in the development of a state's security strategy and the growing interest of the international community in this type of resource have forced scientists to lay the foundations of a relatively new concept, that of *hydropolitics*.²¹ Attempts to define this concept are quite modest in Western literature, and in Romania they are completely missing. Their common point presupposes the sovereign control, in one form or another, of water. Hydropolitics involves either cooperation or conflict, both of which can occur among international actors who have shared competencies in international waters.²² One of the weaknesses in tackling water conflicts is ignoring political, economic and cultural variables.

At first glance, we would be tempted to establish a causal relationship

¹⁹ ***, "Former National Leaders: Water, a Global Security Issue", in *Forbes*, URL: <https://www.forbes.com/sites/realspin/2017/02/06/will-central-asia-fight-over-water-resources/#4f1ea4914c1f>, accessed on 03.08.2020.

²⁰ Christiane J. Fröhlich, "Water: Reason for Conflict or Catalyst for Peace? The Case of the Middle East", in *L'Europe en formation*, no. 365, Autumn 2012, p. 142, URL: <https://www.cairn.info/revue-l-europe-en-formation-2012-3-page-139.htm#>, accessed on 03.08.2020.

²¹ Viorel Ordeanu, Benoni Andronic, "Războaiele pentru apă", in *Journal of Military Science*, no. 3, 2019, p. 95.

²² Anthony Turton, Roland Henwood (eds.), *Hydropolitics in the Developing World: A Southern African Perspective*, African Water Issues Research Unit, 2002, p. 15.



between developing countries and environmental degradation. This hypothesis can only be confirmed to a small extent, which is why it cannot become a truth. In contrast, developing countries have well-developed industries that operate, but pollute. It is true that countries such as Germany have tried to use strategies for the implementation of the so-called *green energy*, but from an economic point of view it has not proved to be a cost-effective strategy. Seriously, production-based economic growth cannot be based on eco-technologies for the simple reason that they are much more expensive and profits are falling substantially. Although we talk about green energy as belonging to the future, it is less likely for this to happen any time soon. While NGOs promote desideratum and utopias, the business environment and the state will always focus on economic growth correlated with a spending level as low as possible.

The intensity of water-related conflicts, as well as the degree of cooperation between the parties depend on a number of factors:

1. The degree of deficit, poor management or misallocation of water resources;
2. The degree of interdependence between states in terms of common water resources, regardless of borders;
3. Having control over water resources on geographical and historical criteria;
4. Existence of alternative sources of water or other options in order to negotiate an agreement between the parties;
5. The relative power of the parties;
6. The possibility that a protracted conflict may have broken out due to a disagreement over this type of resource.²³ When severe deficits are expected and water is perceived as being over-exploited or degraded by others, instability can occur, creating the conducive environment for conflicts to break out.

3. Water Use in Central Asia – Cooperation or Conflict?

Central Asia has a special wealth in terms of water resources. An important part of the region's rivers flow into inland lakes or disappear into the desert by evaporation. Two of the largest rivers in the region are Amu Darya (formerly called Oxus) and Syr Darya (formerly known as Jaxartes).²⁴ They come from the eastern mountains of Central Asia and pass through the Kara Kum and Kyzyl Kum deserts. The Amu Darya River is made up of several smaller rivers, such as the

²³ Shlomi Dinar, "Water, Security, Conflict, and Cooperation", in *The SAIS Review of International Affairs*, Vol. 22, no. 2, John Hopkins University Press, Summer-Fall 2002, pp. 236-237.

²⁴ Erika Weinthal, *Water Conflict and Cooperation in Central Asia*, Occasional Paper no. 32, Human Development Report Office, 2006, p. 3, URL: http://hdr.undp.org/sites/default/files/weinthal_erika.pdf, accessed on 04.08.2020.

Panj in Afghanistan, the Vakhsh in Tajikistan, then passes through Uzbekistan and Turkmenistan before flowing into the Aral Sea. The Syr Darya River rises in the Tien Shan Mountains in eastern Kyrgyzstan and flows into western Uzbekistan through the Fergana Valley.

Currently, most of the water in the two rivers comes rather from melting glaciers than from rainfall. Accelerated melting of glaciers in spring and summer causes a rise of water levels, which conveniently coincides with the peak season of agriculture.



Figure no. 1: Amu Darya and Syr Darya river basins²⁵

The Zarafshon, Kashkadarya, Kafirnigan, Murghab, Tejen, Turgai, Sarysu and Chu rivers also contribute to the region's river basin.²⁶ Zarafshon has its sources in the Pamir Mountains.

²⁵ The map is available at the URL: http://www.cawater-info.net/aral/index_e.htm, accessed on 04.08.2020.

²⁶ Erika Weinthal, *op. cit.*, 2006, p. 4.



Figure no. 2: Hydrographic network of Central Asia²⁷

The collapse of the Soviet Union also meant the destruction of the centralized water resources management system, which operated for more than half a century. For example, during the communist period, the Moscow authorities managed the Aral Sea Basin as well as an integrated economic unit. The USSR decided how the water of the Amu Darya and Syr Darya rivers would be used to meet the priority economic objectives. In the case of the Central Asian states, such an objective was to grow 90% of the cotton needed in the Soviet Union.²⁸ Between 1950 and 1980, the Moscow authorities developed an extensive system of reservoirs, canals and pumping stations to support the production of cotton, which was representative of the entire region. For example, 170,000 kilometres of canals have been built in Uzbekistan to irrigate about 4.2 million hectares. One of the largest projects in the region was the construction of the Kara Kum Canal, whose purpose was to transport water along 1,400 kilometres of desert in Turkmenistan.²⁹ Irrigation continues to be particularly important in the region, given the fact that, according to some World

²⁷ The map is available in Martin Russell, *Water in Central Asia – An increasingly scarce resource*, Briefing, European Parliamentary Research Service, September 2018, p. 2, URL: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI\(2018\)625181_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI(2018)625181_EN.pdf), accessed on 04.08.2020.

²⁸ Erika Weinthal, *op. cit.*, 2006, p. 5.

²⁹ *Ibidem.*

Bank reports³⁰, the entire area could become a desert.

Water is certainly one of the most important elements in agriculture or energy. If Uzbekistan, Turkmenistan and Kazakhstan have rich reserves of fossil fuels, the same cannot be said about Tajikistan and Kyrgyzstan, which are forced to import energy from neighbouring states. However, the two republics have great hydropower potential and manage to provide most of the energy needed using this method. Domestic water use has also increased in recent years, but more than half of Tajikistan's population does not have a source of drinking water in their homes.

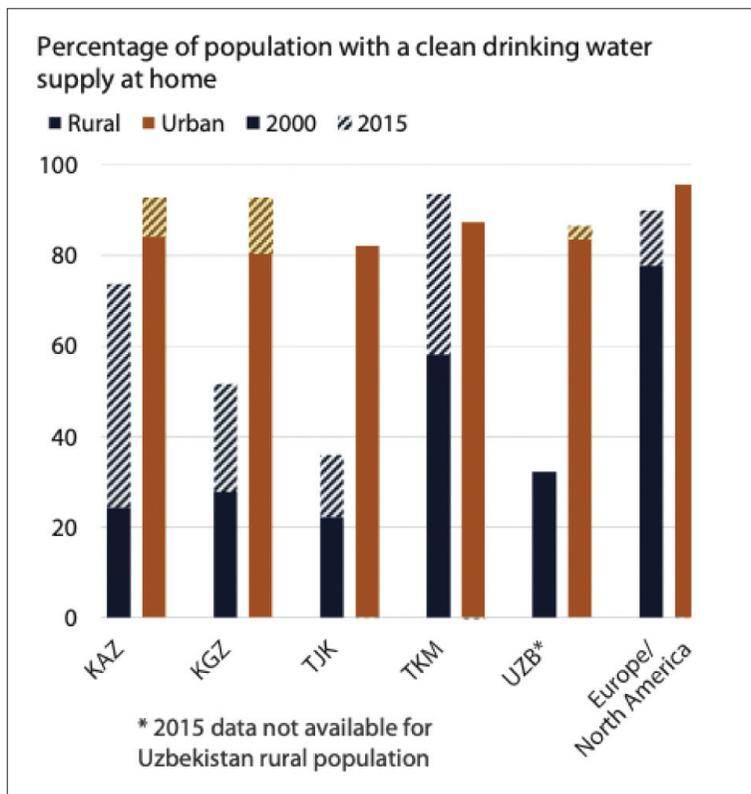


Figure no. 3: Domestic water use in the Central Asian republics³¹

The cooperation of the five Central Asian countries is vital for them in order to be able to correctly allocate limited water resources to states that share the

³⁰ Julia Bucknall, Irina Klytchnikova, Julian Lampietti, Mark Lundell, Monica Scatasta, Mike Thurman, *Irrigation in Central Asia. Social, Economic and Environmental Considerations*, February 2003, p. i, URL: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI\(2018\)625181_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI(2018)625181_EN.pdf), accessed on 04.08.2020.

³¹ The chart is available in Martin Russell, *op. cit.*, September 2018, p. 5, URL: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI\(2018\)625181_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI(2018)625181_EN.pdf), accessed on 04.08.2020.



same river basins, but also to be able to efficiently manage shared infrastructure. Cooperation in the region continued after the disintegration of the USSR, with the signing of the Almaty Agreement of 1992. Under the agreement, an interstate commission for water coordination was established, which became part of the Aral Sea Rescue Fund (IFAS).³² The role of the commission is to coordinate water management policies throughout the region. This agreement was only the first brick of a very well-welded foundation, followed by others both bilateral and regional. For example, in 1996, Turkmenistan and Uzbekistan established some ways to share infrastructure and agreed that each state could obtain an equal amount of water from the Amu Darya River. Another example is the signing of an agreement between Kyrgyzstan, Kazakhstan and Uzbekistan in 1998 (Tajikistan joined in 1999). Kyrgyzstan has pledged to provide enough water from Toktogul waterfall during the farming season, receiving compensation from other states for losses from hydroelectric power generation during winter.³³ This compensation took the form of fuel and electricity supplies, as well as financial support for the maintenance of the dams. Cooperation in the post-USSR period was more difficult than one might think, especially because IFAS proved ineffective in managing and coordinating the region's water resources. In 2008, tensions between Uzbekistan and Kazakhstan escalated for this kind of reason. Kazakhstan has accused Uzbekistan of not allowing a sufficient amount of water to pass through its territory.³⁴ In 2014, a conflict broke out on the border between Kyrgyzstan and Tajikistan due to insufficient water for irrigation. Kyrgyzstan's rich water resources have also led to repeated border conflicts with Uzbekistan. The latter deployed military troops along the border with Kyrgyzstan on March 24, 2016.³⁵ In 2014, a conflict broke out on the border between Kyrgyzstan and Tajikistan due to insufficient water for irrigation. Kyrgyzstan's rich water resources have also led to repeated border conflicts with Uzbekistan. The latter deployed military troops along the border with Kyrgyzstan on March 24, 2016. Certainly, one of the factors that contributed decisively to the escalation of tensions between the two states was Uzbekistan's attempt to gain control of the Alaskan Reservoir Ala-Buka. The Central Asian republics are forced to try to reach a consensus because of the inability of the governments of these states to modernize water-dependent sectors such as energy and agriculture. Shy steps in reducing this interdependence have been taken by Uzbekistan, which wants to build a reservoir capable of accumulating 2.5 billion cubic meters of water. Basically, the Uzbek

³² *Ibidem*, p. 6.

³³ *Ibidem*.

³⁴ Martin Russell, *op.cit.*, p. 6.

³⁵ Fuad Shahbazov, "Will Central Asia Fight Over Water Resources?", *Forbes*, 6 February 2017, URL: <https://www.forbes.com/sites/realspin/2017/02/06/will-central-asia-fight-over-water-resources/#4f1ea4914c1f>, accessed on 04.08.2020.



authorities aim at reducing dependence on the Toktogul.

A significant part of the water conflicts in the region are related to the Rogun project. Construction of this dam began in 1982, as part of an integrated Soviet plan for the economic development of Central Asia. The construction process stopped in 1991, but was resumed in October 2004, during the visit of Russian President Vladimir Putin to Dushanbe. The Russian company RUSAL has committed to invest 2 billion dollars in the construction of this dam. The agreement was cancelled in 2007 due to the Tajik government's dissatisfaction with the height and capacity of the dam. The Rogun Dam has become a symbol of Tajikistan's sovereignty, which is why government authorities are working to find the economic support they need. The very high cost of this project, of 3-5 billion dollars (almost half of the republic's GDP), is a real cause for concern. Tajikistan's tensions with Uzbekistan have also been stressed by the dam. Reasons include:

- Entirely Uzbek agriculture depends on the water availability for irrigation, and an exploitation of the Rogun project could lead to a water deficit right at the peak of agriculture season. Moreover, Rogun could become a political tool to put pressure on Uzbekistan;
- The water deficit could cost Uzbekistan \$ 600 million in the agricultural sector alone, which would mean a reduction in GDP (about 2%), and 340.000 people could lose their jobs;
- The salinity of rivers will increase, which means that the quality of groundwater will be destroyed;
- The place where the dam will be built is in an area with a strong seismic risk;
- The degree of desertification in the Aral Sea basin will increase.³⁶

Although the desire for cooperation between the Central Asian republics still exists, rivalry and conflicting interests make the whole process difficult. Reaching consensus in the near future seems rather impossible. So far, not even one of the conflicts for water resources in the region has come to an end.

Conclusions

The prospect of water wars is undoubtedly frightening, but it is not too late to avoid it. A cost-benefit analysis should be sufficient to demonstrate that armed struggle, in such a context, is neither rational nor cost-effective. Moreover, cooperation and investment in desalination and water purification facilities could be much less expensive and certainly more effective in resolving the freshwater crisis.

³⁶ Konur Alp Kocak, *Water disputes in Central Asia. Rising tension threatens regional stability*, Briefing, European Parliamentary Research Service, October 2015, p. 8, URL: [http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/571303/EPRS_BRI\(2015\)571303_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/571303/EPRS_BRI(2015)571303_EN.pdf), accessed on 04.08.2020.



The consensus that the five Central Asian republics could reach on water resources will be closely linked to the particularities of each state's domestic policy. This type of resource can be seen as a common concern of the whole region and it is the only potential factor that can fuel regional conflicts, but, paradoxically, it could be a factor that could determine cohesion. One of the ways that should be looked for at a high level is mediation, because of the fact that water dependence forces the five states to find a middle ground. Of course, there is no guarantee that water resources will be a strong enough reason to ensure collaboration in the region, but it could be the premise for modernizing infrastructure and streamlining the management of such resources, and this would be a first particularly important step.

BIBLIOGRAPHY:

1. ***, "Factsheet on Water and Sanitation", URL: www.un.org/waterforlifedecade/factsheet.html apud ***, *Natural Resources, Conflict, and Conflict Resolution*, United States Institute of Peace, Washington, DC, 14 September 2007.
2. ***, *Former National Leaders: Water, a Global Security Issue*, in *Forbes* <https://www.forbes.com/sites/realspin/2017/02/06/will-central-asia-fight-over-water-resources/#4f1ea4914c1f>
3. ALPKOCAK, Konur, *Water disputes in Central Asia. Rising tension threatens regional stability*, Briefing, European Parliamentary Research Service, October 2015, URL: [http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/571303/EPRS_BRI\(2015\)571303_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/571303/EPRS_BRI(2015)571303_EN.pdf)
4. BUCKNALL, Julia; KLYCHNIKOVA Irina; LAMPIETTI, Julian; LUNDELL, Mark; SCATASTA, Monica; THURMAN, Mike, *Irrigation in Central Asia. Social, Economic and Environmental Considerations*, February 2003, URL: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI\(2018\)625181_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI(2018)625181_EN.pdf)
5. BUȘE, Dorel, *Managementul crizelor și conflictelor regionale*, România de Măine Foundation Publishing House, Bucharest, 2006.
6. DINAR, Shlomi, "Water, Security, Conflict, and Cooperation", in *The SAIS Review of International Affairs*, Vol. 22, No. 2, John Hopkins University Press, Summer-Fall 2002.
7. FARISONI, Fabio; GIUPPONI, Carlo; REYNAUD, Arnaud; CECCHERINI, Guido; CARMONA-MORENO, César; DAVID GONZALEZ-SANCHEZ, Ad De Roo; BIDOGLIO, Giovanni, "An innovative approach to the assessment of hydro-political risk: A spatially explicit, data driven indicator of hydro-political issues", in *Global Environmental Change*, Volume 52, September 2018, apud MOCAGRAMA, Ana, *Studiu: conflictele legate de apă se vor intensifica în jurul lumii*, 5 April 2019, URL: <https://www.green-report.ro/conflicte-apa>



8. FRÖHLICH, Christiane J., “Water: Reason for Conflict or Catalyst for Peace? The Case of the Middle East”, in *L’Europe en formation*, No. 365, Autumn 2012, URL: <https://www.cairn.info/revue-l-europe-en-formation-2012-3-page-139.htm#>

9. FRONE, Simona; FRONE, Dumitru-Florin, “The Importance of Water Security for Sustainable Development in the Romanian Agri-Food Sector”, in *Agriculture and Agricultural Science Procedia* 6, 2015.

10. FRUNZETI, Teodor, *Coordonate ale psihologiei militare aplicate*, Centrul Tehnic Editorial al Armatei Publishing House, Bucharest, 2009.

11. GLEICK, Peter H., “Water and Conflict: Fresh Water Resources and International Security”, in *International Security*, Volume 18, No. 1, Summer 1993.

12. GOLU, Mihai, *Conflictologia – disciplină de graniță*, URL: <https://andreibocila.files.wordpress.com/2010/10/tema20i20tema20i20conflicte20si20negocieri20c38en20organizatii.pdf>

13. GRIGOROIU, Marian-Valentin, *Crizele și conflictele contemporane*, Ministry of Internal Affairs Publishing House, Bucharest, 2006.

14. HLIHOR, Constantin; HLIHOR, Ecaterina, *Comunicarea în conflictele și crizele internaționale. Secolul al XX-lea și începutul secolului XXI*, Comunicare.ro Publishing House, Bucharest, 2010.

15. IOJĂ, Cristian (ed.), *Managementul conflictelor de mediu*, University of Bucharest Publishing House, Bucharest, 2015.

16. ISTRATE, Cristian, *Relațiile politico-diplomatice și militare dintre SUA și Federația Rusă în perioada post Război Rece*, SITECH Publishing House, Craiova, 2019.

17. MOORE, Scott, “The Water Wars Within: Preventing Subnational Water Conflicts”, *NewSecurityBeat*, 30 May 2018, URL: <https://www.newsecuritybeat.org/2018/05/water-wars-within-preventing-subnational-water-conflicts>

18. ORDEANU, Viorel; ANDRONIC, Benoni, „Războaiele pentru apă”, in *Journal of Military Science*, No. 3, 2019.

19. PETERSEN-PERLMAN, Jacob D.; VEILLEUX, Jennifer C.; WOLF, Aaron T., “International water conflict and cooperation: challenges and opportunities”, in *Water International*, 2017, URL: <https://transboundarywaters.science.oregonstate.edu/sites/transboundarywaters.science.oregonstate.edu/files/Publications/Petersen-Perlman%20et%20al.%20-%202017%20%20International%20water%20conflict%20and%20cooperation%20chal.pdf>

20. RUSSELL, Martin Russell, *Water in Central Asia – An increasingly scarce resource*, Briefing, European Parliamentary Research Service, September 2018, URL: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI\(2018\)625181_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/625181/EPRS_BRI(2018)625181_EN.pdf)



21. SAFTA, Dan, *Managementul conflictelor în organizație*, Trei Publishing House, Bucharest, 2016.
22. SHAHBAZOV, Fuad, “Will Central Asia Fight Over Water Resources?”, *Forbes*, 6 February 2017, URL: <https://www.forbes.com/sites/realspin/2017/02/06/will-central-asia-fight-over-water-resources/#4f1ea4914c1f>
23. SIMILEANU, Vasile, *Conflicte asimetrice*, Top Form Publishing House, Bucharest, 2011.
24. STETTER, Stephan; HERSCHINGER, Eva; TEICHLER, Thomas; ALBERT, Mathias, *Conflicts about water: Securitizations in a global context*, in *Cooperation and Conflict*, Volume 46, Issue 4, 2011.
25. TURTON, Anthony; HENWOOD, Roland (eds.), *Hydropolitics in the Developing World: A Southern African Perspective*, African Water Issues Research Unit, 2002.
26. VINYAMATA, Eduard, “Conflictology: A Multidisciplinary Vision”, *Journal of Conflictology*, Volume 1, Issue 1, 2010.
27. Erika Weinthal, *Water Conflict and Cooperation in Central Asia*, Occasional Paper no. 32, Human Development Report Office, 2006, URL: http://hdr.undp.org/sites/default/files/weinthal_erika.pdf



PERSPECTIVE ON TURKEY'S CULTURAL POLICY IN HUNGARY: SYMBOLISM OF THE OTTOMAN HERITAGE

*Jordan PETRÖCZ**

Turkey has changed its policy since the AKP is on the government led by President Erdogan. We can see that the Ottoman past and the restoration of the imperial status plays a major role in Turkish politics. It affects all aspects of Turkey's policy, including cultural policy, policy of memory and architecture. Turkey also makes its status visible abroad by building Ottoman-style buildings or renovating old Ottoman monuments, especially in the former parts of the Ottoman Empire. We can see that in addition to the political and business negotiations between Turkey and Hungary, Ankara proposed the restoration of old Ottoman monuments in Hungary. In Szigetvár, the excavation and restoration of two monuments, the Tomb of Suleiman and the Mosque of Suleiman was supported by Turkey.

Keywords: *Turkey's policy; Erdogan; AKP; Ottoman; Szigetvár; Turkish-Hungarian connections; cultural policy.*

1. Background of Restoration of Ottoman Monuments

Turkey is a medium power in the world now and it has an increasing influence in a part of Europe. But there were times when Turkey had much more influence and power. During the Ottoman period, the Sultan was not only a key ruler among European leaders, he was also the supreme leader of the Muslim world: the Caliph, the most important religious and political leader of Islam. It lasted until the beginning of the 20th century. Kemal Atatürk became the founder of modern Turkey, he changed its century-old orientation and laid the foundations of a secular

** Jordan PETRÖCZ is PhD Candidate of the Doctoral School on Safety and Security Sciences, Óbuda University, Budapest, Hungary. E-mail: jordan.petrocz@phd.uni-obuda.hu*



and Western-oriented country that began to transition from a vast Muslim empire to a non-religious democratic state. But in recent years, Turkey has changed the path of Kemal Atatürk, and it can be observed that there has been a change in Turkish politics since the leadership of the Justice and Development Party (AKP). Under President Erdogan's leadership, analysts believe Turkey is trying to regain its imperial status.¹

We can also see these changes in Turkish foreign policy, as Turkey is more and more involved in regions that were formerly part of the Ottoman Empire.² According to Alexander Murison Turkish, foreign policy has been changed by the "growing embrace of the philosophy of neo-Ottomanism".³ Instruments of foreign policy are: diplomatic and economic relations, cultural and educational programs, and the army and the military industry.

This study would like to address the cultural aspect of changes in Turkish foreign policy. In the cultural field, we can see that Turkey is increasingly motivated to refer to the Ottoman past not only within Turkey's borders but also abroad, and more specifically in regions that were formerly under Ottoman rule. In recent years, Ankara has made investments in regions that were once part of the Ottoman Empire, such as schools, bridges, marketplaces. And the Turkish government seems to be putting emphasis on renovating and restoring religious buildings in these regions.⁴

There are a number of mosque restoration projects underway in the Balkans, a region previously ruled by Ottoman sultans for centuries. In Kosovo some mosques have been restored by The Turkish Cooperation and Coordination Agency (TIKA) such as the Fatih Sultan Mehmed Han Mosque and The Sinan Paşa Mosque. Both religious buildings were originally built in the Ottoman era. There are also some mosques in North Macedonia that TIKA has rebuilt, and similar projects are underway in Bosnia and Herzegovina, Albania and Montenegro.⁵

The Turkish government funded the restoration of mosques and tombs in Africa in regions that were formerly also under Ottoman rule: Algeria, Egypt,

¹ Joshua W. Walker, "Turkey's Imperial Legacy: Understanding Contemporary Turkey through its Ottoman Past", in *Perspectives on Global Development and Technology*, no. 2-3/ 2009, URL: https://www.researchgate.net/publication/233690114_Turkey's_Imperial_Legacy_Understanding_Contemporary_Turkey_through_its_Ottoman_Past, accessed on September 10, 2020.

² Attila Pintér, "Foreign policy of Turkey at the beginning of the 21st century – neo-ottoman or redefined?", in *Külügyi Szemle*, Spring 2013, p. 10.

³ Alexander Murinson, "The Strategic Depth Doctrine of Turkish Foreign Policy", *Middle Eastern Studies*, vol. 42, no. 6, 2006, p. 945, URL: www.jstor.org/stable/4284512, accessed on 09.10.2020.

⁴ ***, "TIKA Has Restored More Than 50 Mosques in the Past 5 Years", URL: https://www.tika.gov.tr/en/news/tika_has_restored_more_than_50_mosques_in_the_past_5_years-53824, accessed on 08.10.2020.

⁵ ***, "TIKA's Mosque Restoration Projects", URL: http://www.tika.gov.tr/en/news/tikas_mosque_restoration_projects-8601, accessed on 10.09.2020.



Sudan, Ethiopia. Through TIKA, Ankara has also restored some important Islamic sites in Iraq and Lebanon.⁶ As stated on the official website: “The efforts of TIKA respond to the ongoing need for the protection of cultural heritage of the Turkish Islam Civilization”, therefore, more than 50 mosques have been restored by the Turkish government department in the last five years.⁷

Regions of Hungary were also under Ottoman rule for more than 150 years. There are also Ottoman monuments in Hungary that have been restored in recent years or are planned to be restored with financial support from Turkey. For example, the Tomb of Gül Baba in Budapest. In Szigetvár (in the south-western part of Hungary), TIKA spent a significant amount of money to search for the Tomb of Suleiman the Great, excavate it and make it possible to be visited. This tomb was lost for centuries. In Szigetvár, TIKA is also involved in the renovation of Sultan Suleiman’s former mosque, which dates back to the 16th century, when Suleiman’s troops occupied Szigetvár and the region in 1566, but since the end of Ottoman rule the building has not been used as a mosque, it has served other purposes.

When an ancient building is planned to be restored and rebuilt, it is interesting and important to know what this building was originally like. This article seeks to address the following questions: what is the story of these buildings in Szigetvár? What was their function in the Ottoman period? Why were they built at the time? Why is it important for the Turkish government to renovate these old buildings now and to make them spectacular? Is there any purpose for the renovations of the buildings which are located more than a thousand kilometers from the Republic of Turkey? In the Turkish media and on the official website of Turkish Cooperation and Coordination Agency (TIKA), these monuments are called “common heritage” with Hungary, as well as “heritage of Turkish Islam Civilization”.⁸ What do we need to know about what is called heritage, or cultural heritage?

This article focuses on Szigetvár and studies the history of the Tomb of Suleiman and the Mosque of Suleiman. These two examples reflect the approach of Turkish politics, as mentioned above. *These two cases can serve as an example whether there is any symbolic of the restoration of mosques and tombs in Europe.*

2. Method of Studying the Case of Ottoman Monuments in Szigetvár

This study is focusing on two monuments in Szigetvár, Hungary, which were excavated and restored with support from the Turkish government: the tomb of Suleiman the Magnificent and the mosque of Suleiman.

⁶ ***, “TIKA’s Mosque Restoration Projects”, *op. cit.*

⁷ ***, “TIKA’s Mosque Restoration Projects”, *op. cit.*

⁸ ***, “TIKA’s Mosque Restoration Projects”, URL: http://www.tika.gov.tr/en/news/tikas_mosque_restoration_projects-8601_ accessed on 10.09.2020.



Hence, these two buildings will be analysed in the following system:

1. What is the **definition and the description** of these Islamic monuments: türbe (tomb) and mosque?

2. The **historical background** of these buildings:

The Ottoman period. In this section, we dwell on who built these buildings originally, when and for what purpose.

What happened with the buildings after the Turkish Occupation of Hungary, how have their functions and evaluations changed over time.

How the restoration of the buildings began, the circumstances of the restoration and what are the plans for the future of these buildings.

The following questions arise:

1. What was the original function of these buildings?

2. Did they have any message or symbolic background at the time of their construction? If so, what could that be?

3. Why was it important for Turkey to excavate and renovate these old monuments in recent years?

4. What is their message for the future?

3. General Historical Background – Suleiman and Szigetvár

Sultan Suleiman was one of the greatest sultans of the Ottoman Empire. He was a great conqueror who invaded territories, both east and west. During his reign, he annexed much of the Middle East and large areas of North Africa. He conquered Belgrade and Rhodes in the West, as well as much of Hungary.

In 1566, Sultan Suleiman began its 7th conquest of Hungary, and his great goal remained the conquest of Vienna. But he was stopped again in Hungary. The Ottomans wanted to take over Szigetvár before moving on to Vienna, but the siege of Szigetvár lasted too long because the Hungarian leader of the defenders, Miklos Zrínyi, heroically resisted with his soldiers. About 100.000 conquerors attacked 2.300 Hungarians, Croatians defending their homeland. According to a witness, during the fight the mighty Ottomans shouted, “Allah, Allah”, and the defenders answered, “Jesus, Jesus!”⁹. Zrínyi and his soldiers were trapped in the flaming castle and burst out with their last breath to fight the Ottomans face to face, then died. Sultan Suleiman died during the siege in his tent, watching the battle, but his death was kept a secret.

⁹ Sámuel Budina, *The story by Samuel Budina in Hungarian in Latin about the siege of Szigetvár in 1566*, Szigetvár, 1978, p. 16.

4. Historical Background of Suleiman's Tomb, in Szigetvár

“Türbe” (Tomb) - Definition and general description

The Ottomans had their own tradition in honoring the dead, building a cemetery outside the city walls or, sometimes, next to mosques. A turban-shaped tombstone commemorates a man, and a stone tablet ornamented with flowers commemorates a woman.¹⁰ For those who had higher ranks or who were particularly important to them, a larger, more spectacular construction was built, called “türbe” which is a word for grave or mausoleum. In Turkish-Islam history, a türbe was built for a person to express respect and reverence for that person and what he did.¹¹

Typically, such a tomb was erected in Turkey for a Turkish person, rarely away from the center of the empire, for example in the territory of the Ottoman occupation of Hungary. There could be two main reasons for this: the high-ranking Ottoman person was really active in Hungary, or the Muslims considered the person a Muslim saint.¹² According to Islam, the saints are “the bearers of Muhammad’s light, and radiate even after their death”, so those who visit their tomb or build a türbe (tomb) above them can trust, that he or she “will stand before the Supreme Judge with shining face on the Day of Judgment”.¹³ These tombs are also used for the Islamic cult of the dead, so these monuments are also religious in nature.¹⁴ Next to these tombs which were especially important, a “tekke”, a dervish lodge (or monastery) was built.¹⁵

Suleiman's Türbe (Tomb) in the Ottoman period

After the Siege of Szigetvár, the Ottomans occupied the fortress and the surrounding areas. Suleiman’s body was secretly taken to Istanbul for burial. His son, Selim, later ordered a memorial to be erected at the site of the death of the late sultan, who was considered a “ghazi”¹⁶, a warrior of faith who fought for Islam.¹⁷ He ordered two villages near Szigetvár to take care of the area where Suleiman died.¹⁸ In Istanbul a prestigious mausoleum was built for the sultan in 1566, but 10

¹⁰ Győző Gerő, *Turkish architecture in Hungary - djami, turbe, bath*, Budapest, 1980, p. 34.

¹¹ Fatih Elcil, “Ottoman graves and graveyards – selected examples”, in *Memory of Suleiman in Szigetvár, Mediterrán és Balkáni Fórum*, 2014, p. 37.

¹² Balázs Sudár, *The Idrisz Baba turbe of Pécs*, Budapest, 2013, p. 42.

¹³ Balázs Sudár, “Places of worship, monasteries, tomb chapels. Cultural institutions during the Turkish occupation” part I, *História*, no. 1/2003.

¹⁴ Gerő Győző, *op.cit.*, p. 76.

¹⁵ Nicolas Vatin, “A turbe where no one rests. Comments on the establishment and purpose of the tomb of Suleiman the Great in Szigetvár”, in *Keletkutatás*, no. Spring-Autumn/2008. p. 59.

¹⁶ Nicolas Vatin *op. cit.* p. 68.

¹⁷ József Thúry: *Török Történetirók. I.* Budapest, 1893, p. 405.

¹⁸ Nicolas Vatin, *op. cit.*, p. 68.



years after Suleiman's death, there was also a spectacular mausoleum in Szigetvár as well, on the site of his death.

The mausoleum of Suleiman near Szigetvár was carved from precious white marble, with a dome on it, a roof made of lead, and a huge golden sphere on top.¹⁹ According to some descriptions, Suleiman's tomb was one of the most beautiful death memorials in Hungary and the türbe shone from afar.²⁰

In fact, the Ottomans not only built a beautiful tomb at Suleiman's death site, but also built a huge complex around it.

There were some eyewitnesses who have left us the description of the place, like Evliya Celebi, the famous Ottoman explorer, who wrote that he saw a "Friday mosque", a smaller mosque, an Islamic school (madrasa), an inn, a bathhouse and some other buildings around the high tomb.²¹

There was also a dervish lodge next to the tomb, where the dervishes of the Halveti Sufi Order were asked to maintain the complex and provide religious care.²² This Islamic order was associated with the Ottoman army, and some of their saints were warriors, who died as martyrs in the struggle for Islam.²³

The Ottoman Empire also built up a fortress around the complex of Suleiman's tomb, so it was surrounded with walls and a group of soldiers served here.²⁴ There was a time when 100 soldiers served here to provide protection for this complex.²⁵ There was also a barrack inside the walls, for the soldiers. According to a 17th century Hungarian soldier, Pál Esterházy, the wall of the fortress was surrounded by a ditch and there was only one drawbridge into the fort.²⁶

This complex was built not only for prestige but also for use. Since Suleiman the Magnificent died as "martyr" against infidels in this place, his tomb in Szigetvár became a well-known Islamic pilgrimage site.²⁷ Historical sources show that thousands have visited this place, pilgrims even from the far away Asia have come here to pay their respect.²⁸ Because of the numerous visitors, the Ottomans founded a new settlement outside the wall of the fortress of the tomb, which was the only

¹⁹ Géza Szabó, "The place of death and the turbe of Sultan Suleiman in the history of Szigetvár and in the popular memory according to recent researches, in *Ethnographia*, no. 3/2014. p. 383.

²⁰ Sándor Takáts, *Drawings from the Turkish world*, vol. IV, Budapest, 1928, p. 130.

²¹ ***, *Journey of Turkish world traveler Evlia Chelebi in Hungary. II. 1664-1666*, translated: Imre Karácson, Budapest, 1908, p. 36.

²² Nicolas Vatin, *op. cit.*, p. 60.

²³ Gábor Ágoston, Balázs Sudár, *Gul Baba and the Bektashi dervishes of Hungary*, Budapest, 2002, p. 54.

²⁴ Vatin, *op. cit.*, p. 68.

²⁵ Evliya Çelebi, *op.cit.*, p. 36.

²⁶ Pál Esterházy, *Mars Hungaricus*, Budapest, 1989, p. 142.

²⁷ József Molnár, "Sultan Suleiman' tomb in Turbek", *Művészettörténeti értesítő*, no. 1/1965, p. 64.

²⁸ Pál Esterházy, *op. cit.*, p. 142.



Ottoman-founded settlement in the territory of Hungary.²⁹ Only with the help of this settlement could they organize accommodation and food for the pilgrims. This area close to Szigetvár was named “Turbék” after the Turkish word “türbe” (grave).³⁰

According to historical sources, several Islamic religious positions were held in the tomb complex: türbedar (the keeper of the tomb),³¹ imam (the leader of the Muslim community, the person who leads the prayers), khatib (Friday preacher), recitator, muezzin³² and the person who led the technical staff of the place of worship³³. Seeing this information we can understand that the religious institutions near the tomb were frequently used.

Original function of Suleiman’s Tomb

As we can see, this tomb functioned as a memorial place of one of the greatest sultans of the Empire, whose period was even called the “Golden Age” of the Ottoman Empire. Although Suleiman’s tomb in Istanbul was the place where the oiled body of the sultan was placed in a coffin and his memory was cherished, the place of his death was also important to the Empire. Possibly his heart and internal organs were buried here. Suleiman was also a religious role model for Muslims, therefore the last station in his life, “Szigetvár was holy in the eyes of the Ottomans”³⁴. It was also a place where Muslims could pray for the dead or dying people, according to the 36th Surah of Quran (like at every other tomb), as Evliya Celebi, the Ottoman explorer, did when he visited Szigetvár.³⁵ It became a popular pilgrimage site, where pilgrims wanted to pay their respect and be encouraged. Later, the Ottoman troops coming to fight against Hungarians, first came to his tomb to pray, because “prayer at this sacred tomb elevated the spirit of the Turkish army” and gave them motivation.³⁶

Why was it built? The message and the symbolism of Suleiman’s Tomb

There are three main reasons why we can ask whether the Ottomans have a symbolic message with this tomb. As we see, Suleiman had one spectacular tomb in

²⁹ Norbert Pap, “Frameworks of the Suleiman research, the most important findings of 2013”, in *Mediterrán és Balkáni Fórum*, 2014, p. 32.

³⁰ Valéria Kováts, “Historical popular traditions of Szigetvár II”, in *Janus Pannonius Múzeum Évkönyve 1962*, Pécs, 1963, p. 256.

³¹ Erika Hancz, “Tent of Sulaiman the Great near Szigetvár, his death and his tomb in documented ottoman references”, in *Memory of sultan Suleiman in Szigetvár, Mediterrán és Balkáni Fórum*, 2014, p. 69.

³² Nicolas Vatin, *op. cit.*, p. 59.

³³ Balázs Sudár, *Djamis and mosques in Ottoman Hungary*, Budapest, 2014, p. 630.

³⁴ Nicolas Vatin, *op. cit.*, p. 65.

³⁵ Evlia Cselebi, *op.cit.*, p. 36.

³⁶ Sándor Takáts, *op. cit.*, p. 128.



the capital, Istanbul, and it was not customary that a tomb should be erected for the death of every sultan as a second tomb. But the next sultans considered it important to build and maintain the tomb and the Szigetvár complex. Secondly, if the only purpose to build the tomb was to honor the dead, why it was not built sooner than 10 years after his death? And thirdly, the area of this tomb at Turbék was not in a strategic location, few kilometers from the important castle of Szigetvár, but still the Ottomans fortified Suleiman's Tomb and maintained the fort, the walls, the moat, and paid the garrison there, which was a great effort at a time when all soldiers and all the efforts and time were needed for the Empire to win on the battlefields.

Nicolas Vatin, an expert of this period, looked for the reasons to build the tomb in Szigetvár. According to his statement, there was a serious political reason why the Ottomans built this tomb there. Szigetvár was located in a place that had been the border of the Habsburg and Ottoman Empires for years, so after the conquest of this area, the Ottomans apparently wanted to mark this land and show the enemy that this land belongs to the Turks now.³⁷ It was a sign also for the Habsburg Empire for decades, but at the time of the construction (about 1576) the Ottomans and Habsburgs had good diplomatic relations because of the treaty of Adrianople (1568). Therefore, Vatin argues that the Ottomans first wanted to signal to another enemy: the Zrínyi family. Miklós Zrínyi, who died against Suleiman soldiers at the Siege of Szigetvár, had a son, György was the leader of the neighboring region in the 1570's and attacked many of the lands taken from his father. According to Vatin, that was the political message of the tomb in Szigetvár: the Zrínyi family and the Hungarian king must accept once and for all that Szigetvár belongs to the Ottoman Empire.³⁸

But Vatin also stated that Szigetvár was sacred for the Ottomans because Suleiman died here as a martyr of Islam. He claims that the "symbolic importance of the tomb is clear: the construction of this complex declared to the world that this place became definitively Muslim and Ottoman"³⁹. According to other experts on the subject, this tomb represented impenetrable boundary for the enemy and wanted to make it permanent that this place was part of the "dar al-Islam", which means "the house of Islam", meaning that the area belongs forever to Islam.⁴⁰

We can now combine this view with a series of facts.

A dervish lodge (tekke) was established near the tomb, a sign of great religious reverence, as mentioned earlier.

They appointed a highly respectable religious sheikh, Ali dede, to serve as leader of the tomb, who had previously been a sheikh in the prestigious Halvet

³⁷ Nicolas Vatin, *op. cit.* p. 62.

³⁸ Nicolas Vatin, *op. cit.* p. 66.

³⁹ Nicolas Vatin, *op. cit.* p. 61.

⁴⁰ Balázs Sudár, *op. cit.* 2014, p. 628.



monastery of Sarajevo, who fought in the battle of Szigetvár, and who allegedly prayed with the Ottoman troops for the battle⁴¹, and last but not least, he was a disciple of Suleiman's spiritual leader, Nureddinzade sheikh.⁴²

One of the mosques next to the tomb was converted into a "jami masjid" ("Friday mosque") allowing the Friday ceremony to be held there. This increased the religious prestige of the place. It must be also mentioned here that wherever a Friday ceremony could be held, Muslims could pray the "khutbah", and everywhere Muslims could pray the "khutbah" on a conquered land that symbolized one thing: the place became part of the Islamic world.⁴³

The Ottomans built a great pilgrimage place there, which was visited by thousands.

The Ottomans took the maintenance of the pilgrimage site and the religious complex in this land far away from Istanbul so seriously that they ordered two conquered villages in the neighborhood to spend the income of their land on the maintenance of this complex and provide for the needs of the dervishes and pilgrims.⁴⁴

They fortified the complex of the tomb and paid numerous soldiers to protect it.

It becomes obvious that the Ottomans took this place and its symbolism very seriously. There is another aspect that also supports the assumption that this complex had a symbolic message: it seems like the symbolism of this complex was clear for the Hungarians and Habsburgs at that time, because from time to time they attacked this place even it was not in a strategic place.⁴⁵ The great-grandchildren of Zrínyi, the defender of Szigetvár, whose name was also Miklós, destroyed the whole complex of the türbe in 1664. He left standing the tomb of Suleiman at Turbék as a sign of respect. But the Ottomans renovated the place very quickly: they made it spectacular again in the same year.⁴⁶

What happened with the tomb after the Ottoman occupation?

After 123 years the Ottomans lost Szigetvár, and the complex of the Tomb of Suleiman in Turbék burned down. The only one standing there was the Tomb. Interestingly, the Catholic church dedicated the tomb to Saint Mary immediately after the departure of the Turks. A Habsburg officer later arbitrarily destroyed the tomb to sell its construction materials, leaving the Suleiman Tomb physically lost

⁴¹ Hancz, 2014, p. 69.

⁴² Mehmet Cemal Öztürk, "The tekke and the work of Nureddinzâde Mustafa Muslîhuddîn, Sheikh to Mehmed Pasha Sokolović", URL: <http://pof.ois.unsa.ba/index.php/pof/article/view/853>

⁴³ Balázs Sudár, *op. cit.*, 2014, p. 45.

⁴⁴ Nicolas Vatin, *op. cit.*, p. 70.

⁴⁵ Nicolas Vatin, *op. cit.* p. 61.

⁴⁶ József Molnár, *Turkish monuments of Szigetvár*, Budapest, 1958, p. 32.



in Szigetvár. But its memory was not forgotten. The Catholic church had built a temple in Turbék, in the place where they thought the Suleiman Tomb was, and it became one of the most important pilgrimage places for Catholics in this part of Hungary. The reason was clear: the tomb marked the place as part of Islamic rule, and the Catholic Church wanted to express that it belonged to Christianity again. They wanted to symbolically reclaim the land by building a shrine for Saint Mary in the same place where the Suleiman Tomb was.⁴⁷ Although we now know that the ruins of Suleiman's tomb are not under this church in Turbék, it is interesting to read that many Hungarian historians in the 20th century mentioned the place of the tomb as a religious symbol of the Islamic rule in Hungary, and described the church built on the ruins of the Suleiman's tomb as a symbolic victory of Christianity over the Ottoman occupation.⁴⁸ In fact, the ruins of Suleiman's Hungarian Tomb were lost for centuries and for more than 300 hundred years no one knew where it was exactly.

5. The Restoration of Suleiman's Tomb – Circumstances, Reasons and Future Plans

In 1980's, the Turkish government wanted to pay tribute to Suleiman in Szigetvár as his 500-year birthday was approaching, and Turkey had planned to rebuild the Tomb of Suleiman.⁴⁹ A plan was drawn up for a Suleiman memorial park to be built on the site of the sultan's death, so a place was designated with scientists, that could have been Suleiman's last station. But since Suleiman was considered the destroyer of the Kingdom of Hungary, the project met great resistance, and the Suleiman Memorial could not be built.⁵⁰ Finally, the Turkish state decided to name it the Hungarian-Turkish Friendship Park. The city assembly in Szigetvár finally voted to give the area to Turkey for 99 years, for 1 HUF. The park was designed in Turkish style, they put a huge copper Suleiman statue in the middle and built a symbolic tomb for Suleiman, where they had brought soil all the way from Turkey. Two years later they also built a Turkish style fountain in the park and it was completed, the opening ceremony could be held on the Suleiman's 500th anniversary (1994), with high-ranking representatives of both states. It actually seemed to be a Suleiman Memorial Park, but three years later a statue of the Hungarian hero, Zrínyi, made of

⁴⁷ Norbert Pap, "Frameworks of the Suleiman-research, the most important findings of 2013", in *Memory of sultan Suleiman in Szigetvár, Mediterrán és Balkáni Fórum*, special edition, p. 26.

⁴⁸ Béla Németh, *Szigetvár története*, Pécs, 1903; Gyula Szeghalmy, *Dunántúli Vármegyék*, 1937.

⁴⁹ László Horváth, Zoltán Varga, "The enemy became friend", in *Várak, kastélyok, templomok*, no. 4/2010, p. 30.

⁵⁰ Norbert Pap, "Islam versus Christianity – symbolic occupancy in Szigetvár", in *Szulejmán szultán Szigetváron*, Editor: Norbert Norbert; Pál Fodor, Pécs, 2017, p. 220.



plastic, was also exhibited.⁵¹

The Turkish delegation had arrived in 1994 with business representatives (economists, chambers of commerce, manufacturers etc.) who came “in the hope of doing business” and the leaders of the two countries discussed opportunities for business relations between their countries.⁵²

Over the years, it has become clear to scholars that Suleiman’s Tomb must be located elsewhere than at the Turbek Church or the area of the Hungarian-Turkish Friendship Park. The forthcoming 450th anniversary of the battle of Szigetvár (1566) brought a change. In 2012, the municipalities of Szigetvár and Turkey started negotiations on cooperation to restore some Ottoman monuments in Szigetvár. This event launched the process of investing in the renovation of Ottoman monuments in Hungary through Turkey’s national institution, the Turkish Cooperation and Coordination Agency (TIKA). In 2012, two documents had been signed: 1. Memorandum of understanding “to protect the common history of the two countries, including the restoration of Ottoman monuments in Hungary” and 2. “the research Support Agreement was signed to locate and rebuild the Suleiman the Magnificent Tomb”.⁵³ On TIKA’s official site it was made clear that these projects were also part of one of the primary goals of Turkey’s cultural policy: “protecting historical and cultural heritage”. One year later, President Erdogan visited Hungary and during the visit a memorandum of understanding was signed, according to which the two countries will protect their cultural heritage.⁵⁴ Meanwhile the two countries negotiated to increase trade between Turkey and Hungary from €2 billion euro to €5 billion.⁵⁵

In 2016, the Turkish government paid and arranged the restoration of the Hungarian-Turkish Friendship Park, which received new Ottoman-style architectural decorations and symbols. In Zrínyi’s honour, his statue was made of brass, so the plastic statue that had stood there since 1997 was replaced.

Since 2013, a Turkish-Hungarian research group, in cooperation with the large financial support of TIKA, found the ruins of Suleiman’s Tomb in Szigetvár in the vineyard and garden of a family house. Hence, on the 450th anniversary of Suleiman’s and Zrínyi’s death (2016) visitors from all over the world could have a

⁵¹ Géza Szabó, Árpád Kovács, Péter Barkóczy, “Tactics and military technology in the light of arhaeometallurgic analysis of cannons and bullets of Szigetvár”, in *Gesta*, 2013, p. 31.

⁵² ***, “The Turkish guests were looking for business relations”, *Új Dunántúli Napló*, 07.09.1994. September, p. 2.

⁵³ ***, “TIKA Builds New Connections Between Turkey and Hungary”, in URL: http://www.tika.gov.tr/en/news/tika_builds_new_connections_between_turkey_and_hungary-8549, accessed on 10.09.2020.

⁵⁴ ***, “TIKA Builds New Connections Between Turkey and Hungary”, *op. cit.*

⁵⁵ ***, “The Turkish-Hungarian relations entered a more intensive phase”, in URL: <http://kdnf.hu/roviden/intenzivebb-szakaszba-leptek-magyar-torok-kapcsolatok>, accessed on 10.09.2020.



look at the excavation place in the news and the reports, or even in person. Since then, the big question is: What is the next step? For the Hungarian government, media and local leadership, it was a great archeological and scientific success to find the tomb, as seen above. For the Turkish government department and media, there was also great happiness about the discovery, but TIKA had previously stated that they wanted to find the location and rebuild the tomb. At the beginning of the project, TIKA had promised €50.000⁵⁶ for the research of the grave alone, but until 2019, Turkey had actually spent €200.000 through its department.⁵⁷

Regarding the future, before the group found Suleiman's tomb in Szigetvár, Günhan Börekçi, a professor at the University of Istanbul previously stated: "For Muslim Turks, such a discovery would mean so much. Suleiman is considered one of the greatest caliphs in Islamic history; thus, they would consider his tomb another pilgrimage site. You should see how many people Suleiman's mausoleum in Istanbul today."⁵⁸

6. Historical Background of Suleiman Mosque in Szigetvár

Definition, description of the word "mosque"

The first gathering place for Islam was in Muhammad's house, in Medina. After that, Muslims built houses to pray, these are the mosques. About three hundred years after Muhammad had left Mecca (in Islam it is called Hijrah after the 4th century), two types of mosques are distinguished. One where they can pray but they cannot hold a Friday congregational prayer, the other is where a Friday sermon can be delivered. This is the so called "masjid djami'", meaning, a "Friday Mosque".⁵⁹ During the history of Islam, these mosques were more decorative, monumental and prestigious. But the function was the most important: Muslims can only pray the *khutbah* ("the Friday prayer") in these mosques. The *khutbah* had an important role in the Muslim world and during the Ottoman Empire, they included the name of the emperor to express their loyalty. But in a newly conquered territory, like Hungary, this prayer had a symbolic meaning: this land, this city becomes part of

⁵⁶ Péter Visnovitz, "A race is about to start for the heart of the great sultan", in URL: <https://www.origo.hu/itthon/20121128-torok-penzbol-keresik-szigetvaron-szulejman-sirjat.html>, accessed on 10.09.2020.

⁵⁷ Norbert Pap, "The Pilgrimage Town (Türbe Kasabası) of Sultan Süleyman at Szigetvár", 2019, in *Brill*, URL: <https://brill.com/view/book/edcoll/9789004396234/BP000028.xml>, accessed on 10.09.2020.

⁵⁸ Roff Smith, "After 450 Years, Archaeologists Still Hunting for Magnificent Sultan's Heart", URL: <http://news.nationalgeographic.com/news/2014/06/140620-ottoman-empire-suleyman-hungary-turkey-sultans-heart/>, accessed on 10.09.2020.

⁵⁹ József Molnár, *The Art of Islam*, D. Egyed Publishing House, Budapest, 1959, p. 4.



the Muslim World, part of the “dar al-Islam”.⁶⁰ During the Ottoman conquest, it was often emphasized that the territories would also be conquered for Islam, and it was necessary to hold a Friday sermon on the newly conquered land, because the territory could only become part of the dar al-Islam if the *khutbah* was prayed there in a Friday mosque.⁶¹ Thus, the Ottomans always built a Friday Mosque after a successful siege, or they reorganized a Christian church to become a Friday Mosque, so *khutbah* could be prayed. It was part of the conquest, but it was also a duty for the Muslims, because after the event, this place could never fall into the hands of infidels.⁶²

The Ottoman period – the original function of the building

This mosque was built right after the siege of Szigetvár in 1566, and it was the first mosque in this newly conquered territory. Grand vizier Sokollu Mehmed ordered the construction of a Friday Mosque in Suleiman’s name, and because almost nobody knew that Suleiman was already dead, this mosque was believed to be founded by Suleiman himself, and it was named after the sultan. During the Ottoman Occupation of this region (1566-1689), it was used for Muslim gatherings, prayers, sermons. Because Suleiman was revered as a “ghazi” warrior of faith and a martyr, this mosque also became a place for pilgrimage. It had a great minaret and was always crowded, according to Evliya Celebi.

Why was it built? Message and symbolism of Suleiman’s mosque

This Friday Mosque was ordered to be built in Szigetvár so the *khutbah* could be prayed in Szigetvár as soon as possible. This gives importance to the mosque: in Szigetvár this mosque was the place where Ottomans first prayed the “Friday Prayer”, which means, as we have learned above: it was there that the Ottomans proclaimed that Szigetvár and this region were under Islamic rule. The Ottoman troops had organized a thanksgiving ceremony to Allah for the victory and the conquest of Szigetvár in this mosque.^{63,64}

What happened after the Ottoman Occupation?

After the Ottomans lost Szigetvár in 1689, the Habsburgs destroyed almost all the mosques, but the Mosque of Suleiman survived because it was within the castle walls of Szigetvár, and the Habsburgs wanted to use the building. The first royal

⁶⁰ Balázs Sudár, *op. cit.*, 2014, p. 45.

⁶¹ József Molnár, *The Art of Islam, op. cit.*, p. 5.

⁶² Balázs Sudár, *op. cit.*, 2014, p. 45.

⁶³ Béla Németh, *Szigetvár története. (History of Szigetvár.)* Pécs, 1903, p. 293.

⁶⁴ József Molnár, “Sultan Suleiman’s djami in Szigetvár”, in *Művészettörténeti Értesítő*, no.1/1976, pp. 90-94.



commander of the castle arranged his apartment in it, later it had several functions: a place for military equipment, a hospital, and even a chapel for Catholic soldiers. Meanwhile, the huge minaret of the former mosques had collapsed in a storm. Since the 18th century, Szigetvár and its castle has become the private property of Hungarian noble families, they used the former mosque as a storehouse for seeds. In 1920's the family Andrassy had renovated the castle, building new floors on top of the old buildings and adding new buildings to it. The former mosque became part of the new castle and was used by the family as a Knights' Hall. Because of the World War II, the Andrassy family had fled Szigetvár, and during the socialist regime the castle was used as a museum and apartment house. After excavation and the archeologists' research, in 1958, the former mosque became a certified historical monument and was used as an exhibition space for the castle.

7. The Restoration of the Mosque – Circumstances, Reasons and Future Plans

Since the 80's, the Turkish government was planning to build a Suleiman Memorial in this former mosque as the 500th birthday of Suleiman approached, but it was not a success. In the 2000's, the castle of Szigetvár was in real need of restoration but was faced with financial problems. In 2008, a Turkish organization, the "Magyarországi Iszlám Kulturális Egyesület" ("Hungarian Islam Cultural Association"), offered to renovate the entire building with its walls, build a Turkish education center and renovate the ancient minaret of the former mosque of Suleiman in the castle, in exchange for the right to make use of the castle. The plan was rejected. Before the 450th anniversary of Suleiman's death (2016), TIKA and the Mayor of Szigetvár had negotiated the "cultural heritage" of the Ottoman period in Szigetvár, and the Turkish Government Office had offered €2 million for the restoration of the Mosque of Suleiman.⁶⁵ From the beginning, TIKA classified this project as part of its Mosque Restoration Project, which aims at the "protection of cultural heritage of the Turkish Islam Civilization" "by restoring ancestral relic mosques in a number of countries"⁶⁶. They also mentioned that these mosques "are our cultural heritage". On its official website, TIKA stated that the objective is the "reconstruction of the Kanuni Sultan Süleyman Mosque located in the Zigetvar Castle according to its original state and reopening it for service"⁶⁷.

⁶⁵ ***, "They were looking for a turbe and found a city near Szigetvár – the 'holy city' of Suleiman", URL: <http://szigetvar.hu/var/szigetv%C3%A1r-h%C3%ADrad%C3%B3-9>, accessed on 10.09.2020.

⁶⁶ ***, "TIKA's Mosque Restoration Projects", URL: http://www.tika.gov.tr/en/news/tikas_mosque_restoration_projects-8601, accessed on 10.09.2020.

⁶⁷ ***, "TIKA's Mosque Restoration Projects", *op. cit.*



In 2012, TIKA's president, Serdar Cam told the Turkish newspaper *Hürriyet* that "the mosque would be open for worship"⁶⁸.

In the same year, the president of TIKA Hungary, Öztürk Mehmet told the press that the reopening of the Suleiman Mosque as place of worship would be truly symbolic because the Turks used to have many mosques in Hungary, but now (2012) there is no one there. He also added that there is a need for a mosque in Budapest.⁶⁹

The Turkish Government was planning to reconstruct the minaret of the mosque, which had collapsed in the 18th century. In 2015, Turkish Ambassador to Budapest, Fakil Sakir, and architect Özgür Sevim presented a plan of reconstruction of the minaret in the town hall of Szigetvár. They mentioned that many high-ranking Turkish politicians and Turkish tourists were coming to Szigetvár for the anniversary in 2016, and they would be disappointed to see the minaret in ruins.⁷⁰

The idea of restoring the mosque and the minaret and reopening it as a religious place provoked great sensation, debates, misunderstandings and resistance in the Hungarian media. On the Turkish official website and in the news was broadcasted the complete restoration and reopening of the old religious building, on the Hungarian side, this news was not clarified, but it was stated that the old Ottoman monuments should be protected and renovated. At the beginning of the cooperation with TIKA, the leadership of Szigetvár hoped that the joint project would promote the relationship between the two countries⁷¹ and bring economic benefits⁷², and on the Hungarian side, the hope for tourism growth played a major role.⁷³

In 2012, the mayor of Szigetvár stated: "There will be no functioning mosque here. (...) We only discussed the restoration of the mosque. Hungary is a Christian country, not a Muslim one, as we do not want to build a church in Turkey either". But he later added that if some Muslims wanted to pray there, a place would be provided for them to do so.⁷⁴ There was a symposium on the subject in Budapest,

⁶⁸ ***, "Sultan Süleyman Mosque to be restored in Hungary", URL: <http://www.hurriyetdailynews.com/sultan-suleyman-mosque-to-be-restored-in-hungary.aspx?pageID=238&nID=35243&NewsCatID=375>, accessed on 10.09.2020.

⁶⁹ Péter Visnovitz, *op. cit.*

⁷⁰ József Spirik, "Erdogan is coming, the Turks would build a minaret in Hungary", URL: https://index.hu/belfold/2016/01/20/jon_erdogan_minaretet_epitenenek_a_torokok_magyarorszagon/, accessed on 10.09.2020.

⁷¹ ***, "They were looking for a turbe what they found was a city near Szigetvár – the 'holy city' of Suleiman", URL: <http://szigetvar.hu/var/szigetv%C3%A1r-h%C3%ADrad%C3%B3-9>, accessed on 10.09.2020.

⁷² Endre B. Mészáros, "A Turkish center downtown?", in *Új Dunántúli Napló*, 02.07.2013, p. 3.

⁷³ ***, "The heart of Suleiman can lure Turkish tourists to Szigetvár", URL: http://turizmusonline.hu/cikk/torok_turistakat_csalhat_szigetvarra_szelejman_szive, accessed on 10.09.2020.

⁷⁴ Péter Visnovitz, *op. cit.*



entitled “Should a minaret be built in Szigetvár?” Members of the Zrínyi Memorial Year Committee and renowned scholars answered the questions of the public about the issue. At this event, László L. Simon, Parliamentary Secretary General of the Prime Minister’s Office and Deputy State Secretary for Cultural Heritage Protection and Significant Cultural Investment, stated that the Hungarian government did not want to convert Szigetvár into an Islamic pilgrimage site, and did not want to rebuild the old minaret.⁷⁵

It was clear: the Hungarian perspective and the Turkish perspective for the future of the old mosque were different and no agreement was reached.

TIKA began collaborating with an architectural studio and created 3D representations of the restored mosque, even the modern minaret, which later was deleted from their website. Since then, a number of 3D show were exhibited in the castle, demonstrating the restoration of the mosque in various decorations and architectural design.⁷⁶

Visiting the town hall of Szigetvár, Turkey’s Ambassador Fakir Sakir said in 2015 that the the restauration of the minaret in Szigetvár will be a “non-religious building”, it will simply be used for tourism purposes together with in the castle. “There are no Muslims in the area, so you do not have to worry about changing the function of the minaret and mosque”⁷⁷. On the other hand, as seen before, TIKA, the Turkish Government Office stated that they want to reopen the mosque for service and worship, and this was made public in the Turkish media. It is becoming customary for Turkish diplomats and politicians to go to Szigetvár in the castle and pray in the room that used to be the Suleiman mosque⁷⁸. Nowadays there is also “a religious tourism” and Turkish groups or other Muslim guests visit the castle to pray in the room which was formerly the mosque, and there is always a prayer rug in case of need.⁷⁹

8. Ottoman Monuments and Cultural Heritage

As already seen, TIKA uses the words *heritage* and *cultural heritage* to describe Suleiman’s Tomb the Mosque. The concept of *cultural heritage* has been approached by various scholars in academic literature, but there are a few aspects

⁷⁵ Jordán Petrócz, “Should there be a minaret in Szigetvár?”, URL: https://www.hetek.hu/hatter/201603/legyen_e_szigetvaron_minaret_, accessed on 10.09.2020.

⁷⁶ Péter Koch, “Zrínyi-fortress and djami of Szigetvár”, URL: http://epiteszforum.hu/a-szigetvari-zrinyi-var-es-dzsami_, accessed on 10.09.2020.

⁷⁷ József Spirik, *op. cit.*

⁷⁸ István Vas, “Szigetvár 1966-2002”, in *Szigetvár története*, Bösze Sándor; Ravazdi László; Szita László, Szigetvár, 2006, p. 415.

⁷⁹ ***, “Will there not be a functioning mosque in Szigetvár?”, in *Mosques of the World*, URL: <http://vilagmecsetei.blogspot.com/2012/11/>, accessed on 10.09.2020.



we consider worthy of mention in order to better understand the concept of cultural heritage in connection with the two monuments we are analysing:

- Alois Riegl, who wrote the first systematic analysis of heritage values, argues that a religious building always has a “present value” because the building is connected to a god. And if that god’s religion still exists, then the good condition of that building serves the interest of that religion. As he dealt with this issue, he found, that from a secular point of view, a certain monument is a historical monument and a memory of the past, but from a religious point of view it can be a sacred place that can be used in the present as well.⁸⁰

- Designating something as a heritage is a good tool for creating an identity.⁸¹ Cultural heritage allows people to determine where they come from and where they belong.⁸²

- The designation of something as a *cultural heritage* reflects the past in order to align it with actual goals.⁸³ The concept of *cultural heritage* highlights elements of the past that can be used in the present. So, the concept of *cultural heritage* can be a tool of politics or business.

As mentioned earlier, TİKA has an extensive and a well-funded mosque restoration project “in the countries that were part of the Ottoman Empire”⁸⁴. According to the official website of this Turkish governmental department, the restoration of ancient mosques in the former territories of the Empire is aimed at “protecting the cultural heritage of the Turkish Islam Civilization”.⁸⁵ This aim represents the cultural policy of the AKP-led Turkey, which is more concerned with the Ottoman past, the religion of Islam and the restoration of the imperial status than the previous Turkish governments. Ahmet Davutoglu stated in his book “Strategic Depth” that Turkey could be a key actor in the region and in the world by exploiting its Ottoman heritage.⁸⁶ Davutoglu, an important politician of the Recep Tayyip Erdoğan period, once Erdoğan’s chief adviser and later Minister of Foreign Affairs and Prime Minister of Turkey and leader of the AKP, influenced Turkey’s current cultural policy and his idea in his book shows that Ottoman religious buildings are interpreted as imperial heritage.

⁸⁰ Alois Riegl, *Art History and Theory*, Budapest, 1998, p. 40.

⁸¹ Péter Erdősi, Gábor Sonkoly, “Introduction”, in *The cultural heritage*, Budapest, 2004, p. 10.

⁸² David Lowenthal, “Purpose of heritage”, in *The cultural heritage*, (Editors) Péter Erdősi, Gábor Sonkoly Gábor, Budapest, 2004.

⁸³ David Lowenthal, *op. cit.*

⁸⁴ ***, “TİKA Has Restored More Than 50 Mosques in the Past 5 Years”, URL: https://www.tika.gov.tr/en/news/tika_has_restored_more_than_50_mosques_in_the_past_5_years-53824, accessed on 08.10.2020.

⁸⁵ ***, “TİKA’s Mosque Restoration Projects”, *op. cit.*

⁸⁶ Yanarocak, H. E. C., “The empire strikes back”, URL: <http://www.jpost.com/Opinion/Op-EdContributors/Article.aspx?id=286618>, accessed 09.10.2020.



By investing in mosque restoration projects in former Ottoman territories in Africa, the Middle-East and Europe, Turkey is showing its commitment to the Muslim believers living there, but also “channeling its imperial past, to assert its status as a regional power as well as the ideological and cultural leader of the Muslim world.”⁸⁷

Some Europeans fear that Turkey’s increasing cultural activity in the Balkans is “signalling a renewed desire for regional hegemony”, but what is certain is that Turkey „would like to be taken seriously in the region, and it retains its interest in the protection of Muslims there.”⁸⁸ In the Balkans, TIKA has also nurtured relations with Muslim organisations, and the restoration of former Ottoman mosques in general represents “symbolic projects”⁸⁹. Building mosques was also symbolic during the Ottoman conquest of European territories, when, for example, Suleiman the Magnificent put emphasis on converting many churches into mosques and building spectacular mosques right after his soldiers conquered a new land. The symbolic communication continued when European troops recaptured land from the Ottomans, destroyed most mosques or converted them back into churches. And this kind of symbolic battle took place in many parts of the world, in Algeria, Cyprus, Egypt, or Spain.⁹⁰

Conclusions

For the AKP government led by President Erdogan, Ottoman history and memory have become an important topic in Turkish public sphere, political discourse, and cultural policy, and some call it “neo-Ottomanism”⁹¹. Suleiman’s Tomb and Mosque in Szigetvár are closely connected with the Ottoman Empire, its greatest ruler Suleiman, and his religion, Islam. These monuments are considered a *common heritage* with Hungary, but the Turkish governmental department, TIKA,

⁸⁷ Pitamber Kaushik, “In Pakistan’s eyes Turkey leads Islamic world”, URL: <https://asiatimes.com/2020/09/in-pakistans-eyes-turkey-leads-islamic-world/>, accessed on 09.10.2020.

⁸⁸ Asli Aydıntaşbaş, “From myth to reality: How to understand Turkey’s role in the Western Balkans”, in European Council on Foreign Relations, URL: https://www.ecfr.eu/publications/summary/from_myth_to_reality_how_to_understand_turkeys_role_in_the_western_balkans, accessed on 09.10.2020.

⁸⁹ Kerem Öktem, “Global Diyanet and Multiple Networks: Turkey’s New Presence in the Balkans”, in *Journal of Muslims in Europe*, 1, 2012, p. 37.

⁹⁰ ***, “Church vs. Mosque: a history of medieval-era religious conflicts.. and nothing has changed”, URL: <https://north-africa.com/2020/07/church-vs-mosque-a-history-of-medieval-era-religious-conflicts-and-nothing-has-changed/>, accessed on 09.10.2020.

⁹¹ Esra Arsan, Yasemin Yıldırım, “Reflections of neo-Ottomanistdiscourse in Turkish news media: The Case of The Magnificent Century”, in *Journal of Applied Journalism & Media Studies*, no. 3, vol. 3, 2014, p. 315.



also considers them a “*cultural heritage* of the Turkish Islamic Civilization”.

It can be noticed that the AKP-led Turkey is strengthening ties with former parts of the Ottoman Empire by investing in the rebuilding of significant institutions and restoring Ottoman monuments. At the same time, by restoring old mosques and tombs it seeks to strengthen its position in the Muslim world. With such projects, Turkey not only helps to maintain old buildings, but often also seeks to promote religious activity in the region. These projects can be successful in many ways: 1. a historical site becomes accessible; 2. if the building is in a Muslim neighbourhood, believers can use it immediately; 3. if there is no immediate need for Muslim gatherings, a beautifully restored Ottoman mosque or tomb provides an opportunity to organize religious events in the future.

We have seen that when a former religious building is designated as a cultural heritage, the original function can be restored if the religion for which it was built still exists. We could observe that Turkey aims to restore these buildings and put them back to use. Examples of this process can be found in the Balkans, Africa, the Middle-East, where TIKA not only renovated old mosques but reopened them for Muslim prayers.

This article examined the case of the restoration of two Ottoman monuments in Szigetvár, Hungary, and sought to find out whether they were symbolic in order to understand better why the Turkish government is investing money in a remote small town in Hungary.

The tomb of Suleiman represents a memorial of the greatest sultan of Ottoman Empire, a memorial of a martyr of Islam, a pilgrimage complex visited by thousands of people. It was a place where Muslims could share in the light of the saint of Islam, a place where warriors against Hungary and the Habsburgs have strengthened their courage. It was a political message to the Hungarians and the Habsburgs that the region belonged to the sultan, a message that the region belonged to “*dar al-Islam*”, territory of Islam.

As for Suleiman’s Mosque, it was the first mosque after the conquest, it was used for 123 years for Islamic prayers and sermons; it is the place where the Ottomans could pray for the first time the *khutbah*, the Friday prayer, and proclaim that Szigetvár is part of “*dar al-Islam*”; and also a place of pilgrimage of Suleiman, the great caliph and martyr of Islam.

We could also see the duality of the official Turkish and the Hungarian perspectives on these buildings. While the Hungarian government wants to find the original location of the tomb and allow the public to see the ruins, the Turkish government aims at rebuilding the tomb, creating an opportunity to be a place of pilgrimage again. While during the Turkish-Hungarian dialogue these buildings are mentioned as a common heritage with Hungary, which is the basis of cooperation in the restoration, in the Turkish media and on TIKA’s official website, these



old monuments are listed as “our heritage” and “the heritage of Turkish-Islamic civilization”. This reflects Ahmet Davutoglu’s position that Turkey is exploiting its Ottoman heritage to gain a prominent position in the region and in the world.

This makes Turkey’s mosque projects special in Europe: When Turkey restore an Islamic building in Hungary, Albania, Kosovo, Bosnia-Herzegovina, Montenegro and North Macedonia the project has historical roots, because the Turkish government activates itself in a place, where former leaders of Turkey, the sultans already built mosques and there were already Islamic rule over the regions throughout history. And for the Ottomans the Conquest of Western countries was seen as conquest for Islam, and every Islamic religious building was important for the believers to gather but also served as a markerpoint showing the victory and power of Islam in the region. Suleiman the Magnificent, Ottoman Empire’s greatest conqueror toward West and also every Ottoman ruler conquering lands in Europe, always built mosques to mark the new borders the Empire and of Islam, the official religion of the Empire. Thus, by restoring ancient religious buildings in former Ottoman regions of Europe, it can be seen as restoring ancient symbolism in that region.

It can be understood in the mosque projects all round the former Ottoman Empire’s territory, that symbolic is not marginal in TIKa’s projects. Turkey restored buildings which background is strongly connected to Ottoman past or/and has a value among Muslim believers in the World. For example:

- in Ethiopia, the Tomb of King Najashi, who was the first to welcome Muslim immigrants after Hijrah;
- in Iraq, the Sheikh Abdul Qadir Gilani Complex which was built by Mimar Sinan, the prestigious architect of Suleiman the Magnificent, during the Golden Age of the Ottoman Empire;
- in Kosovo, the mosque of Sinan Paşa, governor of the Ottoman Empire in Bosnia;
- in Bosnia and Herzegovina, the Maglaj Kurşunlu Mosque, a good example of the Ottoman architecture, and the Fatih Sultan Mehmet Mosque, built by Bosnia’s first Ottoman governor;
- in Skopje, North Macedonia, the Mosque of Mustafa Paşa, a vizier of Sultan Selim;
- in Budapest, Hungary the Tomb of Gül Baba, a martyr of the conquest the northernmost Christian capital, where his tomb became the northernmost Muslim pilgrimage site.

Looking at these examples, the symbolic of Suleiman’s Tomb and Mosque, in Szigetvár, should not be ignored, and should be taken into consideration in connection with the restoration projects and plans. Mosques and tombs are always prestigious buildings and always represent the religion of Islam in that place.

The construction or the restoration of a mosque has never been an insignificant construction, it has always had a symbolic message, especially in Europe.

BIBLIOGRAPHY:

1. ***, “Church vs. Mosque: a history of medieval-era religious conflicts.. and nothing has changed”, URL: <https://north-africa.com/2020/07/church-vs-mosque-a-history-of-medieval-era-religious-conflicts-and-nothing-has-changed/>
2. ***, “Sultan Süleyman Mosque to be restored in Hungary”, URL: http://www.hurriyetdailynews.com/sultan-suleyman-mosque-to-be-restored-inhungary.aspx?pag_eID=238&nID=35243&NewsCatID=375
3. ***, “The heart of Suleiman can lure Turkish tourists to Szigetvár”, in http://turizmusonline.hu/cikk/torok_turistakat_csalhat_szigetvarra_szulejman_szive
4. ***, “The Turkish guests were looking for business relations”, in *Új Dunántúli Napló*, 07.09.1994.
5. ***, “The Turkish-Hungarian relations entered a more intensive phase”, URL: <http://kdnp.hu/roviden/intenzivebb-szakaszba-leptek-magyar-torok-kapcsolatok>
6. ***, “They were looking for a turbe what they found was a city near Szigetvár – the ‘holy city’ of Suleiman”, URL: <http://szigetvar.hu/var/szigetv%C3%A1rh%C3%ADrad%C3%B3-9>
7. ***, “TIKA Builds New Connections Between Turkey and Hungary”, URL: http://www.tika.gov.tr/en/news/tika_builds_new_connections_between_turkey_and_hungary-8549
8. ***, “TIKA Has Restored More Than 50 Mosques in the Past 5 Years”, URL: https://www.tika.gov.tr/en/news/tika_has_restored_more_than_50_mosques_in_the_past_5_years-53824
9. ***, “TIKA’s Mosque Restoration Projects”, URL: http://www.tika.gov.tr/en/news/tikas_mosque_restoration_projects-8601
10. ***, “Turkey’s charismatic pro-Islamic leader”, URL: <http://news.bbc.co.uk/2/hi/europe/2270642.stm>
11. ÁGOSTON, Gábor; SUDÁR, Balázs, *Gul Baba and the Bektashi dervishes of Hungary*, Budapest, 2002.
12. ARSAN, Esra ; YILDIRIM, Yasemin , “Reflections of neo-Ottomanist discourse in Turkish news media: The case of The Magnificent Century”, in *Journal of Applied Journalism & Media Studies*, no. 3, vol. 3, 2014.
13. AYDINTAŞBAŞ, Asli, “From myth to reality: How to understand Turkey’s role in the Western Balkans”, in European Council on Foreign Relations, URL: https://www.ecfr.eu/publications/summary/from_myth_to_reality_how_to_understand_turkeys_role_in_the_western_balkans



14. BUDINA, Sámuel, *The story by Samuel Budina in Hungarian in Latin about the siege of Szigetvár in 1566*, Szigetvár, 1978.
15. ÇELEBI, Evliya, *Journey of Turkish world traveler Evliya Çelebi in Hungary. II. 1664-1666*, (translated: Imre Karácson), Budapest, 1908.
16. ELCIL, Fatih, "Ottoman graves and graveyards – selected examples", in *Memory of sultan Suleiman in Szigetvár, Mediterrán és Balkáni Fórum*, special edition, 2014.
17. ERDŐSI, Péter; SONKOLY, Gábor, "Introduction", in *The cultural heritage*, Budapest, 2004.
18. ESTERHÁZY, Pál, *Mars Hungaricus*, Budapest, 1989.
19. GERŐ, Győző, *Ottoman-Turkish architecture in Hungary - djami, turbe, bath*, Budapest, 1980.
20. HANCZ, Erika, "Tent of Suleiman the Great near Szigetvár, his death and his tomb in documented ottoman references", in *Memory of sultan Suleiman in Szigetvár, Mediterrán és Balkáni Fórum*, special edition, 2014.
21. HORVÁTH, László; VARGA, Zoltán, "Ellenségből Barátok" ("The ennemy became friend"), in *Varak, kastélyok, templomok*, no. 4, 2010.
22. KAUSHIK, Pitamber, "In Pakistan's eyes Turkey leads Islamic world", URL: <https://asiatimes.com/2020/09/in-pakistans-eyes-turkey-leads-islamic-world/>
23. KOCH, Péter, "Zrínyi-fortress and djami of Szigetvár", URL: <http://epiteszforum.hu/a-szigetvari-zrinyi-var-es-dzsami>
24. KOVÁTS, Valéria, "Historical popular traditions of Szigetvár II", in *Janus Pannonius Múzeum Évkönyve 1962*, Pécs, 1963.
25. LOWENTHAL, David, "Purpose of heritage", in *The Cultural Heritage*, (Editors:) Péter Erdősi; Gábor Sonkoly Gábor, Budapest, 2004.
26. MÉSZÁROS, B. Endre, "A Turkish center downtown?", in *Új Dunántúli Napló*, 02.07.2013.
27. MOLNÁR, József, "Sultan Suleiman's djami in Szigetvár", in *Művészettörténeti Értesítő*, no.1, 1976.
28. MOLNÁR, József, "Sultan Suleiman's tomb in Turbek", in *Művészettörténeti értesítő*, no. 1, 1965.
29. MOLNÁR, József, *Turkish monuments of Szigetvár*, Budapest, 1958.
30. MOLNÁR, József; EGYED, D., (Editors) *The Art of Islam*, Budapest, 1959.
31. MURINSON, Alexander, "The Strategic Depth Doctrine of Turkish Foreign Policy", *Middle Eastern Studies*, vol. 42, no. 6, 2006, URL: www.jstor.org/stable/4284512
32. NÉMETH, Béla, *History of Szigetvár*, Pécs, 1903.
33. ÖKTEM, Kerem, "Global Diyanet and Multiple Networks: Turkey's New Presence in the Balkans", in *Journal of Muslims in Europe*, no.1, 2012.



34. ÖZTÜRK, Mehmet Cemal, “The tekke and the work of Nureddinzâde Mustafa Muslîhuddîn, Sheikh to Mehmed Pasha Sokolović”, URL: <http://pof.ois.unsa.ba/index.php/pof/article/view/853>

35. PAP, Norbert, “Frameworks of the Suleiman research, the most important findings of 2013”, in *Memory of Suleiman in Szigetvár, Mediterrán és Balkáni Fórum*, special edition, 2014.

36. PAP, Norbert, “Islam versus Christianity – symbolic occupancy in Szigetvár”, in *Szulejmán szultán Szigetváron*, Norbert Pap, Pál Fodor (Editors), Pécs, 2017.

37. PAP, Norbert, “The Pilgrimage Town (Türbe Kasabası) of Sultan Süleyman at Szigetvár”, in *Brill*, 2019, URL: <https://brill.com/view/book/edcoll/9789004396234/BP000028.xml>

38. PETRŐCZ, Jordán, “Should there be a minaret in Szigetvár?”, URL: https://www.hetek.hu/hatter/201603/legyen_e_szigetvaron_minaret

39. PINTÉR, Attila, “Foreign policy of Turkey at the beginning of the 21th century – neo-ottoman or redefined?”, in *Külügyi Szemle*, Spring 2013.

40. RIEGL, Alois, *Art History and Theory*, Budapest, 1998.

41. SMITH, Roff, “After 450 Years, Archaeologists Still Hunting for Magnificent Sultan’s Heart”, URL: <http://news.nationalgeographic.com/news/2014/06/140620-ottoman-empire-suleyman-hungary-turkey-sultans-heart/>

42. SPIRIK, József, “Erdogan is coming, the Turks would build a minaret in Hungary”, URL: https://index.hu/belfold/2016/01/20/jon_erdogan_minaretet_epitenenek_a_torokok_magyarorszagon/

43. SUDÁR, Balázs, “Places of worship, monasteries, tomb chapels. Cultural institutions during the Turkish occupation – I. part”, *História*, no. 1, 2003.

44. SUDÁR, Balázs, *Djamis and mosques in Ottoman Hungary*, Budapest, 2014.

45. SUDÁR, Balázs, *The Idrisz Baba turbe of Pécs*, Budapest, 2013.

46. SZABÓ, Géza, “The place of death and the turbe of Sultan Suleiman in the history of Szigetvár and in the popular memory according to recent researches”, in *Ethnographia*, no. 3, 2014.

47. SZABÓ, Géza; KOVÁCS, Árpád; BARKÓCZY, Péter, “Tactics and military technology in the light of arhaeometallurgic analysis of cannons and bullets of Szigetvár”, in *Gesta*, 2013.

48. SZEGHALMY, Gyula, *Dunántúli Vármegyék*, 1937.

49. TAKÁTS, Sándor, *Drawings from the Turkish world*, vol. IV, Budapest, 1928.

50. THÚRY, József, *Turkish historians. I*, Budapest, 1893.

51. VAS, István, “Szigetvár 1966-2002”, in Sándor Bösze; László Ravazdi; László Szita (Editors), *History of Szigetvár*, Szigetvár, 2006.



52. VATIN, Nicolas, “A turbe where no one rests. Comments on the establishment and purpose of the tomb of Suleiman the Great in Szigetvár”, in *Keletkutatás*, Spring-Autumn, 2008.

53. VISNOVITZ, Péter, “A race is about to start for the heart of the great sultan”, URL: <https://www.origo.hu/itthon/20121128-torok-penzbol-keresik-szigetvaron-szulejman-sirjat.html>

54. WALKER, Joshua W, “Turkey’s Imperial Legacy: Understanding Contemporary Turkey through its Ottoman Past”, in *Perspectives on Global Development and Technology*, no. 2-3, 2009, URL: https://www.researchgate.net/publication/233690114_Turkey's_Imperial_Legacy_Understanding_Contemporary_Turkey_through_its_Ottoman_Past

55. YANAROCAK, Hay E.C., “The empire strikes back”, URL: [OpEd Contributors/Article.aspx?id=286618](http://OpEdContributors/Article.aspx?id=286618)



INFORMATION IN CYBERSPACE – ACTUALITY AND CHALLENGES

*Nicolae Costinel MAREȘI**

The information revolution produced by the accelerated development of communication infrastructure, the emergence of online social networks, the way information sought is distributed on the Internet require a thorough information analysis in cyberspace.

The fact that an enormous amount of information is stored in cyberspace and operates both military and civilian personnel are just some of the reasons why cyberspace has become a medium for the deployment of hybrid conflicts.

A possible hostile force exploits the vulnerabilities of the human psyche in the context of its membership in a social group. In cyberspace information can be “corrupted” intentionally at the time of its dissemination by giving it new valences, but also through cyberattacks.

A more elegant form by which information can serve obscure interests is by making it redundant.

These current challenges can have solutions from the simplest to the most technical.

Keywords: *cyberspace; pseudo-information; cognitive bias; post-truth era; redundancy; filter bubble; artificial intelligence.*

1. Cyberspace between the Public Domain and the Operational Environment

According to Romania’s current cybersecurity strategy, cyberspace is *the virtual environment generated by cyber infrastructures, including information content*

*** Lieutenant Nicolae Costinel MAREȘI is PhD student in the field of Military Science within “Carol I” National Defence University, Bucharest, Romania. E-mail: maresicostinel@gmail.com**

*processed, stored or transmitted, as well as the actions carried out by users in it.*¹

Broadly, cyberspace is the collection of computer devices connected through networks where electronic information is stored and used and communication takes place. In the doctrinal document cited, the U.S. Air Forces define cyberspace as *a global domain within the information environment of the interdependent network of information technology infrastructures, including the Internet, telecommunications networks, computer systems and built-in processors and controllers.*²

In Figure no.1 the three-dimensional specificity of cyberspace is presented.

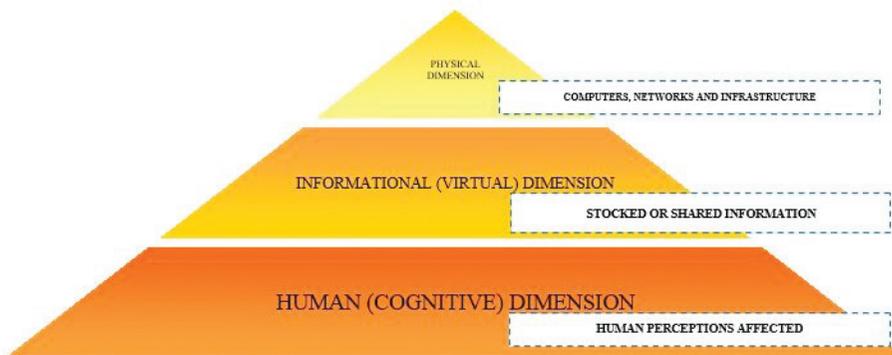


Figure no. 1: The three dimensions of cyberspace³

Cyberspace has become what it is today thanks to the U.S. Department of Defense (DoD), which established Advanced Research Projects Agency (ARPA) for the promotion and development of advanced military technologies, and promoted early research for the creation of a computer network⁴. In 1969, ARPA's research activity led to the creation of the Internet, with the invention of the first computer network, called ARPANET, composed of several networked computers. These were computers from universities, military and government institutions and could transmit bits of information to each other.

The Internet started as a military project and was then passed on to the civilian population. It is today the bulk of cyberspace, becoming *a network of networks*,

¹ Government of Romania, *Law No. 271 of 15 May 2013 for the approval of the Romanian Cybersecurity Strategy and the National Action Plan on the Implementation of the National Cybersecurity System*, Annex No.1, Chapter II. I, point 3.

² ***, "What is cyberspace? Examining its components", in *Pathfinder – Air Power Development Bulletin*, Issue 153, april 2011, URL: http://airpower.airforce.gov.au/APDC/media/PDF-Files/Pathfinder/PF153-What-is-Cyberspace_-Examining-its-Components.pdf, accessed on 25.06.2020.

³ Antonia Colibasanu, "Nation-States in the Digital World", URL: <http://www.colibasanu.ro/features/nation-states-in-the-digital-world/>, accessed on 26.06.2020.

⁴ Gabriela Grosseck, "INTERNET – istoric, evoluție, perspectivă", URL: http://consilr.info.uaic.ro/uploads_t4el/resources/pdffromInternet_evoluție_perspectivă.pdf, pp. 4–6, accessed on 31.05.2020.

a global network that is created by connecting smaller networks of computers and servers.⁵ This is the main source of information for the general public. Today, people communicate on the internet, they have stored banking information, they have personal data being functionally dependent on the use of internet.

In recent years, many states have recognized cyberspace as a confrontational space and operational area, along with terrestrial, aerial and aquatic environments. In 2016, at the Warsaw summit, NATO took the same step. Cyberspace is the only artificial confrontational environment because it is man-made and cannot exist in the absence of man.

Military operations in cyberspace are defined as *such as planning and synchronizing activities in and through cyberspace, with the aim of facilitating freedom of maneuver and the achievement of military objectives* or as *using cyber capabilities to achieve objectives in or through cyberspace*.⁶

Cyber vulnerabilities of military capabilities, interconnected or not with other systems or networks, once exploited by the adversary, allow major damage (changing the trajectory of a missile, blocking a command and control system, disabling sensors or an early warning system etc.).

Forces hostile to Romania's interests, as determined by Romania's cybersecurity strategy, which generates threats in cyberspace are presented in Figure no. 2.

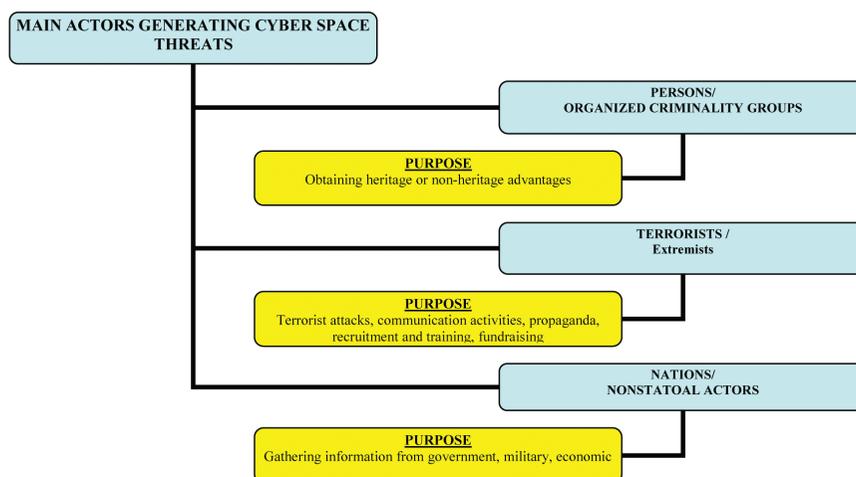


Figure no. 2: The main actors that generate threats in cyberspace and their purposes

⁵ ***, "The Difference Between Cyberspace & The Internet", in *Cyber Security Intelligence*, URL: <https://www.cybersecurityintelligence.com/blog/the-difference-between-cyberspace-and-the-internet-2412.html>, accessed on 25.06.2020.

⁶ Dumitrescu Bogdan, "Operaționalizarea spațiului cibernetic – de la securitate cibernetică la succes operațional –", *Gândirea militară românească*, no. 1/2019, URL: <https://gmr.mapn.ro/app/webroot/fileslib/upload/files/arhiva%20reviste/gmr%201%202019/dumitrescu.pdf>, accessed on 06.04.2020.

Because the internet is the most extensive domain of cyberspace, it becomes the most significant for this article.

2. Pseudo-Information, Redundancy and Attacks in Cyberspace

Possible hostile intentions of a hybrid aggressor to adverse information security can range from pseudo-information manipulation, the creation of informational redundancy in cyberspace to cyberattacks, which will mostly affect critical infrastructure.

According to official statistics provided by the National Statistical Institute, which is the main producer of official state statistical data, based on the most recent data to date, the number of people, in Romania, aged 16-74 years, who have ever accessed the Internet in 2019 was 12,068,263 internet users, an increase of 7.03% compared to 2018. On the assumption that the population number in Romania is kept around 19 million inhabitants, it follows that 64% had or have Internet access.

In Figure no. 3 one can observe that Romanians use the Internet, a vast area of cyberspace, to socialize (participation in social networks 81.7% of the total), but also to access information from open sources on the Internet (54.9% of the total).

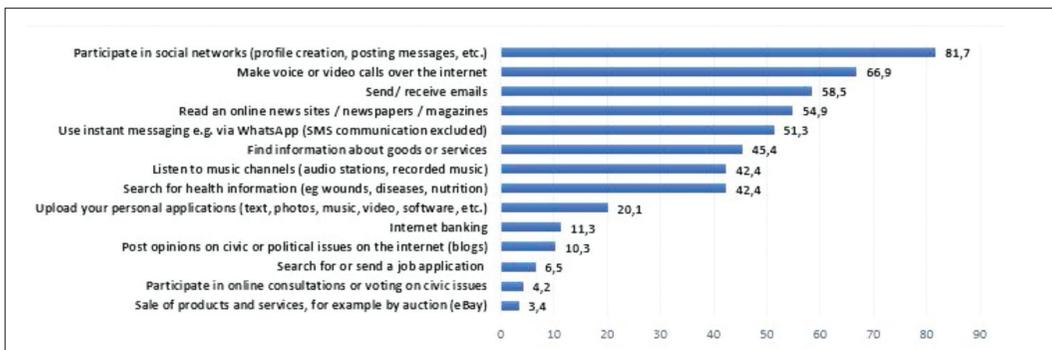


Figure no. 3: Chart representing the purposes of Internet use, in 2019, as a percentage of the total Romanian inhabitants connected to the Internet

Social media is not only the environment in which people communicate, but also the place where they join social groups (several subjects with common interests). Access to these groups is not restricted and so other participants (including militants of terrorist or military groups of hostile states) who have a hidden agenda (disinformation, manipulation, or other information operations) may join them.

When referring to groups, people are prone to thought errors (cognitive biases) that they would not have had if they were not part of them:

- **groupthink**, which has also become an important field of study in social

psychology. In short, this cognitive bias is when members of a homogeneous group following consensus make erroneous decisions polarizing individual judgments. Individuals in the group who had different opinions, out of a desire not to be excluded from the group, gradually succumb to the idea that the group is more informed (see Figure no. 4). It is said that this cognitive bias was the cause of controversial historical moments such as: the bombing of Pearl Harbor, the Vietnam War and Iraq⁷. Paraphrasing Friedrich Nietzsche, *among individuals, madness is a rarity: but in groups, parties, peoples, epochs it is a rule*.

- **group attribution error**, the tendency of people to believe either that the characteristics of each member of the group reflect the whole group or that the decision of a group reflects the preferences of the group members, even when the available information suggests otherwise⁸.

- **parochial altruism**, *systematic distortion of the empathic capacity that makes most of us more compassionately regarding the actions of individuals in our own group*⁹.

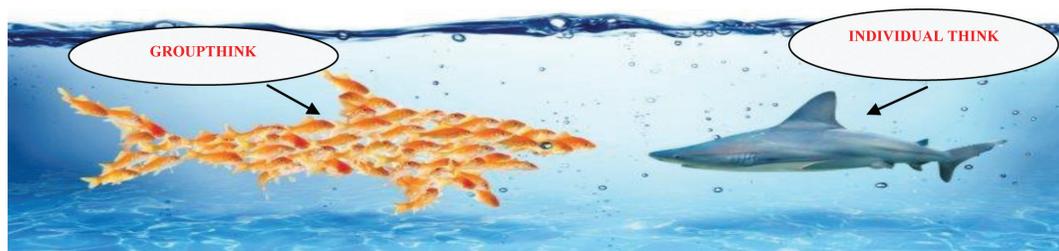


Figure no. 4: Illustration of group thinking and individual social group thinking created in cyberspace¹⁰

In groups people are easier to manipulate because they have more confidence in the members of the group they belong to, overestimating them and proving skepticism towards those who do not belong to the group. These biases of thought are part of our ancestral heritage, starting with the tribes' era. In term of simplicity

⁷ ***, "Groupthink | psychology", in *Encyclopedia Britannica*, URL: <https://www.britannica.com/science/groupthink>, accessed on 01.06.2020.

⁸ Scott T Allison, David M Messick, "The group attribution error", in *Journal of Experimental Social Psychology*, vol. 21, no. 6, 01.11.1985, URL: <http://www.sciencedirect.com/science/article/pii/0022103185900253>, accessed on 31.05.2020.

⁹ ***, "Altruismul – suntem programati sa fim buni. Si totusi...", *Descopera.ro*, URL: <https://www.descopera.ro/stiinta/4869070-altruismul-suntem-programati-sa-fim-buni-si-totusi>, accessed on 31.05.2020.

¹⁰ ***, "Echipa la lucru: de la 'gândirea de grup' la riscul de conflict", URL: <https://www.ziaruldeiasi.ro/stiri/echipa-la-lucru-de-la-a-gandirea-de-grupa-la-riscul-de-conflict--140290.html#>, accessed on 01.06.2020.



we can summarize that *contemporary tribalism can be the engine of disinformation* and that cognitive factors encountered in groups, such as the illusory effect of truth, superficiality in information processing, and limited ability to critically evaluate information can be important elements in the spread and acceptance of misinformation.¹¹

Disinformation or information influence is achieved by disseminating pseudo-information (*pseudo-* is a Greek prefix that means *false*). Some authors argue that pseudo-information *is false data entered into the system to obstruct its activities; partially presented truths are also part of the pseudo-information category*¹². A change to the above could be that pseudo-information is not just data and can be disseminated without hostile intent. By reference to truth, pseudo-information is opposed to information, as science and pseudo-science are positioned.

Pseudo-information is closely related to the emergence of man, the development of language and best describe the current *post-truth era*. Pseudo-information can easily become post-truths. According to Francis Fukuyama, an American sociologist, post-truths represent information that has no factual basis, which has been criticized as untrue, but nevertheless perceived by many people as being true¹³. *Post-truth refers to the circumstances in which objective facts influence people to a lesser extent than personal emotions and beliefs. The post-truth was declared the word of 2016 by the prestigious Oxford dictionary and became a fashionable word in politics and media.*¹⁴

As can be distinguished in Figure no. 5, a major role in the post-truth era is redundancy. By accessing analogous information from multiple sources, man comes to neglect the importance of a factual basis of information and accepts it as such.

¹¹ ***, “‘Conformation Bias’: Political Tribalism as a Driver of Disinformation”, *Power 3.0: Understanding Modern Authoritarian Influence*, URL: <https://www.power3point0.org/2019/01/15/conformation-bias-political-tribalism-as-a-driver-of-disinformation/>, accessed on 31.05.2020.

¹² Gheorghe Nicolaescu, Vasile Simileanu, *Restructurarea sistemelor informaționale*, National Defence University Publishing House, Bucharest, 2005, p. 17.

¹³ Francis Fukuyama, *The Post-Truth Society*, URL: <https://fsi.stanford.edu/news/post-truth-society>, accessed on 01.06.2020.

¹⁴ Andreea State, “Post-adevărul, o alegere a societății”, *Sinteza*, no. 39, p. 1, URL: https://www.academia.edu/37935675/Post-adevarul_o_alegere_a_societatii_Sinteza_nr_39_Andreea-Monica_State-%C8%98tirbu.pdf, accessed on 01.06.2020.

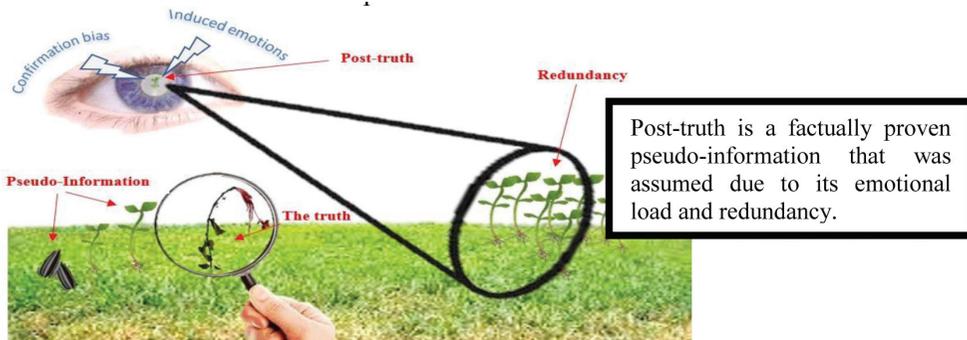


Figure no. 5: Illustration of pseudo-information-truth-post-truth relationship in cyberspace

The post-truth era is specific only to open societies, in which internet access is not restricted, because the internet has brought the possibility to immediately access a huge amount of information, often useless. The post-truth era exists only in redundant systems.

Redundancy means excess, unnecessary abundance that exceeds the need. For example, in the communication process, it is the information that can be redundant. Redundancy can also have positive aspects, but it is often the cause of dysfunctions that inevitably lead to the slowdown and even the blocking of the decision-making process (military, political or personal).

If we are to translate the effects of redundancy into John Boyd's OODA decision cycle model (Observation, Guidance, Decision and Action), it can be observed (Figure no. 6) that the observation segment is extended over time leading to a delay in taking an appropriate decision. A slower-executed OODA cycle is a disadvantage to a faster one.

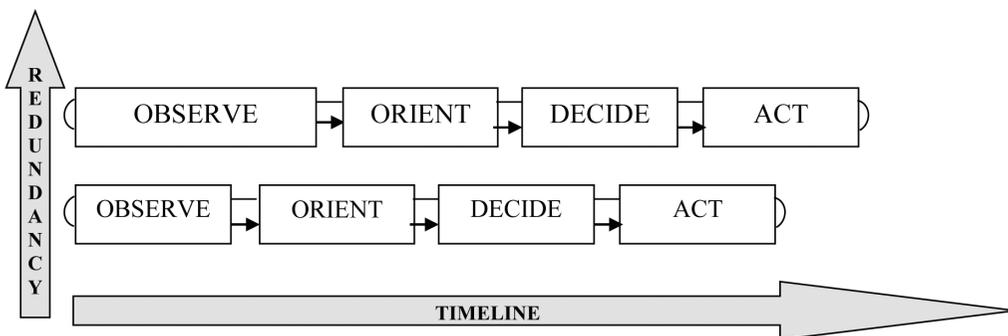


Figure no. 6: Implications of redundancy in the decision-making cycle (OODA model)

Moreover, the specialists of the Romanian Intelligence Service point out that when they draw attention to the fact that *the immediate availability of a huge and undifferentiated amount of information quickly invests ordinary users with pseudo-*



*expertise, paradoxically inhibiting their very exercise of critical thinking*¹⁵.

In terms of redundancy, the short time available for processing information does not allow the time so that all the information be filtered according to criteria of rightness: objective/subjective, true/false, from reliable sources/with suspicious origins, which is bringing with it new vulnerabilities.

To the population it can be transmitted redundant information, through social media, that influences it in the most efficient way, exploiting cognitive biases (anchoring bias, confirmation bias)¹⁶.

Redundancy in cyberspace is also a product of new technologies such as search algorithms that create phenomena called *echo chambers* or *filter bubbles*.

In 2017, in his closing speech to his second term as US President, former President Barack Obama declared: *for too many of us it is increasingly comfortable (sure) to retreat into our own bubbles...especially in our searches on social media. And we become so confident in our bubbles that we only begin to accept information, whether true or not, that fits our opinions, instead of basing our opinions on the evidence that exists.*¹⁷

As a concept, the filter bubble describes a person's situation online, when the search engine provides highly customized information content based on their browsing history, due to the search engine search algorithm used (EdgeRank, Hummingbird) and HTTP cookies. The more you search for a certain information, the more information you will be provided with in the same area of interest¹⁸.

In Figure no. 7 an example is given of a man who seeks information about peace, but the search engine gives him information only about the war, based on his previous searches about the war.

In 1994 Lou Montulli endowed the Internet with memory, with the invention of cookies. Cookies are those files created by a website on the terminal from which it was accessed that keeps the visitor's activity history and which can be accessed by the website when the user returns. Cookies have opened up a great vulnerability in terms of online privacy and there are many studies and court cases that have proven this¹⁹.

¹⁵ ***, "Propaganda de modă nouă", *Revista Intelligence*, URL: <https://intelligence.sri.ro/propaganda-de-moda-noua/>, accessed on 01.06.2020.

¹⁶ ***, "Bias-uri cognitive produse de excesul de informații", *Sinepsys*, URL: <https://sinepsys.ro/bias-uri-cognitive-produse-de-excesul-de-informatii/>, accessed on 01.06.2020.

¹⁷ ***, "Discursul de încheiere a mandatului al președintelui Barack Obama", *Time*, URL: <https://time.com/4631007/president-obama-farewell-speech-transcript/>, accessed on 02.06.2020.

¹⁸ ***, "Ești prins în bula ta de filtrare ?", URL: <https://coolerinsights.com/2014/06/are-you-trapped-in-your-bubble/>, accessed on 02.06.2020.

¹⁹ John Schwartz, "Înzestrarea internetului cu memorie a costat confidențialitatea utilizatorilor săi", *The New York Times*, 4 September 2001, URL: <https://www.nytimes.com/2001/09/04/business/giving-web-a-memory-cost-its-users-privacy.html>, accessed on 02.06.2020.



Figure no. 7: Illustration of the filter bubble phenomenon

In a logical string of ideas, the study does not stop only at documenting the important aspects of pseudo-information and information pollution (redundancy). Below are some aspects of the history of information security concerns in cyberspace in the context of cyberattacks.

Concern for information and knowledge security in cyberspace has a relatively recent history since the 1960s, when the International Federation for Information Processing (IFIP) was also established²⁰. IFIP, based in Laxenburg, Austria, currently brings together more than 3500 academic and industry scientists, organized into more than 101 working groups reporting to 13 technical committees. This organization's publications deal with areas such as information security management, digital forensics, critical infrastructure protection, data and application security, and so on.²¹

The history of the first virus (worm), which affected thousands of computers in the USA, in 1988, is related to the establishment of the first CERT (Computer Emergency Response Team). Since then, cyber threats have evolved and in turn have challenged the development of the cyber defense capabilities of entities operating in this dimension.

The concept of cyberattack is associated with cyber espionage operations, cyberwarfare, cybercrime, hacktivism and involves the use of elements/techniques

²⁰ Dumitru Oprea, "Protecția și securitatea sistemelor informaționale", 2017, pp. 8–9, URL: <http://www.feaa.uaic.ro/doc/12/ie/Securitatea%20sistemelor%20informationale.pdf>, accessed on 03.04.2020.

²¹ ***, "About IFIP*", *IFIP*, URL: http://www.ifip.org/index.php?option=com_content&task=view&id=124&Itemid=439, accessed on 07.03.2020.



such as: malware (worms, viruses, trojans), phishing, ransomware, denial of service, man in the middle, crypto jacking, sql injection, zero-day exploits, but not limited to the above²².

With regard to the many types of cyber defence, a reliable defence solution is predicted to be the artificial intelligence (AI).

Artificial intelligence is a niche area that deserves to be more researched and can provide timely solutions to the challenges of the future in terms of attacks on information security in cyberspace as well as information attacks. Arthur Victoria details some of the major advantages of using AI in cybersecurity:

- machine learning techniques (domain of computer science) on which AI is based can identify patterns, trends and anomalies in huge databases and quickly detect cyberattacks;
- a classic cyberattack detection (antivirus) system needs its database to be continuously updated manually, which means more costs. A cyberattack detection system with AI does not require so many updates because it develops new information from its databases;
- classic cyber defence systems are reactive, i.e. they must be attacked before threats can be stopped, so a first “victim” is required, while AI systems are proactive.
- compared to conventional cyber defense that uses cloud computing and requires an internet connection, systems that have built-in AI provide the same level of protection and independent information systems;
- AI protection systems have very low exposure to cognitive (human) biases common in classical methods²³.

Conclusions

To date, the most dangerous cyber-aggressors are the states, which do not publicly acknowledge these hostilities. Espionage and high-sophisticated sabotage in cyber-field will be claimed in the future by criminal networks, terrorists or even hackers.

The ability of a hybrid adversary to adapt to the context of the situation and to use both conventional and unconventional elements in a unique, surprising way requires full-spectrum information security, driven by solid exercises/simulations, taking into account the experience of past events (lessons learned) and based on the

²² Josh Fruhlinger, “What is a cyber attack? Recent examples show disturbing trends”, *CSO Online*, URL: <https://www.csoonline.com/article/3237324/what-is-a-cyber-attack-recent-examples-show-disturbing-trends.html>, accessed on 06.06.2020.

²³ Artur Victoria, *Apărare cibernetică și inteligență artificială*, 2019, https://www.researchgate.net/publication/333371302_Cyber_security_and_artificial_intelligence, accessed on 20.05.2020.



work of specialists in both IT and informational operations.

Efforts are being made, both globally and nationally, to adapt to new security challenges by establishing structures specializing in the planning and execution of operations in cyberspace and building a cybersecurity know-how hub that integrates the knowledge of large companies specializing in anti-malware software with public system specialists.

It is a personal believe that the cyber education campaigns of the target public for cyberattacks must be done more frequently, campaigns such as those initiated by CERT-RO: the awareness campaign against malware on mobile devices, the campaign to prevent cybercrime among young people, the campaign of awareness scams with false technical support.

Any person who operates in cyberspace can enter the sphere of influence of a cyber-aggressor by becoming a source of information and power for it.

It should not be overlooked that information has not reached its full potential in cyberspace. The real information revolution will be produced by 5G technology combined with cloud computing and new technology products that will use undetermined amounts of data and information. They will be the center of interest for scientific researchers, theorists and hybrid aggressors alike, because reality is carried out in a two-step approach, called problem-solution.

BIBLIOGRAPHY:

1. ***, “About IFIP*”, *IFIP*, URL: http://www.ifip.org/index.php?option=com_content&task=view&id=124&Itemid=439
2. ***, “Altruismul – suntem programati sa fim buni. Si totusi...”, *Descopera.ro*, URL: <https://www.descopera.ro/stiinta/4869070-altruismul-suntem-programati-sa-fim-buni-si-totusi>
3. ***, “Bias-uri cognitive produse de excesul de informații”, *Sinepsys*, URL: <https://sinepsys.ro/bias-uri-cognitive-produse-de-excesul-de-informatii/>
4. ***, “‘Conformation Bias’: Political Tribalism as a Driver of Disinformation”, *Power 3.0: Understanding Modern Authoritarian Influence*, URL: <https://www.power3point0.org/2019/01/15/conformation-bias-political-tribalism-as-a-driver-of-disinformation/>
5. ***, “Discursul de încheiere a mandantului al președintelui Barack Obama”, *Time*, URL: <https://time.com/4631007/president-obama-farewell-speech-transcript/>
6. ***, “Echipa la lucru: de la “gândirea de grup” la riscul de conflict”, URL: <https://www.ziaruldeiasi.ro/stiri/echipa-la-lucru-de-la-a-gandirea-de-grupa-la-riscul-de-conflict--140290.html#>
7. ***, “Ești prins în bula ta de filtrare?”, URL: <https://coolerinsights.com/2014/06/are-you-trapped-in-your-bubble/>



8. ***, “Groupthink | psychology”, in *Encyclopedia Britannica*, URL: <https://www.britannica.com/science/groupthink>
9. ***, “Propaganda de modă nouă”, *Revista Intelligence*, URL: <https://intelligence.sri.ro/propaganda-de-moda-noua/>
10. ***, “The Difference Between Cyberspace & The Internet”, in *Cyber Security Intelligence*, URL: <https://www.cybersecurityintelligence.com/blog/the-difference-between-cyberspace-and-the-internet-2412.html>
11. ***, “What is cyberspace? Examining its components”, in *Pathfinder – Air Power Development Bulletin*, Issue 153, april 2011, URL: http://airpower.airforce.gov.au/APDC/media/PDF-Files/Pathfinder/PF153-What-is-Cyberspace_-_Examining-its-Components.pdf
12. ***, Government of Romania, *Law No. 271 of 15 May 2013 for the approval of the Romanian Cybersecurity Strategy and the National Action Plan on the Implementation of the National Cybersecurity System*, Annex No.1, Chapter II. I, point 3.
13. ALLISON, Scott T.; MESSICK, David M., “The group attribution error”, in *Journal of Experimental Social Psychology*, vol. 21, no. 6, 01.11.1985, URL: <http://www.sciencedirect.com/science/article/pii/0022103185900253>
14. COLIBASANU, Antonia, “Nation-States in the Digital World”, URL: <http://www.colibasanu.ro/features/nation-states-in-the-digital-world/>
15. DUMITRESCU, Bogdan, “Operaționalizarea spațiului cibernetic – de la securitate cibernetică la succes operațional”, *Gândirea militară românească*, no. 1/2019, URL: <https://gmr.mapn.ro/app/webroot/fileslib/upload/files/arhiva%20reviste/gmr%201%202019/dumitr%20escu.pdf>
16. FRUHLINGER, Josh, “What is a cyber attack? Recent examples show disturbing trends”, *CSO Online*, URL: <https://www.csoonline.com/article/3237324/what-is-a-cyber-attack-recent-examples-show-disturbing-trends.html>
17. FUKUYAMA, Francis, *The Post-Truth Society*, URL: <https://fsi.stanford.edu/news/post-truth-society>
18. GROSSECK, Gabriela, “INTERNET – istoric, evoluție, perspectivă”, URL: http://consilr.info.uaic.ro/uploads_lt4el/resources/pdffromInternet_evolutie_perspective.pdf
19. NICOLAESCU, Gheorghe; SIMILEANU, Vasile, *Restructurarea sistemelor informaționale*, National Defence University Publishing House, Bucharest, 2005.
20. OPREA, Dumitru, “Protecția și securitatea sistemelor informaționale”, 2017, URL: <http://www.feaa.uaic.ro/doc/12/ie/Securitatea%20sistemelor%20informationale.pdf>
21. SCHWARTZ, John, “Înzestrarea internetului cu memorie a costat confidențialitatea utilizatorilor săi”, *The New York Times*, 4 September 2001, URL: <https://www.nytimes.com/2001/09/04/business/giving-web-a-memory-cost-its-users-privacy.html>



22. STATE, Andreea, “Post-adevărul, o alegere a societății”, *Sinteza*, no. 39, URL: https://www.academia.edu/37935675/Postadevarul_o_alegere_a_societatii_Sinteza_nr_39_Andreea-Monica_State-%C8%98tirbu.pdf

23. VICTORIA, Artur, *Apărare cibernetică și inteligență artificială*, 2019, https://www.researchgate.net/publication/333371302_Cyber_security_and_artificial_intelligence

ROMANIAN AIR FORCE – 16 YEARS SINCE NATO ACCESSION, COMPLYING WITH CURRENT CHALLENGES AND PREPARING THE FUTURE FORCE STRUCTURE



**Major-General Viorel PANĂ, PhD,
Chief of the Romanian Air Force**

❶ **Strategic Impact (SI):** Major-General Viorel Pană, you are the leader of a very important and long-range category of forces in the conduct of military actions, both in peacetime, in crisis situations and at war, the contribution of the Air Force being decisive and crucial in the modern operational space. In the context of the current situation caused by the COVID-19 pandemic, we know that the air transport units under your command – the C-27 J Spartan and C-130 Hercules aircraft – have successfully participated in the inter-agency action against this pandemic, supporting the efforts of the central authorities in the acquisition and bringing into the country of medicines and medical

protective materials from different states, some of them being located at strategic distances. In this context, how do you appreciate, in a few words, the actions carried out by the forces under your command in support of the Ministry of Health, the central and local administration?

Major-General Viorel PANĂ, PhD, Chief of the Romanian Air Force (VP): First of all, I would like to mention that the Romanian Air Force (RAF) proceeded based on the action plans developed by the Defence Staff and the Ministry of National



Defence, plans which have been implemented at the level of all categories of forces, as well as at the level of central structures.

Specific for the Air Force, apart from joint actions carried out in the presence points with the forces of the Ministry of Internal Affairs, there were air transport missions of persons suspected of or infected with SARS-CoV-2, repatriation missions of Romanian citizens from areas severely affected by this pandemic, missions of transportation of sanitary materials so necessary during this period and, last but not least, missions through which we offered our support to the Republic of Moldova's citizens. In this context, the Air Force have planned and executed over 10 missions of transportation/evacuation of Romanian citizens from high-risk countries and over 15 missions of transportation of medical equipment from Germany, Turkey, South Korea or Spain.

Also, the Air Force have provided the logistic support necessary for the arrangement of medical triage in several hospitals in the country, as well as the support provided to the local authorities for the arrangement of quarantine centres.

- ② **SI:** *During these missions, you faced various problems. Where do you consider that there were encountered (major) difficulties and where was the effort greater during these mission/support actions? Please, provide some details about these types of missions.*

VP: Among the difficulties encountered during this period we can mention the very short time available for the preparation and execution of transportation missions, especially in the first phase of the emergency state, when the need for sanitary protection materials (face masks, coveralls) was more stringent than it is today. Also, the execution of non-stop missions led to the accumulation of the crews' physical and mental fatigue, and in the air transportation missions of COVID-19 patients, the wearing of special protective equipment by the crew led to a restriction of freedom of movement and a certain discomfort.

In order to carry out and execute the flight missions in the best and safest conditions, a series of safety measures have been taken to ensure the protection of the crews, and of its passengers. Thus, both crew members and passengers are permanently equipped with gloves and protective masks, they maintain a physical distance during the flight, and when we have performed missions that involved providing air transportation for people suspected of or infected with SARS-CoV-2, we have provided special isolated rooms (isolation stretcher), which were mounted inside the aircraft, the crew did not come into contact with those persons and moreover, throughout the mission the crew members were equipped with special protective suits, and after each mission, the total



decontamination of both the aircraft and the crew members' equipment was carried out.

- ③ **SI:** *From this complex perspective, how do you see the current situation worldwide? How about in Romania?*

VP: The situation is very complex and volatile at the same time because we are all fighting against an enemy that it is still unseen and unknown. All countries are taking those physical and health measures to limit the spread of this virus, but even so, it is a difficult phenomenon to control, affecting people of all ages. At least for a while we will have to learn to live with this virus and to adapt our lifestyle and daily habits to this new reality.

Unfortunately, even in Romania, things are not different, there is still community virus spread and new outbreaks of infection appear, but by applying those minimum measures of distancing and sanitation and by raising public awareness of the need to implement them, things will certainly improve, there will no longer be a pressure on the health care system and it will be possible to create the premises for limiting the spread and, implicitly, of the diseases with the new SARS-CoV-2 coronavirus.

- ④ **SI:** *How do you assess the inter-institutional cooperation at central and local level in the fight against the pandemic and the efforts made to limit the spread of this virus, as you are an active participant in these efforts?*

VP: Given the responsibilities of the Ministry of National Defence provided by the regulations in the field of emergencies and alert, even from the beginning, at the level of the Ministry of National Defence, plans and measures were designed that clearly established the cooperation between various structure components, as well as with the structures belonging to the Ministry of Internal Affairs and the Ministry of Health. Inter-agency cooperation was stronger and took place in very good conditions, especially during the state of emergency and continued, but at a lower level in terms of participation, during the state of alert.

Thus, the Air Force military personnel carried out a wide range of missions, of which we can mention:

- performing the epidemiological triage in Giurgiu Customs;
- missions to ensure public order and safety, in cooperation with the MIA staff, with a number of over 250 militaries and 20 vehicles, in various garrisons in the country;
- taking over guards of some objectives from the Romanian Gendarmerie.



- ⑤ **SI:** *It is well known the professionalism of your staff in carrying out the missions assigned, deriving from the Romanian Constitution: combat missions (air police) and support (participation in extinguishing fires) or humanitarian aid, in an allied framework or under the mandate of other international security organizations (UN, EU, OSCE). How would you describe the efforts of your subordinate staff in this period characterized by so many security challenges? We would also greatly appreciate if you could present us some aspects arising from the participation of the Air Forces contingent in the MINUSMA mission in Mali.*

VP: Between September 2019 and October 2020, the RAF participated in the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA), with a detachment of 4 helicopters and 120 military personnel. In an environment with an extreme climate, where mobility is difficult because of long distances and having an almost non-existent infrastructure, the four IAR-330 Puma L-RM helicopters are an essential capability to support UN's efforts to stabilize the area. The detachment carried out MEDEVAC/CASEVAC medical evacuation missions, transportation of troops and materials, air patrols and observation missions, in accordance with the UN procedures and methods.

Between October 2019 and April 2020, the Carpathian Pumas detachment (rotation I) completed 195 combat missions (MEDEVAC/CASEVAC, reconnaissance, research and surveillance, patrol, cargo and passenger transportation), totalling 740 flight hours. Two rapid deployments (lasting a maximum of 96 hours) were also carried out in support of UN operations in other sectors – Mopti and Kidal.

This year, we are particularly proud of the successful accomplishment of the mission and the returning home, in a healthy condition, of all the military from the first rotation of the IAR-330 Puma L-RM Four Helicopter Detachment, deployed in Mali, within the MINUSMA mission, action that continues with the presence of the military personnel from the second rotation.

- ⑥ **SI:** *General, we know Romania's level of ambition and commitment within NATO to assign 2% of GDP for defence, implicitly a (significant) percentage for procurement. Can you detail for us the main aspects regarding/concerning this ample process of endowment and retrofit of the Romanian Air Force and what would the priorities of this process be?*

VP: We face unconventional and asymmetric, hybrid threats, which manifest themselves from the Baltic Sea to the Black Sea, from the North Atlantic to the Mediterranean, as well as from various non-state actors.



In recognition of the new security environment, the National Defence Strategy published in 2015, included a specific commitment to meet NATO expectations. In particular, it sets its sights at military modernization, by allocating 2% of Romania's Gross Domestic Product (GDP) to defence spending, starting in 2017, for at least ten years. Such commitments are meant to support the statement that Romania is an important security provider in the region, not just a beneficiary.

This required a steady and deep thorough growth within the Romanian Air Force in order to meet the new challenges facing NATO, as well as a dynamic approach to comply with the retrofit requirements and to integrate them into NATO.

Some acquisitions have been planned for some time, but in 2016, after the procurement program of the Romanian Army 2017-2026 was approved by the Supreme Council of National Defence, the situation changed and we witnessed the entry of new equipment and technologies in our capabilities.

We will continue to increase our operational capability through the multi-role fighter procurement program, designed to achieve a final operational air capability represented by three multi-role combat squadrons equipped with 5th generation F-35 Lightning II Joint Strike Fighters aircraft (JSF), through a transition period covered by three squadrons equipped with F-16 aircraft. So far, in the first phase of the program, we have purchased twelve F-16 Mid-Life Upgrade (MLU) aircraft from the Government of the Portuguese Republic, we have trained our pilots and technicians, and the first squadron was declared operational in the summer of 2019 and performs Air Police missions. Also, a contract for the purchase of five more F-16 aircraft was signed, two of which have already been delivered in mid-August, and the others will be received by the end of 2021. There are ongoing activities to continue the program, to train additional staff and, at the same time, to facilitate the involvement of our national defence industry to be prepared to perform maintenance and service for the F-16 aircraft fleet. In this sense, a framework agreement was signed between the Romanian Air Force and Aerostar Bacău, through which this company was designated a maintenance centre for F-16 aircraft.

Another important acquisition program was launched when it was decided to purchase PATRIOT surface-to-air missile systems. The purpose of this program is to provide the Air and Land Forces with seven PATRIOT missile systems, consisting of: missiles, C2 elements, initial logistical support and personnel training, in order to defend the national airspace and strategic military and civilian objectives. The first four systems are expected to be delivered by the end of 2022, the first of which will be delivered in September this year.

Moreover, SHORAD/VSHORAD integrated short-range/very short-range air defence weapon systems are being considered for purchase, as Romania



is determined to implement the integrated air and missile defence (IAMD) concept.

We have an ongoing upgrade program for IAR-330L helicopters. Our goal is to modernize twelve helicopters in order to provide an up-to-date platform for national missions during peacetime, to support central and local authorities in case of emergencies, and to participate in UN peacekeeping missions, as part of Romania's commitment to the Republic of Mali.

We have started the modernization program of the IAR-99 Șoim (Hawk) aircraft at an advanced training platform. Because we have the F-16 multi-role aircraft in our inventory, the IAR-99 requires a reconfiguration of avionics and flight control systems to ensure the pilots' smoother transition to the F-16. The program aims at modernizing ten IAR-99 Șoim (Hawk) aircraft, with a new platform configuration, with the aim of increasing the reliability of on-board installations and systems and extending the life cycle of the aircraft. This modernization program will involve the capabilities of the national industry.

In order to achieve a reliable and sustainable C4ISR system, procurement programs have been carried out through which the radar units of the Air Force are equipped today with several types of digital radar stations, such as fixed radar surveillance 117 (FPS 117), 79 mobile radar surveillance (TPS-79), Gap Filler and TPS-77.

We are also considering the modernization of the transportation fleet, more precisely of the C-130 aircrafts from the 90th Otopeni Air Transport Base.

- 7 **SI:** *In the same perspective, what are the priorities for the specialized training of staff and what would this training process consist of? When will we be able to resume our own air police missions?*

VP: First of all, I would like to mention that the Air Police missions have been carried out without interruption by the RAF, at NATO standards, since 2004, after Romania's accession to North Atlantic Alliance, being, at that time, among the few countries newly joined who had performed by their own means, from the very beginning, the Air Police combat service. Moreover, from April 2019 until now, even in the current conditions caused by the pandemic of the new coronavirus, the Air Force have focused on meeting the established objectives, among the most important being the execution of the Permanent Combat Service, especially the Fighting Service – Air Police, under NATO command, with the F-16 Fighting Falcon multirole aircraft. The Air Police mission accomplished through its own forces is supplemented by the deployment of the enhanced Air Policing missions in Romania, thus ensuring the implementation of the assurance measures taken at the Alliance level, in order to ensure security and



stability in the area of the Black Sea and for maintaining the sovereignty of the Romanian and NATO airspace in the southern part of Europe.

Regarding the training and education process of the Romanian Air Force personnel, I consider human resources an essential factor and I want to make sure, this being one of my priorities, that the personnel will be trained and prepared to face future challenges. With this in mind, officers, non-commissioned officers, warrant officers and civilian staff go through a comprehensive training program that extends during their careers. We are continuously analysing the training methodology and the learning program in order to capitalize on the new knowledge acquired and to ensure that we have the proper staff to make the right decisions, in a timely manner, and to execute a mission most efficiently.

- 8 **SI:** *You are a General of the Romanian Army with a lot of international experience, participating in numerous missions in the theatres of operations in Iraq, Afghanistan, Bosnia and Kosovo. What do you think are the short and medium term perspectives of the Allied presence in Romania? What is the relationship with the American soldiers stationed at the military base in Câmpia Turzii?*

VP: We must not forget that here we are talking about one of Romania's reliable strategic partners that, by the presence of its troops on our national territory, either in the short term, for various exercises or joint activities, as it is the case at the air base in Câmpia Turzii, or permanently, as it is the case of the troops stationed at the Mihail Kogălniceanu air base, also allows us to train our own forces with an experienced and skilled partner in various operational areas around the globe. The presence of American troops also provides a StratCom message, that we are not alone, that we are part of the strongest political-military alliance, and this entails the development of new capabilities and concepts and expanding the cooperative relations at a much higher level.

- 9 **SI:** *Please accept the translation of the discussion on a personal level and tell us what this turbulent period, marked by the fight against the pandemic caused by the new type of coronavirus, meant to you and your subordinates.*

VP: You gave the answer from the wording of the question: a turbulent period, marked by uncertainties that affects one for sure. Fortunately, the Air Force military personnel have proven that they are prepared and trained to act on tactics and procedures against an unseen and yet unknown adversary, who has taken all humanity by surprise, by the speed and aggressiveness of its spread. At the same time, we are trained to adapt, to act in conditions of lack of information



and insecurity, both physical and informational, and to make the best decisions for the successful fulfilment of essential missions but also of daily tasks.

- ⑩ **SI:** *Finally, thanking you for your ideas and opinions on the issues that have been and will remain in the attention of the Air Force staff, please send a message to the contributors and readers of the Strategic Impact Journal.*

VP: The missions performed by the Romanian Air Force in recent years, especially with NATO partners, have confirmed that we are a force structure compatible with the requirements and missions of the North Atlantic Alliance, and the correct orientation and speed of transformation have been noted, in unreserved views expressed by NATO's governing structures. During this period, we have proved our ability, value, adaptability and professionalism. We have demonstrated, through the missions we have performed, that Romania is a reliable partner, which respects its commitments to both the North Atlantic Alliance and the United Nations, actively contributing to the process of generating security.

We will continue to improve and strengthen our fighting capabilities in order to defend our national values and the state of rule of law and, at the same time, respect our country's international commitments to strengthen the regional security and the Southeast area of the Northern Atlantic Alliance.

I want to assure your readers that in the homeland of Vuia, Vlaicu and Coandă, regardless of the weather and the times, the Romanian Air Force will always be at high altitude, to defend the clear sky!

ROMANIAN LAND FORCES – TRADITION, RESILIENCE AND INNOVATION



**Major General Iulian BERDILĂ,
Commander-in-Chief of the
Romanian Land Forces**

❶ **Strategic Impact (SI):** Major General Iulian Berdilă, you have recently taken over the leadership of the Land Forces, after a period at the command of the Headquarters of the Multinational Division South-East (HQ MND-SE), a North Atlantic Council (NAC) activated NATO military body under operational command (OPCOM) of Supreme Allied Commander Europe. Also, the Land Forces, under your command, have successfully participated in the inter-institutional effort against the COVID-19 pandemic throughout the country. In this context, how do you appreciate, in a few words, the cooperation and actions carried out by the forces under your command in support of the Ministry of Internal Affairs, the Ministry of Health and the local administration?

Major General Iulian BERDILĂ, Commander-in-Chief of the Romanian Land Forces (IB): The Land Forces have quickly adapted to the new reality and we have intervened where we were asked for support. As part of the inter-agency effort, the Land Forces carried out a wide range of missions, such as presence patrols, guarding objectives and other missions in support of the Ministry of Internal Affairs, the Ministry of Health and local government, structures with which we have had an excellent cooperation.



- ② **SI:** *Where have your subordinates encountered the most major difficulties and where do you consider that the greatest effort was concentrated during these support actions?*

IB: Of course, there have been situations in which we have encountered challenges generated mainly by the unique nature of the consequences of the pandemic, to which we had to adapt quickly. We must not forget that all the measures taken were in support of the population. Finally, despite all the factors that generated this crisis, the Land Forces have fulfilled their assigned tasks and are able to take on new responsibilities as part of a joint effort to combat the effects of the COVID-19 pandemic.

- ③ **SI:** *We would like to ask you a multiple question. The military personnel from the Romanian Land Forces, through the experience gained in the Theatre of operations (TO) over the years, are recognized as outstanding fighters. Can you present us some ideas/aspects regarding the participation of Land Forces in TO under the mandate of NATO and EU (RSM in Afghanistan, EUFOR, SRF, Western Balkans etc.)? Also, what can you tell us about Romanian Land Forces contribution and participation in the Combined Joint Enhanced Training Program (CJET)?*

IB: In the spirit of international commitments, the Land Forces is annually contributing with a wide range of capabilities to various international operations and exercises conducted under the mandate of NATO, the UN, the OSCE or the EU. In 2019 and, further, in 2020, the Land Forces have represented the most important contributor of the Romanian Armed Forces to external missions, both in terms of deployed personnel and military equipment and technique. This year, over 700 military personnel from the Romanian Land Forces participated in approved external missions. The main effort will continue to be directed to Afghanistan. We will also have troops that will maintain the national contribution to ensure the Enhanced Forward Presence of NATO in the Battle Group deployed in Poland and we will continue the military participation within NATO-KFOR and EUFOR-ALTHEA.

The concept related to Combined Joint Enhanced Training (CJET) was developed regionally at Romania's initiative and became operational in 2018. CJET is an important component of NATO's defense and deterrence position. The tailored Forward Presence on NATO's eastern flank (tFP) took into account the dynamics of the security environment in the region and the will and capabilities of the allies in the region.



In addition, CJET provides the framework for consolidated multinational training at joint level, through the planning, organization and development of an integrated training program and national and Allied exercises. In this context, of the tFP, CJET catalyses multi-domain training solutions (including by air, sea and land).

- ④ **SI:** *In July 2020, in the presence of Mr. President Klaus Iohannis, the Commander of the Armed Forces and the Minister of National Defence, Mr. Nicolae Ciucă, you participated, in Sibiu, in the founding ceremony of a new multinational allied command in Romania – Headquarters Multinational Corps South-East (HQ MNC-SE). From your perspective, as Chief of the Land Forces, please provide us some details about the importance of this multinational headquarters.*

IB: In the context of the dynamics of the international security environment and consistent with the international commitments assumed by the Armed Forces, Romania has recognized the allied need to strengthen command and control in the region. Thus, Romania has assumed the establishment on its national territory of a multinational command and control capability in the land domain – HQ MNC-SE, which will be made available to NATO.

HQ MNC-SE will have the status of international military headquarters, as an element of the NATO Forces Structure and it will be an important regional element in the planning, coordination and conduct of training and evaluation activities in allied framework.

- ⑤ **SI:** *Finally, thanking you for your ideas and opinions on the issues that have been and will be in the attention of the Land Forces Staff, please send a message to the readers of Strategic Impact journal.*

IB: I would like to reassure your readers that the Romanian Land Forces remain devoted to fulfilling our country's NATO and EU commitments, by continuing specific training activities, both nationally and in allied framework, in order to increase our capacity to quickly and efficiently respond to the full spectrum of challenges.

In the end, we inform our readers that in one of the following issues of the journal we are going to include a distinct interview with Major-General Berdilă on the topic of endowment, modernization and training of the Land Forces staff.

ROMANIAN NAVAL FORCES – 160 YEARS OF EXISTENCE



**Rear Admiral Mihai PANAIT,
Chief of the Romanian Naval Forces**

❶ *Strategic Impact (SI): Rear Admiral, you are the Chief of the Romanian Naval Forces, a very complex and important category of forces in conducting military actions both in peacetime, in crisis and at war, its contribution being decisive in the modern operational space.*

Rear Admiral Mihai PANAIT, Chief of the Romanian Naval Forces (MP):

The Romanian Naval Forces (RNF) perform specific actions and missions in accordance with the objectives of the defence policy and its priorities, the principles and concepts of the National Defence Strategy of Romania, the Doctrine of the Romanian Armed Forces, the evolutions of the security environment and the decisions of the competent constitutional authorities –

Romanian Parliament, the President of Romania, the Supreme Council of National Defence, the Government of Romania, the Ministry of National Defence.

The Romanian Naval Forces represent an important force category of the Romanian Armed Forces, with an ambitious program of capabilities modernisation and a series of clear directions of action. First of all, we want all the missions that we carry out and that we have planned in accordance with the main activities plan or with the training programs of the units within the RNF to be fulfilled safely.

❷ *SI: This year we celebrate 160 years since the foundation of the RNF. In this context, can you tell us how naval units and formations are currently responding to new risks and threats to national defence and security?*



MP: We have a long tradition, 160 years since the foundation of the Romanian Naval Forces represent not only a beautiful figure, but also an eloquent history for the modernization and transformation of this category of forces. We need to reach the level of our forerunners, to perform, to progress, to modernize and to develop this category of forces.

160 years after the foundation of the Romanian Naval Forces, we present ourselves as a credible, capable, deployable structure, that is close to the partners of the North Atlantic Alliance, because there are important missions and there are not few, and there are special efforts that I want to bring to your attention.

The fact that we annually participate with frigates and minesweepers in each deployment of NATO's permanent naval groups in the Black Sea - Standing NATO Maritime Group 2 (SNMG2) and Standing Naval Mine Countermeasures Group 2 (SNMCMG2) - is honourable, as this is an important mission and constitutes a training model for the other ships or structures of the RNF. We are present in the Black Sea, in the Aegean Sea and in the Mediterranean Sea with ships from the Romanian Naval Forces, during multinational missions and exercises. We are currently carrying out five major exercises in the Black Sea and on the Danube River: SEA SHIELD, POSEIDON, EURASIAN PARTNERSHIP MCM DIVE, SPRING/FALL STORM and RIVERINE, in the following domains: surface combat, anti-submarine combat, mine action, anti-aircraft defence, amphibious operations, maneuvers and developments, supply by sea, maritime interdiction operations.

We have a close cooperation with partners from the countries bordering the Black Sea; we participate with military ships in the BREEZE and SEA BREEZE exercises, of the Naval Forces of Bulgaria and Ukraine. This year we have participated with three ships in the BREEZE exercise and with two ships in the SEA BREEZE exercise. We also have a constant participation with ships and staff in the ARIADNE, MAVI BALINA, DOGU AKDENIZ or NUSRET exercises, carried out by Turkey and Greece, in the Aegean Sea and the Mediterranean Sea. It is a special effort and it is our way of showing that we can build bridges between the Romanian Naval Forces and Bulgaria, Ukraine, Turkey, Greece and the Mediterranean Sea partners.

We are also developing bridges between the Black Sea and the Baltic Sea: we have a very fruitful collaboration with the Polish Naval Forces and through the Marine Flotilla Regiment, starting with 2018, we have an important participation in the largest exercise of the NATO deployed in the Baltic Sea, BALTOPS. The fact that in the 2019 training year, the Marine Infantry Regiment participated for the first time in the Afghanistan theatre of operations, with a company-level detachment, is another element of the Romanian Naval Forces' contribution to ensuring global security. Last but not least, the Operation SEA GUARDIAN,



which is the most important operation in which the RNF have taken part in the last three years, this autumn participating with Queen Mary frigate.

The RNF focuses on modernizing and transforming this category of forces in order to be able to act as a credible, capable and deployable structure, together with its Euro-Atlantic partners. Thus, for the first time in history, in the first semester of 2020, the Naval Forces assumed command of the permanent naval group NATO – SNMCMG2, by securing and boarding the command and staff of the group aboard the mine layer and nets 274 “Vice Admiral Constantin Bălescu”. Taking command of a naval group aimed at maintaining NATO’s combat and immediate response capability in its areas of responsibility, demonstrates the Naval Forces’ determination to be an active part in the Allied effort to support the force generation process in implementing the assurance measures of the allies, forward presence and deterrence.

But the most important thing for the Romanian Naval Forces is the fact that, on board the ships that perform these missions, operations and exercises are the young officers, warrant officers or professional militaries, who, through a special dedication, through a continuous effort, succeed to fulfill their mission and to proudly carry the Romanian flag on the mast. The fact that on the board of the RNF ships from the sea and the river is written “Honor and Homeland” is something that I want to be felt and transmitted to all the crews of the Romanian Naval Forces.

- ③ **SI:** *From this complex perspective, can you tell us about your vision of the geostrategic importance of the Black Sea and the Wider Black Sea Region (WBSR) in European and Euro-Atlantic security?*

MP: The Wider Black Sea Region (WBSR) has a special strategic importance not only for our country, but also for the entire Euro-Atlantic area. WBSR expands the scope of security and stability for the transatlantic community, which is a strategic challenge for the entire international spectrum. As a NATO member, Romania has a responsibility to be a security provider in the region and to support the Alliance for achieving global security objectives.

The fact that we are engaged in a special Euro-Atlantic effort, with an intense participation in national, multinational and international exercises, operations and missions in theaters of operations is a defining element for the Romanian Naval Forces, something that obliges and honors us at the same time.

The first course of action I would like to develop in this regard is to succeed in fulfilling all our commitments and missions in NATO and the EU and to develop, through intelligent planning, the program with the main activities for



the next period, for the 2021 training year, but also with a long-term vision, until 2025.

- 4 **SI:** *In the current international context, what can you tell us about Romania's role in providing security in the Black Sea? Do you think it is necessary to set up a new type of leadership in this region? What details can you give us about the Three Seas Initiative, whose summit took place last year in Bucharest?*

MP: The Black Sea represents the link between South-East Europe, the Caucasus, the Middle East and the Mediterranean Sea, being at the same time the demarcation line between the European Union, the former Soviet space and NATO. The new National Defence Strategy specifies that the Black Sea Region is of strategic interest to Romania and must be a safe and predictable space – essential aspects for the national security. Romania has an interest in contributing to the development of policies and solutions to support regional development towards an area characterised by security and stability. This region must be stable, democratic and prosperous, closely linked to the European and Euro-Atlantic structures.

Ensuring security at the Black Sea needs a comprehensive, coherent and coordinated approach at all levels, including the military field.

Achieving, promoting or sustaining stability in the Black Sea requires a special effort on the part of a large number of actors. Thus, participation in joint missions and exercises with ships belonging to NATO and EU, as well as with forces/capabilities belonging to the states bordering the Black Sea (Ukraine, Moldova, Georgia) creates the image of a unitary military force, ready to support regional stability in the Black Sea.

The Three Seas Initiative is the political platform that brings together the 12 European Union states between the Adriatic, Baltic and Black Seas (Austria, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia), with the main objective to increase ties between these states. The basic principles of the Initiative are to promote economic development, increase cohesion at European level and strengthen transatlantic ties. The summit organized in Romania in 2018 aimed at obtaining progress on interconnectivity in the transport, energy and digital fields.

One of the most important projects is the implementation of BRUA (Bulgaria, Romania, Hungary, Austria) – a project that provides for the transfer of gas from the Caspian Sea region and offshore perimeters of Romania's exclusive economic zone to the Black Sea, to central Europe. Another project, from the priority list, is the interconnection at regional level – FAIRway DANUBE, which has as main objective the rehabilitation and maintenance of the transport



route on the Danube. Even the new Danube-Oder-Elbe project can contribute to the interconnection of northern countries with the Black Sea. And, last but not least, I would like to remind you of RAIL-2-SEA – the modernisation and development of the railway line that connects Gdansk and Constanța, with dual civil and military use.

As mentioned, we are very interested in cooperating with partners in the Baltic area, in particular with the Polish Navy, for a better understanding of the security challenges and solutions adopted to counter maritime risks and threats in the area.

- ⑤ **SI:** *During the joint missions and exercises in peace time with our allies and strategic partners in the Black Sea there were various situations. Where did you encounter major difficulties and where do you think the greatest effort was during these military training activities? Please detail these types of missions. How can you characterise naval cooperation and interoperability with Romania's allies and partners?*

MP: The Naval Forces have taken an active attitude in promoting regional and global stability, by implementing measures to increase confidence and stability at the regional level, including the use of defence diplomacy. In this sense, Romania, through the Naval Forces, participates in peacekeeping missions/crises response operations led by NATO, EU, OSCE and UN or within coalitions of will, for the fight against terrorism, extremism, and insurgency and for ensuring regional and international stability.

Relations with naval forces belonging to the states bordering the Black Sea take place in several formats. First of all, there are those under NATO command within the missions of the NATO permanent naval groups and the exercises planned by the three NATO member countries (Romania, Bulgaria and Turkey). Also, those in bilateral or international format, by participating with personnel and military ships in the exercises planned by the three Partnership for Peace (PfP) countries (Ukraine, the Republic of Moldova and Georgia), those in bilateral format with Bulgaria by hosting an alternative NATO MCM LIVEX – POSEIDON exercise. The Romanian Naval Forces participate in Operation Black Sea Harmony (OBSH), initiated by the Turkish Naval Forces, providing, based on reciprocity, a liaison officer, through which information exchanges are carried out for maritime operations in the Black Sea. Liaison officers from the Russian Federation are also participating in this initiative at the Eregli command, Republic of Turkey.

In order to strengthen cooperation at the Black Sea, Romania, through the Romanian Naval Forces, is part of the forum – “Document on Measures to



Increase Confidence and Security in the Black Sea Naval Domain”/CSBMs whose presidency is rotating, but due to the tense geopolitical conditions in the area, generated by the occupation of Crimea by the Russian Federation, visits to military ports and demonstration exercises were frozen. The Black Sea Naval Cooperation Group – BLACKSEAFOR is also a frozen initiative at the moment.

All these types of activities lead to increased mutual trust and interoperability of the armed forces in the Black Sea region, less in relation to the Russian Federation. The conduct of the Naval Forces in relation to the Russian Federation is dictated by the regulations of the Romanian Ministry of Foreign Affairs and by NATO policies.

Within the European Deterrence Initiative (EDI) on the support provided by the USA to NATO allies and partners in Eastern Europe, RNF participate in the SEA BREEZE series of exercises and PASSEX type exercises with ships belonging to NATO, Romania assuming thus the obligations deriving from the NATO Strategic Concept, the Immediate Assurance Measures (IAM), the Readiness Action Plan (RAP), and Operation Atlantic Resolve South / Black Sea Resolve Events (OARS / BSRE).

- ⑥ **SI:** *As we well know, the Romanian military sailors are outstanding professionals, which is proven in fulfilling the assigned missions deriving from the Romanian Constitution, combat missions (ship guard, maritime traffic monitoring, imposition of the embargo, anti-piracy fight) and support missions (rescue-evacuation) or humanitarian aid, carried out under the Romanian flag in an allied framework or under the mandate of other international security organizations (UN, EU, OSCE). This professionalism and the military experience gained were appreciated by the military leadership of the North Atlantic Alliance, by ensuring the takeover of the leadership of the NATO Standing NATO Mine Countermeasures Group 2 (SNMCMG 2) in the first half of this year, a particularly important and honorable position for the Romanian Naval Forces.*

We would greatly appreciate a presentation of the most relevant aspects of the participation of the King Ferdinand and Queen Mary frigates and the minesweeper Lt. Lupu Dinescu, both in the Standing NATO Maritime Group and in NATO and EU naval missions.

How would you describe the efforts of your subordinate staff during this period of many security challenges overlapping with the outburst of the health crisis?

MP: Being a sailor proves to be a challenge, regardless of the structure in which you are employed in the Romanian Naval Forces. Life at sea is not easy, it is a



difficult job, a job that requires sacrifices, but which contributes to Romania's development in this field.

Through the participation of Romanian military ships in NATO missions and operations, the Romanian Armed Forces and, implicitly, the Romanian Naval Forces, consolidate their status as a reliable partner and contribute to strengthening the security level at the South-Eastern border of the North Atlantic Alliance.

Military sailors who participated in the missions, in this difficult period from a medical point of view, had a responsibility in addition to the usual ones, they had to perform their duty in conditions adapted to the restrictions and recommendations at the time.

However, RNF sailors have managed to successfully fulfill their assigned missions and even provide a model to follow, in terms of compliance with measures to prevent the spread of the virus that society is currently facing.

- 7 **SI:** *Rear Admiral, referring to Romania's commitment within NATO to allocate 2% of GDP for defence, part of this percentage being dedicated to the procurement for categories of forces, please point out to readers of our journal and contributors the main issues concerning this extensive process of procurement and modernisation of the Romanian Naval Forces and what would the priorities of this process be?*

MP: In order to meet the current operational requirements, the Romanian Naval Forces are permanently concerned to ensure strategic continuity within NATO and the EU, both through a unitary, coherent approach of the projects in which Romania is involved, and through the development of procurement and modernization programs, aiming at equipping the force structure with modern, interoperable military equipment and systems and to revitalise existing military equipment and systems, as well as to ensure, as soon as possible, credible deterrence and countermeasures, in accordance with defence and gradual response plans, developed and revised at national and Alliance level.

These objectives can be achieved by carrying out, based on the best operational requirements/cost ratio, all procurement and modernization programs, of which the main priorities are:

- procurement of four multifunctional corvettes in the period 2020-2026, with funds allocated from the RNF budget (1.6 billion euros), the contract estimated to be signed immediately after the completion of the appeals following the specific award procedure;
- modernization of T22R frigates – stage II – restoration of the operational capability of the two frigates according to the initial architecture and adaptation of the operational profile according to current technical developments in the field of anti-submarine warfare (ASW), anti-air warfare (AAW), anti-surface warfare



(AsuW), as offset operations to the supply contract of the four multifunctional corvettes;

- system of mobile installations for launching naval missiles – achieving a capability to fight against surface ships, composed of two batteries with two anti-ship missile launchers (16 anti-ship missiles), in the period 2020-2024 with funds allocated from the RNF budget (estimated 0.2 billion euros), the LOA type contract through the FMS Program estimated to be signed by the end of 2020, by the USA and Romanian governments;

- major repairs and modernizations of naval and air platforms (major repairs/major overhauls with modernizations of naval platforms and major repairs to IAR PUMA Naval helicopters).

These procurement/modernization programs are augmented in the process of fulfilling Romania's commitments within the Alliance, by programs developed alongside the USA strategic partner or other projects aimed at implementing capability packages financed by the NATO security investment program (NSIP), as well as the participation in consortia of the research-development units from the RNF structures, in research-development-innovation programs at NATO and EU level.

- ⑧ **SI:** *You are an Admiral of the Romanian Armed Forces, with considerable international experience, participating in numerous missions and naval operations in the Mediterranean Sea and the Indian Ocean. What do you think are the short and medium term prospects of the tailored Force Presence (tFP) in Romania? What is the relationship with the American military stationed at the Kogălniceanu military base?*

MP: In response to major security changes and the deteriorating security situation in the Alliance's eastern neighborhood, in 2014, NATO began an extensive process to adjust its defensive stance of deterrence and defence.

The Allied presence on the eastern flank is manifested in a series of decisions taken at NATO summits, concepts, initiatives, operationalisation of new command and control structures and structures of forces, missions and operations or exercises. The Romanian Naval Forces support the participation in the NATO initiative on adapted assurance measures for Turkey (TAMT) in the context of NATO Permanent Naval Groups' mission.

However, in the last two years there has been a slight decrease in the number of deployments of these groups in the Black Sea. We support the continuation of ensuring a consolidated maritime presence in the Black Sea and in the coming years, by ensuring a presence in three distinct periods for joint training activities with NATO members bordering the Black Sea.



I would like to emphasize the attention and effort we devote to active participation in EU initiatives: PESCO (Permanent Structured Cooperation), CARD (Coordination Annual Review on Defence) and EDF (European Defence Fund), respectively in missions and operations under the Common Security and Defence Policy (CSDP): EUNAVFOR Atalanta, EUNAVFOR MED Irini.

In the future, the Romanian Naval Forces intend to increase the level of participation in missions and operations under EU leadership, from active participation with staff to participation with naval capabilities, to support the European effort to build credible European military capabilities.

During the Black Sea Rotational Force exercise coordinated by the Land Forces Staff, we are annually carrying out, alongside structures of the Marine Infantry Regiment within the River Flotilla, theoretical and practical training activities with the American Marines deployed at the Mihail Kogălniceanu military base.

- 9 **SI:** *Please accept the translation of the discussion on a personal level and tell us what this turbulent period of the fight against the COVID-19 pandemic has meant to you and your subordinate structures.*

MP: Since the beginning of the health crisis generated by the COVID-19 pandemic, the Romanian Naval Forces have had an active role in imposing measures for the implementation of the provisions of the national legislation in the field. I would like to mention some important actions that took place under the coordination of the structures in my subordination, namely, the operationalization of the ROL II Hospital in Constanța, as well as joint actions with the staff of the Ministry of Administration and Interior in the garrisons under the Naval Forces.

During the state of emergency, the personnel from the Naval Forces came to the support of the Ministry of Health, the ROL II Hospital in Bucharest, as well as of other institutions in order to carry out their activity in the conditions and limitations given by this pandemic.

I am satisfied that the missions were carried out on time and completely, without significantly affecting the staff's health.

- 10 **SI:** *Finally, thanking you for your ideas and opinions on the issues that have been and will remain in the attention of the Naval Forces Staff, please send a message to the contributors and readers of the Strategic Impact journal.*

MP: From the position of Chief of Naval Forces Staff, I want to convey to all Romanian citizens that the Romanian Naval Forces crew is, above all, a servant



of the country, with a permanent mission to ensure peace and calm in the area of responsibility. Together with comrades from the Romanian Armed Forces and foreign partners, Romanian military sailors contribute to the security of the country, through training and naval diplomacy activities, which they constantly carry out, being able, at any time, to react proactively to security crises. This is achievable, of course, due to our ability to adapt to the continuous changes of the security environment, which we constantly want to strengthen through the professionalism we have shown over time.



GUIDE FOR AUTHORS

We welcome those interested in publishing articles in the bilingual academic journal Strategic Impact, while subjecting their attention towards aspects to consider upon drafting their articles.

MAIN SELECTION CRITERIA are the following:

- ✓ the theme of the article must be in line with the subjects dealt by the journal: up-to-date topics related to political-military aspects, security, defence, geopolitics and geostrategies, international relations, intelligence;
- ✓ the quality of the scientific content;
- ✓ originality of the paper;
- ✓ novelty character – it should not have been anteriorly published;
- ✓ a relevant bibliography comprising recent and prestigious specialized works, including books;
- ✓ the text must be written in good English (British or American usage is accepted, but not a mixture of these);
- ✓ adequacy to the editorial standards adopted by the journal.

EDITING NORMS

- ✓ **Article length** may vary between a minimum of 6 pages and a maximum of 12 pages (between 25.000 and 50.000 words), including bibliography and notes, tables and figures, if any.
- ✓ Page settings: margins - 2 cm, A 4 format. The article shall be written in Times New Roman font, size 12, one-line spacing. The document shall be saved as Word 2003 (.doc). The name of the document shall contain the author's name.

ARTICLE STRUCTURE

- ✓ Title (centred, capital, bold characters, font 24);
- ✓ A short presentation of the author, comprising the following elements: given name, last name (the latter shall be written in capital letters, to avoid confusion), main institutional affiliation and position held, military rank, academic title, scientific title (PhD. title or PhD. Candidate – domain and university), city and country of residence, e-mail address;



- ✓ A relevant abstract, which is not to exceed 150 words (italic characters);
 - ✓ 5-8 relevant key-words (italic characters);
 - ✓ Introduction / preliminary considerations;
 - ✓ 2 - 4 chapters (subchapters if applicable);
 - ✓ Conclusions;
 - ✓ Tables / graphics / figures shall be sent in .jpeg / .png. / .tiff. format as well.
- In the case of tables, please mention above “**Table no. X:** Title”, while in the case of figures there shall be mentioned below (e.g. maps etc.), “**Figure no. X:** Title” and the source, if applicable, shall be mentioned in a footnote.

REFERENCES shall be made according to academic regulations, in the form of *footnotes*. All quoted works shall be mentioned in the references, as seen below.

Example of book: Joshua S. Goldstein; Jon C. Pevehouse, *International Relations*, Longman Publishing house, 2010, pp. 356-382.

Example of article: Gheorghe Calopăreanu, “Providing Security through Education and Training in the European Union” in *Strategic Impact* no. 2 /2013, Bucharest, “Carol I” National Defence University.

Electronic sources shall be indicated in full, at the same time mentioning what the source represents (in the case of endnotes, the following mention shall be made: accessed on month, day, year). *Example of article:* John N. Nielsen, “Strategic Shock in North Africa”, in *Grand strategy: the View from Oregon*, available at <http://geopoliticraticus.wordpress.com/2011/03/03/strategic-shock-in-north-africa/>, accessed on 10.03.2015.

BIBLIOGRAPHY shall contain all studied works, numbered, in alphabetical order, as seen below.

Example of book: GOLDSTEIN, Joshua S.; PEVEHOUSE, Jon C., *International Relations*, Longman Publishing house, 2010.

Example of article: CALOPĂREANU, Gheorghe, “Providing Security through Education and Training in the European Union” in *Strategic Impact* no. 2 /2013, Bucharest, “Carol I” National Defence University.

Electronic sources shall be indicated in full, at the same time mentioning what the source represents. *Example of article:* NIELSEN, John N., “Strategic Shock in North Africa”, in *Grand strategy: the View from Oregon*, <http://geopoliticraticus.wordpress.com/2011/03/03/strategic-shock-in-north-africa/>.

Nota Bene: Titles of works shall be mentioned in the language in which they were consulted, with transliteration in Latin alphabet if there is the case and, preferably, translation in English language of the titles.



SCIENTIFIC EVALUATION PROCESS is developed according to the principle double blind peer review, by university teaching staff and scientific researchers with expertise in the field of the article. The author's identity is not known by evaluators and the name of the evaluators is not made known to authors. Authors are informed of the conclusions of the evaluation report, which represent the argument for accepting/rejecting an article. Consequently to the evaluation, there are three possibilities: a) the article is accepted for publication as such or with minor changes; b) the article may be published if the author makes recommended improvements (of content or of linguistic nature); c) the article is rejected. Previous to scientific evaluation, articles are subject to an *antiplagiarism analysis*.

DEADLINES: authors will send their articles in English to the editor's e-mail address, **impactstrategic@unap.ro**. We welcome articles all year round, but we recommend the following time schedule: 15 December (no. 1); 15 March (no. 2); 15 June (no. 3) and 15 September (no. 4). If the article is accepted for publication, an integral translation of the article for the Romanian edition of the journal will be provided by the editor.

NOTA BENE:

By submitting their materials for evaluation and publication, the authors acknowledge that they have not published their works so far and that they possess full copyrights for them.

Parts derived from other publications should have proper references.

Authors bear full responsibility for the content of their works and for non-disclosure of classified information – according to respective law regulations.

Editors reserve the right to request authors or to make any changes considered necessary. Authors give their consent to possible changes of their articles, resulting from review processes, language corrections and other actions regarding editing of materials.

The authors also give their consent to possible shortening of articles in case they exceed permitted volume.

Authors are not required any fees for publication and are not retributed.

Authors are fully responsible for their articles' content, according to the provisions of *Law no. 206/2004 regarding good conduct in scientific research, technological development and innovation*.

Published articles are subject to the Copyright Law. All rights are reserved to "Carol I" National Defence University, irrespective if the whole material is taken into consideration or just a part of it, especially the rights regarding translation, re-printing, re-use of illustrations, quotes, dissemination by mass-media, reproduction on microfilms or in any other way and stocking in international data bases. Any



reproduction is authorized without any afferent fee, provided that the source is mentioned.

Failing to comply with these rules shall trigger article's rejection. Sending an article to the editor implies the author's agreement on all aspects mentioned above.

For more details on our publication, you can access our site, <http://cssas.unap.ro/en/periodicals.htm> or contact the editors at impactstrategic@unap.ro.

“CAROL I” NATIONAL DEFENCE UNIVERSITY PUBLISHING HOUSE

Director: Colonel Alin CRIVINEANU
Layout editor: Andreea GÎRTONEA
Cover: Andreea GÎRTONEA

The publication consists of 114 pages.

“Carol I” National Defence University Printing House
Șoseaua Panduri, nr. 68-72, Sector 5, București
E-mail: editura@unap.ro
Phone: 021/319.40.80/215