

"Those who have the privilege to know, have the duty to act." — Albert Einstein

GEOSTRATEGIC PULSE

No. 296 May - June 2024 | www.pulsulgeostrategic.ro

SECURITY AND RESILIENCE

**Hybrid Cold War,
Non-kinetic Pressures
and Kinetic
Subliminal Aggression**

P. 49

SECURITY AND RESILIENCE

**Understanding
National Security.
Part I: The Component of
Military Security**

P. 31

SECURITY AND RESILIENCE

**Europe Should Learn
from the Efficient Use
of South Korea's
Defence Budget**

P. 53

Artificial Intelligence in Law Enforcement and Criminal Activities

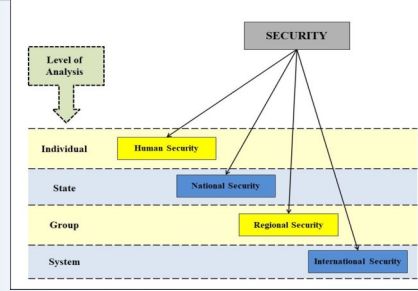
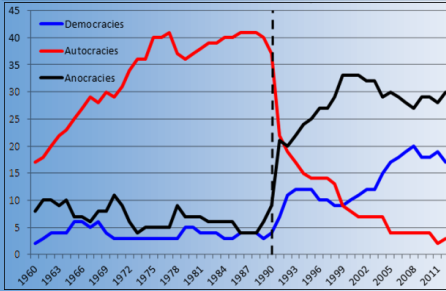
P. 8

The Role of Artificial Intelligence in Shaping Modern Strategic Management Practices

P. 20



CONTENT



1. EDITORIAL

Anocracy – Interesting Form of State Evolution Currently Analyzed and Debated around the World — **P.05**

3. SECURITY AND RESILIENCE

Understanding National Security—Part I The Component of Military Security — **P.31**

3. SECURITY AND RESILIENCE

Europe Should Learn from the Efficient Use of South Korea’s Defence Budget — **P.53**



2. ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) in Law Enforcement and Criminal Activities. A Dual-Use Dilemma— **P.08**

3. SECURITY AND RESILIENCE

Disinformation: Strategic Weapon of the Israel-Hamas War — **P.44**

3. SECURITY AND RESILIENCE

Europe’s Future Hinges on Ending Monopolistic Power Amid Global Turmoil — **P.57**



2. ARTIFICIAL INTELLIGENCE

The Role of Artificial Intelligence in Shaping Modern Strategic Management Practices — **P.20**

3. SECURITY AND RESILIENCE

Hybrid Cold War, Non-Kinetic Pressures and Kinetic Subliminal Aggression – Current and Future Challenges for NATO and the EU — **P.49**

3. SECURITY AND RESILIENCE

Emergency Management and Community Resilience through Augmented Reality (AR) — **P.59**

CONTENT



3. SECURITY AND RESILIENCE

Middle East Conflict: The Impact on Energy Security and Efficiency — P.63



4. ROMANIA

The Prominent Role of Romania in Mitigating the North-South Divide in the Multilateral System — P.69



5. SUA

Analyzing the Presidential Debate: Biden and Trump’s Responses to Climate Change Policy Through an Ecolinguistic Lens — P.71



6. BURMA

Ideology and Geopolitics of the U Nu During the Cold War in Burma — P.83



7. NIGERIA

Nigeria’s Billionaire Security Agents and Threat to National Security — P.89

1. EDITORIAL



**Anocracy – Interesting Form of State Evolution
Currently Analyzed and Debated around the
World**

PhD. Eng. Stelian TEODORESCU

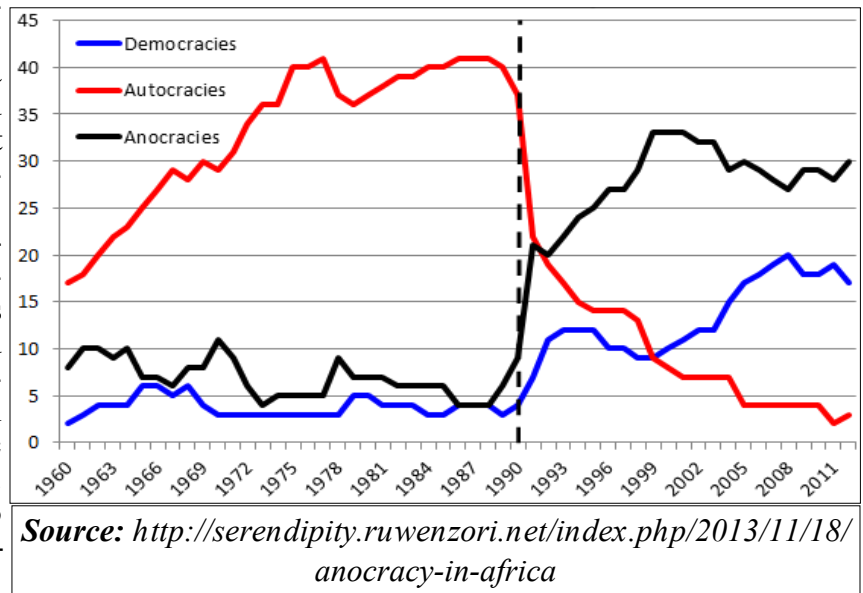
“Learn from yesterday, live for today and hope for tomorrow. The most important thing is to never stop asking yourself.”

Albert Einstein

Throughout history, some nations of the world have transitioned, remained temporarily, or even permanently fallen into autocracy or outright dictatorship. Now some countries in the world are democracies, but other go through an interesting form of their evolution, namely anocracy (quasi-democracies with features of both democracies and autocracies) or pseudo-democracies.

Anocracy or semi-democracy is a form of government that is loosely defined as partial democracy or as “a regime that combines democratic and autocratic features”.

The term “semi-democratic“ is reserved for stable regimes that combine democratic and authoritarian elements. Scholars distinguish anocracies from autocracies and democracies by their ability to maintain authority, political dynamics, and political agendas. Anocratic regimes have democratic institutions that allow nominal competition. Such regimes are particularly susceptible to the outbreak of armed conflict and unexpected or adverse changes in leadership.



Some of these nations are still at risk of falling into the trap of dictatorship. They have a choice, but the question is: what will they do? It is very clear now that there is more and more global discussion about the current state and evolution of governance in various parts of the world, how autocracies emerge and what can be done, particularly in our education systems, to prevent them from occurring.

The operational definition of anocracy is widely used by researchers Monty G. Marshall and Benjamin R. Cole of the Center for Systemic Peace¹, and this definition has been widely disseminated through the political data series. This dataset aims to measure democracy in different states and uses anocracy as one of its classifications for the type of regime in place. Anocratic regimes are also known as hybrid regimes. They combine authoritarian powers with some democratic practices, for example holding elections that are competitive to some extent. In a closed anocracy, competitors are drawn from the existing elite, and in an open anocracy, others also compete. The number of anocratic regimes has steadily increased over time, with the most notable jump occurring after the end of the Cold War. From 1989 to 2013, the number of anocracies increased from 30 to 53².

Strengthening democracy, which according to Freedom House³ is in steady long-term decline, must be a priority for training and educating today's youth. For some people around the world, there is no longer a choice between democracy, autocracy, or something in between. They chose their path, or the path was chosen for them. The ideal of dystopian leaders is to hide from their fellow citizens how bad the nation in which they live has become. Citizens will be constantly told that, in fact, everywhere else is worse. So we can say that disinformation is a second nature of evolution for various leaders. In a dictatorship, the goal is to force everyone to believe the dictatorial line, in a favorable context characterized by a lack of experience, critical thinking, or courage to think otherwise. In such a context, we can say that there are democracies and "democrats". That is, there are many intermediate states. The possibilities are endless, which is why studying the possibilities is very important. Many nations can end up being classified as intermediary states, even if we like it or not, history has proven the existence of such developments. Some countries are, for the most part, full but imperfect democracies. In such countries, each individual eligible to vote has, at least in theory, an equal voice in how the nation is run. In a true democracy, all adults who are citizens—usually anyone born in the country or naturalized—have one vote, and all votes count equally. There are also various forms of quasi-democracies, which may have characteristics of the surface appearance of democracies, but are not truly democratic. These various forms of quasi-democracies are sometimes referred to as "anocracies". It is usually democracies in decline that begin to take on autocratic characteristics.

Moghaddam (2018) pointed out that on the continuum between democracy and dictatorship, change can take three forms. Change can occur in the absence of any change in either laws or informal norms. Or change may occur in informal norms or through changes in laws. As Moghaddam (2018) points out, even countries that seem ideologically very different, such as China and the United States, may be at root less different than they appear. Moreover, even when there are revolutions, it is difficult to establish democracy immediately because it requires (a) revolutionary leaders who are willing to do so – and this is rare –; (b) elites who are willing to hand over power to the people; (c) foreign leaders who are willing to refrain from interfering in the development of democracy; and (d) a population that is ready for democracy (Moghaddam, 2018). While Moghaddam (2018) believes that a specific set of characteristics is needed for people to embrace democracy, De Saint-Laurent and Glaveanu (2018) suggest that a more fluid approach is preferable, as characteristics emerge from the interaction of a form given by the government with the cultural environment in which it appears. Quasi-democracies, i.e. anocracies, can become pseudo-democracies, or democracies in name only. Today, these pseudo-democracies include countries where there is strong suppression of opposition media, the imprisonment of opponents, and "strongmen" who continue to be "re-elected" again and again in undemocratic

¹The Center is involved in innovative, macro-comparative research focused on the issue of political violence in the structural context of the dynamic global system, i.e. the analysis of global societal systems. The Center supports scientific research, data collection and quantitative analysis in many areas related to the fundamental problem of political violence in both human social relations and societal development. The focus of CSP research is on the possibility of an integrated management for all types of societal and systemic conflicts and on the sustainability of systemic peace. Recognizing that the foundation of liberal democratic governance is an informed and active public, the Center produces global intelligence resources and regularly monitors and reports overall trends in societal, global, regional, and state system performance across key dimensions of analysis. of conflict, governance and development (human and physical).

²<https://en.wikipedia.org/wiki/Anocracy>

³Freedom House is based on the core belief that freedom flourishes in democratic nations where governments are accountable to their people. Freedom House assesses people's access to political rights and civil liberties in 210 countries and territories through its annual Freedom in the World report. Individual freedoms – from the right to vote to freedom of expression and equality before the law – can be affected by state or non-state actors.

and rigged elections. People in pseudo-democracies may still have the opportunity to choose a better future, but doing so will be challenging.

Beneath anocracy in terms of freedom is autocracy, which can take one of three often overlapping forms - oligarchy, dictatorship, and fascism. In oligarchy, a small group of people retain control of the government and can do more or less what they want. Russia appeared to be an oligarchy until the start of the war in Ukraine, which showed it to be much closer to dictatorship. Here's the amazing thing: People often vote for what they never say they want, and they don't vote for what they say they want (Thomson-DeVeaux, 2019).

The high correlation between anocratic regimes and human rights abuses denotes the non-linear progression in a country's transition from an autocracy to a democracy. In general, human rights violations decrease substantially when a certain threshold of full democracy is reached. However, human rights violations tend to remain the same or even increase as countries move from autocratic to anocratic regimes. Violations include torture, police brutality, slavery, discrimination, unfair trials, and restricted freedom of expression. Research has shown that political protests, such as those that occurred during the Arab Spring, generally lead to an increase in human rights violations as the incumbent government tries to maintain its power and influence over the government opposition.

In its annual Freedom in the World report, Freedom House scored states' violations of civil liberties on a seven-point scale, with a score of seven representing the highest percentage of violations. Freedom House defined the violation of civil liberties as violations of freedom of expression, rights of association and organization, the rule of law, and individual rights. Most consolidated democracies received scores of one, but almost all anocracies received a score between four and six due to the high percentage of civil liberties violations in most anocracies.

In conclusion, we can say that the instability of anocratic regimes makes human rights violations significantly higher in anocracies than in democratic regimes. According to Maplecroft's⁴ 2014 Human Rights Risk Atlas (Verisk Maplecroft is a global risk intelligence company providing data and insights on sustainability, resilience and ESG⁵ issues), eight of the top ten worst human rights violators to man are anocrats. In addition, the report classified each current anocracy as being "at risk" or at "extreme risk" of human rights violations.

⁴<https://www.maplecroft.com/>

⁵In recent years, the concept of ESG (Environmental, Social, Governance) has become increasingly present in the business world and in investment discussions. ESG is an abbreviation for three essential categories that measure the impact of a company or business on the environment, its social relations and the quality of services and internal organization. Every entrepreneur and businessman needs to understand what ESG is and why it has become so important in the business world, discovering the significant impact the concept has on investment decisions and behavior within the company.

2. ARTIFICIAL INTELLIGENCE



Artificial Intelligence (AI) in Law Enforcement and Criminal Activities A Dual-Use Dilemma

PhD. Mohamed MLILESS (Morocco)

Abstract

This article delves into the dual-use dilemma of artificial intelligence within the realm of law enforcement and criminal activities. The first section, explores the potential misuse of artificial intelligence in amplifying criminal activities. For this aim, many elements will be adopted to explain the darker aspects of artificial intelligence, discussing its potential exploitation for malicious purposes. This includes the generation of fake content, the automation of social engineering attacks, evasion of security systems, execution of ransomware attacks, data pollution, and unauthorized access to devices secured by artificial intelligence. Each of these areas presents unique challenges and threats to security and privacy, underscoring the need for robust countermeasures. The second section on the role of artificial intelligence in enhancing law enforcement services, offers a more optimistic perspective on artificial intelligence's potential. It discusses how artificial intelligence can enhance efficiency and accuracy, reduce human error and bias, improve decision-making, optimize resource allocation, strengthen community ties and public safety, and contribute to crime reduction. However, these benefits come with their own set of challenges, particularly in terms of ensuring fairness, transparency, and accountability in artificial intelligence systems. Collectively, these two sections illuminate the complex and multifaceted relationship between artificial intelligence, law enforcement, and criminal activities. They underscore the need for a balanced approach that maximizes the benefits of artificial intelligence while minimizing its potential misuse, highlighting the importance of this issue in the contemporary digital landscape.



Source: <https://theguardian.com/artificial-intelligence-and-cyber-crime-facing-new-threats-and-challenges/>

Introduction

Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think and act like humans (Fuster & Universiteit, 2020). This is done through the collection of data, the ability to learn from that data, and the implementation of continual, iterative improvement which results in more accurate outputs (Rigano, 2019) and types of AI, including general AI which has a broad focus,

and narrow AI (or “weak AI”) which is built for a specific task.

In law enforcement services (LES), narrow AI is predominantly used to automate manual tasks, help personnel find information quickly, and provide more accurate and timely predictions, amongst other things. Due to advances in technology and processing speeds in recent years, as well as the reducing cost of such technologies, AI has increasingly found itself as a popular and beneficial tool within LES (Interpol, 2023, 2024). However, the implementation of AI technologies in the criminal and civil legal systems, LES, and corrections institutions brings with it a number of considerations that must be taken into account to ensure that such solutions are implemented in a way which is fair, transparent, and accountable (FutureWebAI, 2023). This includes ensuring that the technologies in question are secure and reliable, that decisions made by AI are overseen by human personnel, and that data used to train AI models is itself reliable, unbiased, and subject to appropriate levels of cybersecurity (Rigano, 2019). Such considerations will be explored later on in this document. If AI can significantly benefit LES in several ways, AI could also be used to amplify criminal activities. Artificial Intelligence has been a transformative force in various sectors, including LES, where it has been leveraged to improve efficiency and effectiveness (Smith & Anderson, 2018). However, the same technology that is used to enhance LES could also be exploited to amplify criminal activities (Brundage et al., 20118). This dual-use nature of AI poses significant challenges for society and calls for a comprehensive understanding of its potential misuse (Bostrom, 2014). This article aims to explore this darker side of AI, focusing on how it could be used to facilitate criminal activities.

Finally, the iterative nature of AI, where models can improve over time and effectively change their recommended outputs in the future, means that moving from a rules-based approach to such decisions, output by AI, to a more dynamic way of working requires a significant culture change in LES (North Carolina State University, 2023).

1. Potential Misuse of AI in Amplifying Criminal Activities

The first component of this article investigates the potential misuse of AI in enhancing criminal activity. For this goal, various elements will be used to explain the darker aspects of AI, including its potential for harmful exploitation. This includes creating bogus material, automating social engineering attacks, evading security systems, carrying out ransomware attacks, polluting data, and gaining unauthorised access to AI-secured equipment. Each of these domains poses distinct problems and threats to security and privacy, emphasising the importance of strong solutions.

1.1. AI-Generated Fake Content

Artificial intelligence can be misused in criminal activities in several ways. For instance, AI-generated fake content, such as deepfakes, could surrogate realistic-looking images or videos of people to depict people saying or doing things they never did (Caldwell, 2020).

The misuse of AI in criminal activities, particularly the creation of AI-generated fake content or “deepfakes”, is a growing concern. Deepfakes, synthetic media where a person in an existing image or video is replaced with someone else’s likeness, can be used in various criminal activities such as harassment, extortion, fraud, falsifying identities, non-consensual pornography, and spreading disinformation (Velasco, 2022). These challenges pose significant issues for LES and society, necessitating the development of effective strategies and technologies to detect and combat the malicious use of AI. This includes enhancing LES skills, developing deepfake detection software, and creating policies and regulations to address these issues (Cornelia, 2022). While AI can be misused, it also holds potential for positive impact in many areas, including crime prevention and detection, thus requiring a balanced approach that maximizes the benefits of AI while minimizing its risks (Blauth, 2022).

1.2. Automation of Social Engineering Attacks

Artificial Intelligence (AI) in automated social engineering attacks poses significant challenges to traditional security measures. Artificial intelligence (AI) is being used by malicious actors to automate and improve social engineering techniques, making them more complex and challenging to identify (Arntz, 2023; Portman, 2023; Fox, 2023). Large-scale datasets can be used to train AI algorithms to mimic human behavior, tricking people into disclosing private information or engaging in illegal activity (Whittle, 2021; Botes, 2023). This has made it possible to create phishing emails that are incredibly convincing, messages that are customized for certain recipients, and even AI-powered chatbots and virtual assistants that can converse with users in

real time (Sjouwerman, 2023; Graves, 2023; Ienca, 2023). Given that they may target financial institutions, government agencies, vital infrastructure, and other high-value entities, these automated social engineering attacks pose a serious risk (Sakhnini et al., 2023; Fares et al., 2023; Schmitt, 2022; Schmitt & Flechais, 2023). Although AI has the potential to be harmful, when applied sensibly and morally, it can also be beneficial (Sarker, 2021). Organizations need to take a multipronged strategy to countering these dynamic threats, which includes putting security patterns and countermeasures in place, like automated countermeasure generation and social engineering security patterns (Salahdine & Kaabouch, 2019). In order to reduce the risks posed by these sophisticated attacks, it is also important to foster a culture of skepticism, verify information, and use AI for defense (Alkhalil, 2021; TESSIAN, 2023; Luo, 2011).

1.3. Evasion of Security Systems

Artificial intelligence can be used to evade security systems, such as image recognition and voice biometrics (Caldwell, 2020). Evasion of security systems is a complex and evolving field that encompasses a range of techniques and strategies aimed at circumventing or bypassing various security measures. In today's interconnected world, where data breaches and cyber threats are prevalent, the ability to evade security systems has become a critical skill for both malicious hackers and cybersecurity professionals. From exploiting vulnerabilities in software to social engineering tactics, the landscape of security evasion is multifaceted and constantly adapting to new technologies and defenses. Understanding the methods used to evade security systems is essential for safeguarding sensitive information and staying ahead of potential threats in an increasingly digital age.

1.4. Ransom Ware Attacks

It is mentioned in Caldwell (2020) that AI has been used to make ransomware attacks more efficient by intelligently targeting and evading detection. According to the National Cyber Security Centre (National Cyber Security Centre, n.d.), ransomware is a sort of software that encrypts your files and stops you from accessing them. A criminal organisation will then demand a ransom in exchange for decryption. Ransomware attacks have emerged as a pervasive and damaging form of cyber threat, characterized by malware that blocks access to a victim's data or system, typically by encrypting files and demanding a ransom for their release. These attacks have seen a significant increase in recent years, with various ransomware variants being developed and deployed in attacks across different sectors (Kaspersky, n.d.). The COVID-19 pandemic has further fuelled the rise of ransomware incidents, exploiting vulnerabilities created by the rapid shift to remote work environments. Cybercriminals utilize a variety of strategies to carry out ransomware attacks, including phishing emails, software vulnerabilities, and exploiting Remote Desktop Protocol (Aver, 2022; Blue Goat Cyber, n.d.; Palo Alto Networks, n.d.). Upon infection, victims are confronted with the choice of paying the ransom, attempting to eliminate the malware, or rebooting the device. The financial repercussions of ransomware attacks are significant, with organizations incurring an average loss of \$4.35 million per incident (J.P. Morgan, n.d.; Huang, 2023; Toulas, 2024). It is noteworthy that ransomware attacks have targeted critical infrastructure, such as hospitals, resulting in service disruptions and the compromise of sensitive data (CISA, 2023; Sabin, 2024). The most effective defense against ransomware attacks is prevention, which underscores the importance of robust cyber hygiene practices such as regular software updates, vulnerability scanning, offline encrypted backups, and reporting incidents to LES like the Cyber security and Infrastructure Security Agency (CISA) (NIST, 2021). Anti-ransomware solutions are instrumental in detecting and mitigating these attacks. As ransomware continues to evolve, posing substantial risks to both individuals and organizations (Fortinet, 2023; Trend Micro, 2023; Razaulla, 2023), proactive measures and heightened awareness are crucial in mitigating the impact of these malevolent cyber threats (Agence Nationale de la Sécurité des Systèmes D'information (ANSSI), 2021).

1.5. Data Pollution

In terms of data pollution, AI can be used to identify blind spots in detection rules and pollute data to make attacks more efficient (Caldwell, 2020). Data pollution, a concept analogous to environmental pollution, pertains to the contamination of digital ecosystems with detrimental "data emissions" that disrupt social institutions and public interests (Hasselbalch, 2022). This phenomenon is gaining increasing relevance in the era of

big data and AI, where the misuse and manipulation of data can yield extensive consequences (Ben-Shahar, 2019). Data pollution can manifest in a multitude of forms, such as inaccurate or misleading information, skewed analytics, and biased AI algorithms. The implications of data pollution transcend individual privacy concerns, impacting entire ecosystems and public goods (United Nations Environment Programme, 2020; Li & Huang, 2023). Addressing data pollution requires a multifaceted approach that includes regulatory frameworks, transparency mechanisms, and corrective actions to mitigate its impact. Just as industrial pollution necessitated environmental laws and regulations, data pollution calls for similar governance structures to safeguard public interests and ensure the integrity of digital systems. By understanding the dynamics of power and interests shaping data pollution, stakeholders can work towards a sustainable approach to managing data in the digital age.

1.6. Breaking into Devices Secured by AI

Artificial intelligence has revolutionised many parts of our life, including security. However, it is critical to recognise that, while AI technology improves safety and efficiency, it may also be used for evil reasons. In other words, devices secured by facial recognition or other AI technologies can be broken into using advanced AI techniques. Breaking into devices secured by artificial intelligence poses a unique challenge due to the complexity and adaptiveness of AI systems. Malicious actors can leverage AI to improve the effectiveness of traditional attack techniques, such as password guessing, or develop entirely new types of attacks, like embedding AI capabilities within malware to evade detection (Ciancaglini, 2020). Additionally, AI can be used to create convincing fake identities or personas, known as deep fakes, which can be employed to carry out social engineering attacks (Roberts, 2023). Moreover, AI can be used to generate customized attacks tailored to specific targets, making defense more challenging (Caldwell, 2020). As AI becomes more ubiquitous, securing devices from these emerging threats will require continuous innovation and adaptation in cybersecurity strategies by LES (Comiter, 2019). While these potential misuses of AI are concerning, it's important to note that AI is also extensively used in crime prevention and detection (Caldwell, 2020). As AI technology expands in capability and deployment, so do the risks of criminal exploitation. Therefore, Caldwell et al. suggest that it's crucial to continue research and development in AI security to mitigate these risks. In the realm of LES, as our society progressively incorporates technology, understanding and mitigating the emerging threat of AI-enhanced social engineering attacks becomes imperative. By examining the intricacies and implications of these attacks, we acknowledge the challenges that AI imposes on global LES capabilities. It is essential for these services to adapt their techniques to counteract the criminal utilization of AI and to amplify awareness among professionals in the field and the broader public. This knowledge arms individuals and communities with the requisite tools to protect themselves against the escalating threat posed by AI-driven social engineering strategies.

2. The Role of AI in Enhancing Law Enforcement Services

AI plays a crucial role in LES due to its ability to process and analyze large amounts of data quickly. Real-time data processing, facilitated by AI, is essential for monitoring criminal activities and enhancing public security. AI and big data enable precise and faster detection, modeling, and prediction of criminal activities. Predictive policing, a method of predicting criminal activity before it occurs, is becoming more common in LES worldwide. It will be discussed in this section that AI and data analytics are cost-effective crime prevention methods, as they rely on past data. For instance, traditional methods like surveillance and physical police have drawbacks, such as workforce and material costs, and civil liberty and privacy concerns. By utilizing AI and data analytics, LES can substitute traditional methods while maintaining effectiveness at reduced costs, which is crucial given financial pressures and public demands for safer neighborhoods.

2.1. Enhance Efficiency and Accuracy

AI-powered software can analyze large amounts of data and identify patterns or anomalies that may be missed by human analysts (Veritone, n.d.). This can lead to more accurate predictions and faster response times (Rigano, 2018). Artificial Intelligence has the potential to revolutionize LES by enhancing efficiency and accuracy. According to a study by the RAND Corporation, AI can help LES to analyze large amounts of data, identify patterns, and predict criminal activity (Yeung, 2021). This can help LES to allocate resources

more effectively and prevent crime before it occurs. Additionally, AI can assist in the analysis of video footage, facial recognition, and voice recognition, which can help to identify suspects and solve crimes more quickly (Kshetri, 2017). Furthermore, AI can help to automate routine tasks such as paperwork, freeing up officers to focus on more critical tasks. Overall, AI has the potential to enhance the efficiency and accuracy of LES, making communities safer and more secure. An article on artificial Intelligence and Policing reviews the increasing use of machine learning and AI by LES, highlighting both the opportunities and challenges associated with this technology (Guariglia, 2023). The article emphasizes the significant amount of data required for AI systems, presenting LES with new opportunities to leverage devices equipped with cameras, microphones, and sensors for surveillance purposes. It also raises concerns about the potential consequences for civil liberties due to the extensive data collection involved. The piece touches on issues such as predictive policing algorithms perpetuating inequalities and the need for transparency and fairness in AI implementation within policing. Additionally, it mentions efforts by some cities to ban the use of certain AI technologies in LES. The article underscores the importance of monitoring the rapid adoption of machine learning by police forces and calls for continued scrutiny and regulation of AI applications in policing.

2.2. Reduce Human Error and Bias

Artificial Intelligence can help LES reduce human error and bias: By automating routine tasks and providing officers with data-driven insights, AI helps to eliminate some of the most common sources of error in policing. AI presents a promising avenue for reducing human error and bias in LES practices. Research (Agudo et al., 2024) demonstrates that AI algorithms can help mitigate human errors by providing accurate and consistent analysis of data, leading to more reliable decision-making processes. By automating tasks such as data analysis and evidence collection, AI can minimize the impact of human error in investigations (Smith & Anderson, 2018; Brundage et al., 2018). Furthermore, other studies highlight how AI can help reduce bias in LES by standardizing procedures and applying consistent criteria in decision-making processes. AI has the potential to significantly reduce bias in LES by standardizing procedures and applying consistent criteria in decision-making processes. This is supported by a body of research, including a study by Reese (2022) that discusses how AI can standardize LES procedures, thereby reducing bias. Similarly, Okidegbe (2023) explores how AI can apply consistent criteria in decision-making processes within the criminal justice system. Further, Yeung (2021) identify how AI can help in reducing bias in LES applications. Lastly, the College of Policing (www.college.police.uk) provides insights into how good decision-making can be facilitated by AI. These studies collectively highlight the transformative potential of AI in mitigating bias in LES.

2.3. Improve Decision-Making

Artificial Intelligence can aid in making informed decisions by providing real-time data analysis. For example, crime forecasts allow for more efficient allocation of policing resources. AI has the potential to revolutionize and enhance human decision-making processes by leveraging advanced computational capabilities and sophisticated algorithms. As an adaptive technology that learns from vast amounts of data, AI systems are uniquely positioned to provide valuable insights and support for informed choices in various domains. The integration of machine learning, natural language processing, and cognitive computing into decision frameworks offers LES several distinct advantages. Firstly, AI enhances data analysis by rapidly processing large volumes of structured and unstructured data, providing more comprehensive information than traditional methods. For instance, AI can analyze crime data from various sources in real-time (Shah et al., 2021), enabling decision-makers to make better-informed decisions based on accurate and timely insights. Secondly, AI improves predictive capabilities by identifying patterns and relationships within complex datasets. This can be seen in predictive policing, where AI forecasts crime hotspots with greater accuracy (Jenga et al., 2023; Mandalapu, et al., 2023), enabling proactive decision-making rather than relying solely on historical trends or intuition. Thirdly, AI reduces the cognitive load associated with managing multiple variables simultaneously. This allows humans to focus their attention on higher-level strategic thinking instead of being overwhelmed by details, such as in emergency response coordination where AI can manage logistical details (Zain et al., 2023). Lastly, AI increases objectivity by eliminating biases inherent in human judgment, ensuring fairness and consistency across all decision-making scenarios. For example, AI tools used in judicial sentencing can help ensure consistent outcomes based on objective criteria (Bell et al., 2023), reducing the potential for bias.

2.4. Resource Allocation

In the context of optimizing operations, AI can contribute significantly. For instance, traffic safety systems can identify violations and enforce road rules. Artificial Intelligence indeed plays a crucial role in optimizing decision-making processes by efficiently distributing resources based on data-driven insights and predictive analytics (Capella Solutions, 2023; Taskade, n.d.; Cronin, 2023; Ghosh, 2023). AI algorithms can analyze historical usage patterns (Zeng, et al., 2020), current demands (Dilmegani, 2024), and future trends (Vartak, 2022; Maguire, 2021) to recommend the most effective allocation strategies. By automating resource allocation tasks, AI can enhance efficiency (TECHNO TROPICS, 2023), reduce waste (European Environment Agency, 2021), and maximize the utilization of available resources (Seraydarian, 2023). Additionally, AI's ability to adapt to changing conditions in real-time enables dynamic adjustments to allocations (Aupperlee, 2021). This proactive approach not only improves operational efficiency but also enhances overall organizational performance by aligning resources with strategic objectives and priorities. In essence, AI empowers decision-makers with the tools and intelligence needed to make informed resource allocation decisions that drive sustainable growth and competitive advantage (Meissner & Narita, 2023). Other scholars have emphasised the delicate link between AI and LES (Shipman, 2023). For instance, they discussed the relationship between AI and LES, emphasising the importance of public policy development, autonomous vehicle regulations, and LES officers' understanding of AI's limitations and ethical challenges. Additionally, others have mentioned that AI has the potential to significantly enhance resource allocation in LES by providing data-driven insights, accelerating decision-making processes, and supporting officers in making informed choices (Chiancone, 2023). Through AI-enabled technologies, LES can improve crime prevention, detection, and response efforts, resulting in a safer and more secure society.

AI systems can analyse vast quantities of data, such as surveillance footage (Zeng et al., 2020), criminal records (Al-Zarouni & Vijayakumar, 2021), and social media feeds, to identify patterns and potential threats. These insights can then be provided to human officers, who can utilize their experience, intuition, and judgment to make informed decisions and take necessary actions. This collaborative approach not only saves time but also allows LES to proactively detect and mitigate crimes before they occur (Nature, 2020). Moreover, AI technologies can offer valuable support during high-stress situations, such as hostage situations (Bukhoree & Choksuriwong, 2023) or active shooter scenarios (Hall, 2019), by supplying critical information to human operators (Lundberg & Johansson, 2020) and enabling them to make well-informed decisions under pressure (Purdy & Williams, 2023). To realize the full benefits of AI in LES, it is essential to establish clear guidelines and regulations (European Parliament, 2020; IAPP, 2023), involve diverse stakeholders in the development and deployment of AI technology (UNICRI, 2023; Interpol, 2023), and address potential ethical concerns and biases (ManageEngine, 2023; The Franklin Law, 2023). By doing so, LES can harness the power of AI to enhance operational efficiency and improve overall outcomes (AI Plus Info, 2023; OJP, 2023).

2.5. Community Ties and Public Safety

Community ties and public safety are two interconnected concepts that play a crucial role in ensuring the well-being and security of individuals and society as a whole. A strong sense of community and social cohesion can foster a safer and more secure environment by promoting trust, cooperation, and mutual support among community members. At the same time, effective public safety measures, such as LES, emergency services, and crime prevention programs, can help to maintain order and prevent crime and violence. Together, community ties and public safety form a dynamic and complex system that requires the involvement and collaboration of various stakeholders, including government agencies, community organizations, and individual citizens. In this context, understanding the relationship between community ties and public safety is essential for developing effective strategies and policies that promote safety, security, and well-being for all. Community Ties and Public Safety: AI can strengthen community ties and public safety. For example, AI is helping to identify the potential for an individual under criminal justice supervision to reoffend. To realize the full benefits of AI in LES, it is essential to establish clear guidelines and regulations (Levy et al., 2023), involve diverse stakeholders in the development and deployment of AI technology (Glover et al., 2022), and address potential ethical concerns and biases (Chalfin et al., 2022). By doing so, LES can harness the power of AI to enhance operational efficiency and improve overall outcomes.

2.6. Crime Reduction

In terms of crime reduction, some studies suggest that cities might reduce crime by 30 to 40% with smart technology like AI (Faggella, 2019; Deloitte, 2023). These benefits can revolutionize the way LES operate, improving response times to emergencies, preventing accidents, and providing better and more efficient services to the community. Crime reduction is a multifaceted and critical aspect of maintaining public safety and fostering a secure society. It involves a range of strategies and interventions aimed at preventing, deterring, and addressing criminal activities within communities. Effective crime reduction efforts often require a combination of approaches, including community policing, targeted enforcement actions, crime prevention programs, and social interventions to address underlying causes of criminal behavior. By implementing evidence-based practices and collaborating with various stakeholders, such as LES, community groups, and local government officials, significant progress can be made in reducing crime rates and improving overall safety levels. Understanding the complexities of crime reduction and implementing comprehensive strategies tailored to specific community needs are essential steps towards creating safer environments for all individuals. Artificial Intelligence has emerged as a powerful tool in the realm of crime reduction, offering innovative solutions to enhance LES efforts and improve public safety (Levy et al., 2023). AI technologies can analyze vast amounts of data to identify patterns, trends, and anomalies that may indicate criminal activity, enabling LES to proactively address potential threats (Levy et al., 2023).

Machine learning algorithms can be utilized to predict crime hotspots (Vinothkumar. Et al., 2023), optimize patrol routes (Mingyue & Xueying, 2023), and allocate resources more effectively (Levy et al., 2023). Additionally, AI-powered surveillance systems can enhance monitoring capabilities and assist in real-time crime detection (Al-Madani, et al., 2023).

By leveraging AI for predictive policing (Hung et al., 2021), facial recognition (Van Noorden, 2020), and data analysis (Levy et al., 2023), LES can streamline operations, prioritize interventions, and ultimately reduce crime rates. However, ethical considerations regarding privacy, bias, and transparency must be carefully addressed to ensure that AI technologies are deployed responsibly and in a manner that upholds civil liberties while effectively contributing to crime reduction efforts (Van Noorden, 2020).

Conclusion

In conclusion, this article has provided a comprehensive exploration of the dual-use dilemma of AI within the realm of LES and criminal activities. The first section has shed light on the potential misuse of AI in amplifying criminal activities, discussing its potential exploitation for malicious purposes such as the generation of fake content, the automation of social engineering attacks, evasion of security systems, execution of ransomware attacks, data pollution, and unauthorized access to devices secured by AI. Each of these areas presents unique challenges and threats to security and privacy, underscoring the need for robust countermeasures.

The second section has offered a more optimistic perspective on AI's potential role in enhancing LES. It discusses how AI can enhance efficiency and accuracy, reduce human error and bias, improve decision-making, optimize resource allocation, strengthen community ties and public safety, and contribute to crime reduction. However, these benefits come with their own set of challenges, particularly in terms of ensuring fairness, transparency, and accountability in AI systems.

Collectively, these two sections have illuminated the complex and multifaceted relationship between AI, LES, and criminal activities. They underscore the need for a balanced approach that maximizes the benefits of AI while minimizing its potential misuse. This highlights the importance of this issue in the contemporary digital landscape and emphasizes the need for further research and discussion in this area.

However, it is crucial to note that while AI can significantly benefit LES in several ways, it could also be used to amplify criminal activities. AI has been a transformative force in various sectors, including LES, where it has been leveraged to improve efficiency and effectiveness. Yet, the same technology that is used to enhance LES could also be exploited to amplify criminal activities. This dual-use nature of AI poses significant challenges for society and calls for a comprehensive understanding of its potential misuse. Therefore, this paper aims to explore this darker side of AI, focusing on how it could be used to facilitate criminal activities. This underscores the importance of this issue in the contemporary digital landscape and emphasizes the need for further research and discussion in this area.

References:

- Agence Nationale de la Sécurité des Systèmes D'information (ANSSI). (2021). *Ransomware Attacks, all Concerned how to Prevent Them and Respond to an Incident*. Paris. Retrieved from: https://cyber.gouv.fr/sites/default/files/2021/08/anssi-guide-ransomware_attacks_all_concerned-v1.0.pdf
- Agudo, U., Liberal, K.G., Arrese, M. (2024). The impact of AI errors in a human-in-the-loop process. *Cogn. Research*, 9(1). <https://doi.org/10.1186/s41235-023-00529-3>
- AI Plus Info. (2023). *How Will Artificial Intelligence Affect Policing and Law Enforcement*. Retrieved from: www.aiplusinfo.com
- Al-Madani, A.M., Mahale, V., & Gaikwad, A.T. (2023). *Proceedings of the First International Conference on Advances in Computer Vision and Artificial Intelligence Technologies (ACVAIT 2022)*. DOI: 10.2991/978-94-6463-196-8_33
- Alkhalil, Z., Hewage, C., Nawaf, L., & Khan, I. (2021). Phishing Attacks: A Recent Comprehensive Study and a New Anatomy. *Front. Comput. Sci.*, 3. <https://doi.org/10.3389/fcomp.2021.563060>
- Al-Zarouni, M., & Vijayakumar, P. (2021). The role of artificial intelligence in digital forensics: an overview. *SN Computer Science*, 2(2), 1-9.
- Arntz, P, (2023, December 26). *How to recognize AI-generated phishing mails*. Retrieved from: <https://www.malwarebytes.com/blog/news/2023/12/how-to-recognize-ai-generated-phishing-mails>
- Aupperlee, A. (2021, July 9). *AI Allows Legged Robots To Adapt in Real-Time to Changing Conditions*. Retrieved from: <https://www.cmu.edu/news/stories/archives/2021/july/legged-robots-adapt.html>
- Aver, H. (2022, June 24). *Techniques, tactics and procedures of ransomware*. Retrieved from: <https://www.kaspersky.com/blog/ransomware-ttp-report/44706/>
- Bell, F., Moses, B. L., Legg, M., Silove, J., & Zalnieriute, M. (2023, December 22). AI Decision-Making and the Courts: A Guide for Judges, Tribunal Members and Court Administrators. *Australasian Institute of Judicial Administration*. Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4162985
- Ben-Shahar, O. (2019). Data Pollution, *Journal of Legal Analysis*. 11, 104-159, <https://doi.org/10.1093/jla/laz005>
- Blauth, T. F., Gstrein, O.J., & Zwitter, A. (2022). Artificial Intelligence Crime: An Overview of Malicious Use and Abuse of AI. *IEEE Access*, 10, 77110 – 77122. DOI: 10.1109/ACCESS.2022.3191790.
- Botes, M. (2023). Autonomy and the social dilemma of online manipulative behavior. *AI Ethics*, 3, 315–323. <https://doi.org/10.1007/s43681-022-00157-5>
- Blue Goat Cyber. (n.d.). *Ransomware Tactics: How Cybercriminals Demand and Collect Payments*. Blue Goat Cyber. Retrieved from: <https://bluegoatcyber.com/blog/ransomware-tactics-how-cybercriminals-demand-and-collect-payments/>
- Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies*. Oxford University Press.
- Brundage, M., Avin, S., Clark, J., Toner, H., Eckersley, P., Garfinkel, B., & Anderson, H. (2018). *The malicious use of artificial intelligence: Forecasting, prevention, and mitigation*. Retrieved from: arXiv preprint arXiv:1802.07228.
- Bukhoree, S., & Choksuriwong, A. (2023). The role of explainable Artificial Intelligence in high-stakes decision-making systems: a systematic review. *Journal of Ambient Intelligence and Humanized Computing*, 14, 7827-7843.
- Caldwell, A., Andrews, J. T. A., Tanay, T., & Grifn, L. D. (2020). AI-enabled future crime. *Crime Science*, 9 (14). <https://doi.org/10.1186/s40163-020-00123-8>
- Capella Solutions. (2023, October 14). *How AI is Transforming Resource Allocation in Manufacturing*. Retrieved from: <https://www.capellasolutions.com/blog/how-ai-is-transforming-resource-allocation-in-manufacturing>
- Chalfin, A., Kaplan, J. & LaForest, M. Street Light Outages, Public Safety and Crime Attraction. *J Quant Criminol* 38, 891–919 (2022). <https://doi.org/10.1007/s10940-021-09519-4>
- Chiancone, C. (2023, Octobre 3). *The Role of Artificial Intelligence in Law Enforcement*. Retrieved from: <https://www.linkedin.com/pulse/role-artificial-intelligence-law-enforcement-chris-chiancone/>
- Ciancaglini, V., Gibson, G., Sancho, D., McCarthy, O., Eira, M., Amann, P., Klayn, A., McArdle, R., &

- Beridze, I. (2020). *Malicious Uses and Abuses of Artificial Intelligence*. Retrieved from: <https://unicri.it/sites/default/files/2020-11/AI%20MLC.pdf>
- CISA. (2023). *#StopRansomware: Ransomware Attacks on Critical Infrastructure Fund DPRK Malicious Cyber Activities*. Retrieved from: <https://www.cisa.gov/news-events/cybersecurity-advisories/aa23-040a>
- Comiter, M. (2019). *Attacking Artificial Intelligence: AI's Security Vulnerability and What Policymakers Can Do About It*. Retrieved from: <https://www.belfercenter.org/publication/AttackingAI>
- Cornelia, R. L. L.M. (2022, May 9). *Europol Report Criminal Use of Deepfake Technology*. Retrieved from: <https://eucrim.eu/news/europol-report-criminal-use-of-deepfake-technology/#:~:text=Alternately%2C%20deepfake%20technologies%20have%20an,laws%20to%20policies%20and%20practices>.
- Cronin, M. R. (2023, July 30). *AI and Education Budgeting: Optimizing Resource Allocation in Schools*. Retrieved from: michaelrcronin.com
- Deloitte (2023). *Surveillance and Predictive Policing Through AI*. Retrieved from: <https://www.deloitte.com/global/en/Industries/government-public/perspectives/urban-future-with-a-purpose/surveillance-and-predictive-policing-through-ai.html>
- Dilmegani, C. (2024, Jan 11). *In-Depth Guide to Future of AI in 2024, According to Top Experts*. Retrieved from: <https://research.aimultiple.com/future-of-ai/>
- European Environment Agency. (2021). *Digital technologies will deliver more efficient waste management in Europe*. Retrieved from: <https://www.eea.europa.eu/themes/waste/waste-management/digital-technologies-will-deliver-more>
- European Parliament. (2020). *Artificial intelligence and law enforcement - Impact on fundamental rights*. Retrieved from: www.europarl.europa.eu
- Faggella, D. (2019, February 2). *AI for Crime Prevention and Detection – 5 Current Applications*. Retrieved from: <https://emerj.com/ai-sector-overviews/ai-crime-prevention-5-current-applications/>
- Fares, O.H., Butt, I. & Lee, S.H.M. (2023). Utilization of artificial intelligence in the banking sector: a systematic literature review. *J Financ Serv Mark*, 28, 835–852. <https://doi.org/10.1057/s41264-022-00176-7>
- Fortinet. (2023). *The 2023 Global Ransomware Report*. Retrieved from: <https://www.fortinet.com/content/dam/fortinet/assets/reports/report-2023-ransomware-global-research.pdf>
- Fox, S. (2023, October 13). *Chatbots vs. conversational AI: What's the difference?* Retrieved from: <https://www.ada.cx/posts/chatbots-vs-conversational-ai-whats-the-difference?>
- Fuster, G.G., Universiteit, V. (2020). *Artificial Intelligence and law enforcement impact on fundamental rights*. Brussels: European Union. Retrieved from: <http://www.europa.eu/supporting-analyses>
- FutureWebAI (2023, November 17). *AI in Law Enforcement: Balancing Surveillance and Civil Liberties*. Retrieved from: <https://medium.com/@futureaiweb/ai-in-law-enforcement-balancing-surveillance-and-civil-liberties-3c2c9a9ce131>
- Hall, C. (2019). *AI for Real-Time Active Shooter Defense*. Cutter Consortium.
- Hassan, S.A. (2023, April 6). *How AI Can Be Used to Manipulate People Absent regulation, AI offers a powerful tool for cults and dictators*. Retrieved from: <https://www.psychologytoday.com/us/blog/freedom-of-mind/202304/how-ai-can-be-used-to-manipulate-people>
- Hasselbalch, G. (2022). *Data Pollution & Power White Paper for a Global Sustainable Development Agenda on AI*. The Sustainable AI Lab, Bonn University.
- Ghosh, S. (2023, December 7). *AI Capacity Planning for Resource Allocation in Manufacturing*. Retrieved from: <https://www.quantzig.com/data-engineering/ai-capacity-planning-a-game-changer-for-manufacturers-resources/>
- Glover, T. D., Todd, J., & Moyer, L. (2022). Neighborhood Walking and Social Connectedness. *Frontiers in Sports Active Living*, 41
- Graves, C. (2023, February 16). *Generative AI Can Help You Tailor Messaging to Specific Audiences*. Retrieved from: <https://hbr.org/2023/02/generative-ai-can-help-you-tailor-messaging-to-specific-audiences>
- Guariglia, M. (2023, December 23). *Artificial Intelligence and Policing: Year in Review 2023*. Retrieved from: <https://www.eff.org/fr/deeplinks/2023/12/artificial-intelligence-and-policing-year-review-2023>
- Huang, K., Wang, X., Wei, W., & Madnick, S. (2023, May 04). *The Devastating Business Impacts of a Cyber Breach*. *Harvard Business Review*. Retrieved from: <https://hbr.org/2023/05/the-devastating-business-impacts-of-a-cyber-breach>

- Hung, T.W., & Yen, CP. (2021). On the person-based predictive policing of AI. *Ethics Inf Technol*, 23, 165–176. <https://doi.org/10.1007/s10676-020-09539-x>
- IAPP. (2023). *AI regulatory enforcement around the world*. Retrieved from: iapp.org
- Ienca, M. (2023). On Artificial Intelligence and Manipulation. *Topoi*, 42, 833–842. <https://doi.org/10.1007/s11245-023-09940-3>
- Interpol (2023). *Artificial Intelligence Toolkit*. Retrieved from: www.interpol.int
- Interpol (2024, March 6). *Revised toolkit empowers law enforcement with responsible AI practices*. Retrieved from: <https://www.interpol.int/en/News-and-Events/News/2024/Revised-toolkit-empowers-law-enforcement-with-responsible-AI-practices>
- Jenga, K., Catal, C. & Kar, G. (2023). Machine learning in crime prediction. *J Ambient Intell Human Comput* 14, 2887–2913. <https://doi.org/10.1007/s12652-023-04530-y>
- J.P. Morgan. (n.d.). The Potential Impacts of Ransomware. Retrieved from: <https://www.jpmorgan.com/technology/news/the-potential-impacts-of-ransomware>
- Kaspersky (n.d.). *Ransomware Attacks and Types – How Encryption Trojans Differ*. Retrieved from: <https://www.kaspersky.com/resource-center/threats/ransomware-attacks-and-types>
- Kshetri, K. (2017). Can Blockchain Strengthen the Internet of Things? *IT Professional*, 19(4), 68-72. doi: 10.1109/MITP.2017.3051335.
- Levy, N., Lerman, A. E., & Dixon, P. (2023). Reimagining Public Safety: Defining “Community” in Participatory Research. *Law & Social Inquiry* 2. Retrieved from: <https://www.cambridge.org/core/journals/law-and-social-inquiry/article/reimagining-public-safety-defining-community-in-participatory-research/ABE0E3DBDADD2BDA40F5B223EDA4CBB7>
- Li, C., & Huang, M. (2023). Environmental Sustainability in the Age of Big Data: Opportunities and Challenges for Business and Industry. *Environ Sci Pollut Res*, 30, 119001–119015. <https://doi.org/10.1007/s11356-023-30301-5>
- Lundberg, J., & Johansson, B. J. E. (2020). A framework for describing interaction between human operators and autonomous, automated, and manual control systems. *Cognition, Technology & Work*, 23, 381-401.
- Luo, H., Brody, R., Seazzu, A., Burd, S. (2011). Social Engineering: The Neglected Human Factor for Information Security Management. *Information Resources Management Journal (IRMJ)* 24(3). DOI: 10.4018/irmj.2011070101
- Maguire, J. (2021, January 29). *Artificial Intelligence: Current and Future Trends*. Retrieved from: <https://www.datamation.com/artificial-intelligence/artificial-intelligence-in-2021-current-and-future-trends/>
- ManageEngine. (2023). *The ethical debate of AI in criminal justice: Balancing efficiency and human rights*. Retrieved from: insights.manageengine.com
- Mandalapu, V., Elluri, L., Vyas, P., & Roy, N. (2023). *Crime Prediction Using Machine Learning and Deep Learning: A Systematic Review and Future Directions*. <https://doi.org/10.1109/ACCESS.2023.3286344>. Retrieved from: <https://arxiv.org/abs/2303.16310>
- Meissner, P., & Narita, Y. (2023, Sep 27). *Artificial intelligence will transform decision-making. Here's how*. Retrieved from: <https://www.weforum.org/agenda/2023/09/how-artificial-intelligence-will-transform-decision-making/>
- Mingyue, Q., & Xueying, Z. (2023). Determining Accurate Patrol Routes Using Genetic Algorithm and Ant Colony. *Aut. Control Comp. Sci.* 57, 337–347. <https://doi.org/10.3103/S0146411623040065>
- National Cyber Security Centre (n.d.). *A guide to ransomware*. Retrieved from: <https://www.ncsc.gov.uk/ransomware/home>
- Nature. (2020). Artificial intelligence in research. *Nature*, 586(7828), 186-188.
- NIST. (2021). *NIST Releases Tips and Tactics for Dealing With Ransomware*. Retrieved from: <https://www.nist.gov/news-events/news/2021/05/nist-releases-tips-and-tactics-dealing-ransomware>
- North Carolina State University. (2023, March 21). *Study highlights complicated relationship between AI and law enforcement*. Retrieved from: www.sciencedaily.com/releases/2023/03/230321112609.htm
- OJP. (2023). *Artificial Intelligence Applications in Law Enforcement: An Overview of Artificial Intelligence Applications and Considerations for State and Local Law Enforcement*. Retrieved from: <https://www.ojp.gov/ncjrs/virtual-library/abstracts/artificial-intelligence-applications-law-enforcement-overview>

- Okidegbe, N. (2023). *Algorithms Were Supposed to Reduce Bias in Criminal Justice—Do They?* Retrieved from <https://www.bu.edu/articles/2023/algorithms-were-supposed-to-reduce-bias-in-criminal-justice-do-they/>
- Palo Alto Networks. (n.d.). *What are Ransomware Attacks?* Retrieved from: <https://www.paloaltonetworks.com/cyberpedia/ransomware-common-attack-methods>
- Portman, P. (2023, Nov 13). *Generative AI And the Art of Personalization*. Retrieved from: <https://www.forbes.com/sites/forbestechcouncil/2023/11/13/generative-ai-and-the-art-of-personalization/?sh=4542ba5129c4>
- Purdy, M., & Williams, A.M. (2023). *How AI Can Help Leaders Make Better Decisions Under Pressure*. Harvard Business Review
- Razaulla, S., Fachkha, C., Markarian, C., Gawanmeh, A., Mansoor, W., Fung, B. C. M., ... & Assi, C. (2023). The age of ransomware: a survey on the evolution, taxonomy, and research directions. *IEEE Access*, 11, 40698-40723. <https://doi.org/10.1109/access.2023.3268535>
- Reese, H. (2022). What Happens When Police Use AI to Predict and Prevent Crime? *JSTOR Daily*. Retrieved from <https://www.jstor.org/stable/10.2307/j.ctv1c2rkm8.12>
- Rigano, C. (2018, October 8). *Using Artificial Intelligence to Address Criminal Justice Needs*. Retrieved from: <https://nij.ojp.gov/topics/articles/using-artificial-intelligence-address-criminal-justice-needs>
- Rigano, C. (2019). Using Artificial Intelligence to Address Criminal Justice Needs. *NIJ Journal*, 280. Retrieved from: <https://www.ojp.gov/pdffiles1/nij/252038.pdf>
- Roberts, S. (2023, January 26). *Artificial Intelligence In Cyber Security : A Complete Guide*. Retrieved from: <https://www.theknowledgeacademy.com/blog/artificial-intelligence-in-cyber-security/>
- Sabin, S. (2024, February 20). *Most ransomware attacks on critical services in 2023 happened in North America or Europe*. Retrieved from: <https://www.axios.com/2024/02/20/ransomware-attacks-north-america-europe>
- Sakhnini, J., Karimipour, H., Dehghantanha, A., & Parizi, R.M. (2020). AI and Security of Critical Infrastructure. In: Choo, KK., Dehghantanha, A. (Eds.) *Handbook of Big Data Privacy* (pp:7–36). Springer, Cham. https://doi.org/10.1007/978-3-030-38557-6_2
- Sarker, I.H. (2021). Machine Learning: Algorithms, Real-World Applications and Research Directions. *SN COMPUT. SCI.*, 2, 160. <https://doi.org/10.1007/s42979-021-00592->
- Salahdine, F., & Kaabouch, N. (2019). Social Engineering Attacks: A Survey. *Future Internet*, 11(4):89. <https://doi.org/10.3390/fi11040089>
- Schmitt, L. (2022). Mapping global AI governance: a nascent regime in a fragmented landscape. *AI Ethics*, 2, 303–314. <https://doi.org/10.1007/s43681-021-00083-y>
- Schmitt, M., & Flechais, I. (2023). *Digital Deception: Generative Artificial Intelligence in Social Engineering and Phishing*. Retrieved from <https://ssrn.com/abstract=4602790> or <http://dx.doi.org/10.2139/ssrn.4602790>
- Seraydarian, L. (2023, April 26). *AI-Powered Network Optimization in Telecommunications*. Retrieved from: <https://plat.ai/blog/ai-powered-network-optimization-in-telecommunication/> Shah, N., Bhagat, N. &
- Shah, M. (2021). Crime forecasting: a machine learning and computer vision approach to crime prediction and prevention. *Vis. Comput. Ind. Biomed. Art* 4 (9). <https://doi.org/10.1186/s42492-021-00075-z>
- Shipman, M. (2023, March 21). *Study Highlights Complicated Relationship Between AI and Law Enforcement*. Retrieved from: <https://news.ncsu.edu/2023/03/ai-and-law-enforcement/>
- Sjouwerman, S. (2023, May 26). *How AI Is Changing Social Engineering Forever*. Retrieved from: <https://www.forbes.com/sites/forbestechcouncil/2023/05/26/how-ai-is-changing-social-engineering-forever/?sh=33ecf227321b>
- Smith, A., & Anderson, M. (2018). *Artificial Intelligence and Law Enforcement*. Pew Research Center: *Internet, Science & Tech*. Retrieved from: <https://www.pewresearch.org/internet/2018/10/22/artificial-intelligence-and-law-enforcement/>
- Taskade. (n.d.). *AI Resource Allocation Generator*. Retrieved from: <https://www.taskade.com/generate/project-management/resource-allocation>
- TECHNO TROPICS (2023, DECEMBER 7). *How AI Is Enhancing Efficiency and Productivity Across Diverse Industries*. Retrieved from: <https://techtropics.com/how-ai-is-enhancing-efficiency-and-productivity-across-diverse-industries/>

- TESSIAN (2023, February 7). *Advanced Email Threats 15 Examples of Real Social Engineering Attacks*. Retrieved from: <https://www.tessian.com/blog/examples-of-social-engineering-attacks/>
- The Franklin Law. (2023). *Legal And Ethical Implications of AI in Predictive Policing and Law Enforcement*. Retrieved from: thefranklinlaw.com
- Toulas, B. (2024, February 20). *Critical infrastructure software maker confirms ransomware attack. Bleeping Computer*. Retrieved from: <https://www.bleepingcomputer.com/news/security/critical-infrastructure-software-maker-confirms-ransomware-attack/>
- Trend Micro. (2023, February 21). *A Deep Dive into the Evolution of Ransomware Part 1*. Retrieved from: https://www.trendmicro.com/en_us/research/23/b/ransomware-evolution-part-1.html
- UNICRI. (2023). *The Toolkit for Responsible Artificial Intelligence Innovation in Law Enforcement*. Retrieved from: unicri.it
- United Nations Environment Programme (UNEP). (2020). *Environmental Data as Digital Public Goods within a Digital Ecosystem for the Planet*. Retrieved from: <https://wedocs.unep.org/20.500.11822/36362>
- Velasco, C. (2022). Cybercrime and Artificial Intelligence. An overview of the work of international organizations on criminal justice and the international applicable instruments. *ERA Forum*, 23, 109–126. <https://doi.org/10.1007/s12027-022-00702-z>
- Van Noorden, R. (2020, November 18). *The ethical questions that haunt facial-recognition research*. Springer Nature.
- Vartak, M. (2022, Dec 5). *Top Six Trends (And Recommendations) For AI And ML In 2023*. Retrieved from: <https://www.forbes.com/sites/forbestechcouncil/2022/12/05/top-six-trends-and-recommendations-for-ai-and-ml-in-2023/?sh=703ee1ff1725>
- Veritone (n.d). *AI for public safety police reform: the future powered by ai technology*. Retrieved from: <https://www.veritone.com/blog/ai-public-safety-police-reform/>
- Vinothkumar., K., Ranjith, K. S., Vikram, R. R. Mekala, N., Sasirekha, S.P., & Reshma, R. (2023). Predicting High-Risk Areas for Crime Hotspot Using Hybrid KNN Machine Learning Framework”. In 5th International Conference on Inventive Research in Computing Applications (ICIRCA), Coimbatore, India, 2023 (pp: 848-852). doi: 10.1109/ICIRCA57980.2023.10220738.
- Whittle, J. (2021, Feb 11). *AI can now learn to manipulate human behaviour*. Retrieved from: <https://theconversation.com/ai-can-now-learn-to-manipulate-human-behaviour-155031>
- Yeung, D., Khan, I., Kalra, N., & Osoba, O. A. (2021). *Identifying Systemic Bias in the Acquisition of Machine Learning Decision Aids for Law Enforcement Applications*. RAND Corporation. Retrieved from https://www.rand.org/pubs/research_reports/RR4371.html
- Zain, M. R., Zahari, H.M., & Zainol, N. A.M. (2023). *Inter-agency information sharing coordination on humanitarian logistics support for urban disaster management in Kuala Lumpur*. *Front. Sustain. Cities* 5:1149454. doi: 10.3389/frsc.2023.1149454
- Zeng, W., Wang, P., & Wang, J. (2020). Deep learning algorithms with applications to video analytics for a smart and safe city. *Journal of Big Data*, 7(1),1-25.

2. ARTIFICIAL INTELLIGENCE



The Role of Artificial Intelligence in Shaping Modern Strategic Management Practices

Dr. Hassan TAJEDDINE (Lebanon)

Abstract

The rapid advancement of artificial intelligence (AI) is profoundly reshaping the landscape of strategic management. This paper explores the transformative role of AI in modern strategic management practices, examining how AI-driven technologies enhance decision-making, optimize operations, and provide competitive advantages. By integrating AI into strategic processes, organizations can leverage predictive analytics, automate complex tasks, and gain insights from vast data sets. This research delves into the theoretical underpinnings of strategic management and AI, presents case studies of companies successfully implementing AI, and discusses the challenges and ethical considerations involved. The findings highlight the necessity for businesses to embrace AI to remain competitive and agile in an increasingly dynamic market. Recommendations for practitioners and future research directions are provided to guide the strategic integration of AI. This study contributes to the growing body of knowledge on the interplay between AI and strategic management, offering a comprehensive framework for understanding and leveraging AI in strategic planning and execution.



Source: <https://www.cloudcomputing.id/berita/china-pusat-inovasi-ai>

Keywords: Artificial Intelligence, Strategic Management, Decision-Making, Predictive Analytics, Competitive Advantage, Business Transformation

Introduction

The rapid advancements in technology, particularly artificial intelligence (AI), have fundamentally transformed various sectors, including business and management. Strategic management, which involves formulating, implementing, and evaluating cross-functional decisions to achieve organizational objectives, is no exception. AI's integration into strategic management practices offers unprecedented opportunities for organizations to enhance decision-making, optimize operations, and maintain a competitive edge in the market (Porter, 2014). Artificial intelligence encompasses a broad range of technologies, such as machine learning,

natural language processing, and robotics, which enable machines to mimic human intelligence (Russell & Norvig, 2020). These technologies can process large volumes of data, recognize patterns, and make predictions with high accuracy, thereby supporting strategic decision-making processes (Kaplan & Haenlein, 2019). The application of AI in strategic management includes areas like predictive analytics, where AI models forecast future trends based on historical data, and competitive analysis, where AI tools analyze competitors' activities to inform strategic planning (Davenport & Ronanki, 2018). Moreover, AI-driven technologies are revolutionizing operational efficiency by automating routine tasks, thereby allowing managers to focus on more strategic activities (Huang & Rust, 2018). The integration of AI in strategic management not only enhances organizational performance but also fosters innovation by providing new insights and enabling the development of novel business models (Teece, 2018). However, the adoption of AI in strategic management also presents several challenges. These include technical challenges related to the implementation of AI systems, organizational challenges involving changes in corporate culture and management practices, and ethical and legal considerations concerning data privacy and algorithmic bias (Binns, 2018; Floridi et al., 2018). Despite these challenges, the potential benefits of AI integration in strategic management make it a critical area of study for both practitioners and academics.

The primary purpose of this study is to explore the transformative role of artificial intelligence (AI) in shaping modern strategic management practices. By examining the integration of AI technologies into strategic decision-making processes, this research aims to provide insights into how organizations can leverage AI to enhance their competitive advantage, optimize operations, and drive innovation. This study seeks to achieve the following specific objectives:

- *To Identify the Impact of AI on Strategic Decision-Making:* Investigate how AI-driven technologies, such as machine learning and predictive analytics, are influencing strategic decisions in various industries
- *To Assess the Role of AI in Competitive Analysis:* Examine how AI tools are used to analyze competitors and market trends, thereby informing strategic planning and positioning.
- *To Explore the Use of AI in Enhancing Operational Efficiency:* Analyze the ways in which AI can automate routine tasks and optimize resource allocation, allowing managers to focus on more strategic activities.
- *To Discuss the Challenges and Ethical Considerations of AI Integration:* Address the technical, organizational, and ethical challenges associated with integrating AI into strategic management, including issues related to data privacy and algorithmic bias.
- *To Provide Recommendations for Practitioners:* Offer practical advice for business leaders on how to effectively integrate AI into their strategic management practices to achieve sustainable growth and innovation.

Strategic Management Theories

Strategic management theories provide a foundation for understanding how organizations formulate, implement, and evaluate strategies to achieve their objectives. Several key theories have been developed over the years, each offering different perspectives on the strategic management process.

Porter's Five Forces Model is one of the most widely recognized frameworks in strategic management. Developed by Michael Porter, this model analyzes the competitive forces within an industry to determine its attractiveness and profitability. The five forces include the threat of new entrants, the bargaining power of suppliers, the bargaining power of buyers, the threat of substitute products or services, and the intensity of competitive rivalry (Porter, 2008).

The Resource-Based View (RBV), proposed by Jay Barney, emphasizes the importance of an organization's internal resources and capabilities in achieving a sustainable competitive advantage. According to RBV, firms that possess valuable, rare, inimitable, and non-substitutable resources can achieve superior performance (Barney, 1991). This theory shifts the focus from external industry factors to internal firm-specific factors.

Dynamic Capabilities Theory, introduced by David Teece, Gary Pisano, and Amy Shuen, extends the RBV by emphasizing the role of organizational capabilities in adapting to changing environments. Dynamic capabilities refer to a firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments (Teece, Pisano, & Shuen, 1997).

The Balanced Scorecard, developed by Robert Kaplan and David Norton, is a strategic management tool that provides a comprehensive view of an organization's performance. It incorporates financial and non-financial measures across four perspectives: financial, customer, internal business processes, and learning and growth. This approach helps organizations align their strategic objectives with performance measures and management practices (Kaplan & Norton, 1996).

Blue Ocean Strategy, formulated by W. Chan Kim and Renée Mauborgne, advocates for the creation of uncontested market space to make the competition irrelevant. This strategy focuses on value innovation, which involves creating new demand in an uncontested market space, rather than competing in existing markets. Organizations that successfully implement Blue Ocean Strategy can achieve significant growth and profitability (Kim & Mauborgne, 2005).

The Stakeholder Theory, introduced by R. Edward Freeman, argues that organizations should consider the interests of all stakeholders, not just shareholders, in their strategic decision-making processes. Stakeholders include employees, customers, suppliers, communities, and the environment. This theory highlights the importance of ethical considerations and corporate social responsibility in strategic management (Freeman, 1984).

These strategic management theories provide diverse perspectives on how organizations can achieve and sustain competitive advantage. Understanding these theories is crucial for exploring the integration of artificial intelligence into strategic management practices.

Overview of AI Technologies in Business

Artificial intelligence (AI) has rapidly evolved, becoming a transformative force in various business sectors. AI technologies encompass a range of applications, including machine learning, natural language processing, robotics, and computer vision, each offering unique capabilities to enhance business operations and strategic decision-making (Russell & Norvig, 2020; Goodfellow, Bengio, & Courville, 2016).

Machine Learning (ML) is a subset of AI that focuses on developing algorithms that enable computers to learn from and make predictions based on data. ML is widely used in business for tasks such as customer segmentation, demand forecasting, and fraud detection. For instance, Netflix uses ML algorithms to provide personalized recommendations to its users, significantly enhancing user experience and engagement (Murphy, 2012).

Natural Language Processing (NLP) involves the interaction between computers and human language, enabling machines to understand, interpret, and respond to textual or spoken inputs. NLP technologies are employed in various business applications, including chatbots, sentiment analysis, and automated customer service. Companies like Google and Amazon utilize NLP to improve their search engines and virtual assistants, respectively (Jurafsky & Martin, 2021).

Robotics involves the design and use of robots to perform tasks traditionally carried out by humans. In the business context, robotics is extensively used in manufacturing, logistics, and healthcare. For example, Amazon's use of robots in its warehouses has significantly increased efficiency and reduced operational costs (Siciliano & Khatib, 2016).

Computer Vision is an AI technology that enables machines to interpret and make decisions based on visual inputs. This technology is used in various business applications, such as quality inspection in manufacturing, facial recognition for security purposes, and automated checkout systems in retail. Companies like Tesla leverage computer vision for developing autonomous vehicles, which rely on real-time image processing to navigate roads safely (Szeliski, 2010).

Predictive Analytics is another critical AI application that uses statistical algorithms and machine learning techniques to identify the likelihood of future outcomes based on historical data. Businesses use predictive analytics for activities such as market trend analysis, risk management, and sales forecasting. For instance, financial institutions apply predictive analytics to assess credit risk and detect fraudulent activities (Shmueli & Koppius, 2011).

Artificial Neural Networks (ANNs), inspired by the human brain's structure, are used in deep learning to model complex patterns and prediction problems. ANNs are applied in various business scenarios, including image and speech recognition, natural language processing, and autonomous systems. Google's DeepMind leverages ANNs to develop AI systems capable of defeating human champions in complex games like Go (LeCun, Bengio, & Hinton, 2015).

The integration of these AI technologies into business processes enables organizations to improve efficiency, reduce costs, and drive innovation. However, the successful implementation of AI requires careful consideration of ethical, legal, and technical challenges (Binns, 2018; Floridi et al., 2018).

Previous Research on AI and Strategic Management

The intersection of artificial intelligence (AI) and strategic management has garnered significant attention in recent years, as researchers and practitioners explore how AI can enhance strategic decision-making and organizational performance. Previous studies have highlighted various aspects of AI integration in strategic management, including its impact on competitive advantage, operational efficiency, and innovation. Research has shown that AI can provide a significant competitive advantage by enabling firms to make more informed and timely decisions. AI technologies, such as predictive analytics and machine learning, help organizations analyze large datasets to identify trends and patterns that inform strategic decisions. For example, a study by Chui, Manyika, and Miremadi (2018) demonstrated that companies leveraging AI for competitive intelligence were better positioned to anticipate market shifts and respond proactively.

AI's ability to automate routine tasks and optimize business processes has been widely documented. Huang and Rust (2018) found that AI integration leads to substantial improvements in operational efficiency, allowing organizations to allocate resources more effectively and focus on strategic activities. This shift enables managers to concentrate on high-level strategic planning rather than day-to-day operational concerns. AI also plays a crucial role in fostering innovation within organizations. A study by Wilson and Daugherty (2018) highlighted how AI-driven insights can lead to the development of new business models and strategies. The research emphasized that AI not only supports existing strategic processes but also enables the creation of entirely new approaches to strategy formulation and implementation. The dynamic capabilities framework, as discussed by Wamba, Akter, Edwards, Chopin, and Gnanzou (2015), posits that AI enhances strategic flexibility by allowing organizations to quickly adapt to changing environments.

Their study found that firms with advanced AI capabilities were more agile and could respond to market changes more swiftly than their competitors. Despite the benefits, integrating AI into strategic management also presents challenges. Researchers like Binns (2018) and Floridi et al. (2018) have raised concerns about ethical issues, including data privacy, algorithmic bias, and the potential for AI to exacerbate inequalities within organizations. These studies underscore the importance of addressing ethical considerations in the strategic deployment of AI. Numerous case studies and empirical research have further elucidated the practical implications of AI in strategic management. For instance, a case study by Brynjolfsson, Rock, and Syverson (2018) on the adoption of AI in various industries provided evidence of its positive impact on productivity and strategic outcomes.

Methodology

The research design for this study is based on a mixed-methods approach, combining both qualitative and quantitative data to provide a comprehensive understanding of how artificial intelligence (AI) influences strategic management practices. This approach allows for the triangulation of data, ensuring a more robust and nuanced analysis (Creswell & Plano Clark, 2017). The study aims to explore the impact of AI on strategic decision-making, operational efficiency, and competitive advantage through both empirical data and case studies. Quantitative data will be gathered through structured surveys and questionnaires distributed to senior executives and strategic managers across various industries. These instruments will measure the extent of AI integration in strategic management processes, the perceived benefits and challenges, and the impact on organizational performance (Saunders, Lewis, & Thornhill, 2019). The survey questions will be designed using Likert scales to quantify the respondents' perceptions and experiences.

Qualitative data will be collected through semi-structured interviews with industry experts, strategic managers, and AI practitioners. These interviews will provide in-depth insights into the practical applications of AI in strategic management, the challenges faced during implementation, and the strategies employed to overcome these challenges (Kvale & Brinkmann, 2015). Additionally, case studies of organizations that have successfully integrated AI into their strategic management processes will be analyzed to identify best practices

and key success factors. The quantitative data collected from surveys will be analyzed using statistical methods. Descriptive statistics will summarize the data, while inferential statistics, such as regression analysis, will examine the relationships between AI integration and various strategic management outcomes (Field, 2018). Statistical software, such as SPSS or R, will be used to conduct these analyses, ensuring accuracy and reliability in the findings. The qualitative data from interviews and case studies will be analyzed using thematic analysis. This method involves coding the data to identify recurring themes and patterns related to AI integration in strategic management (Braun & Clarke, 2006). NVivo software will be utilized to assist with the organization and analysis of qualitative data, allowing for the systematic categorization of themes and the extraction of meaningful insights. To enhance the validity and reliability of the research findings, triangulation will be employed by cross-verifying data from multiple sources and methods. This process will involve comparing and contrasting the quantitative survey results with the qualitative interview and case study findings to identify convergent and divergent trends (Flick, 2018).

AI in Strategic Management

Artificial intelligence (AI) has become a critical tool in enhancing decision-making processes within strategic management. AI-driven decision-making leverages advanced algorithms, machine learning, and data analytics to provide insights that are more accurate, timely, and actionable than traditional methods (Sharda, Delen, & Turban, 2020). The integration of AI into decision-making processes allows organizations to analyze large volumes of data, identify patterns, and make informed decisions that drive competitive advantage. AI systems can process vast amounts of data at unprecedented speeds, allowing managers to access real-time insights. This capability is particularly valuable in environments characterized by high levels of uncertainty and rapid change. For instance, AI-driven predictive analytics can forecast market trends, customer behaviors, and potential risks, enabling managers to make proactive and strategic decisions (Chen, Chiang, & Storey, 2012). AI technologies also play a significant role in risk management by identifying potential threats and vulnerabilities that might not be apparent through human analysis alone.

By using AI to analyze historical data and predict future risks, organizations can develop more robust risk mitigation strategies (Agrawal, Gans, & Goldfarb, 2018). For example, financial institutions use AI to detect fraudulent activities and prevent financial losses (Vapnik, 2013). AI-driven decision-making facilitates optimal resource allocation by analyzing data on resource utilization, efficiency, and performance. This analysis helps organizations allocate resources more effectively, ensuring that they are used in areas that yield the highest strategic value. Companies like Google and Amazon utilize AI to manage their supply chains, optimizing inventory levels and reducing operational costs (Barton & Court, 2012). AI enables organizations to gain deeper insights into customer preferences and behaviors through the analysis of large datasets. This information can inform strategic decisions related to product development, marketing, and customer service.

AI-driven customer segmentation and personalization strategies help businesses tailor their offerings to meet specific customer needs, thereby increasing customer satisfaction and loyalty (Davenport, 2018). AI tools support strategic planning by providing scenario analysis and simulations that help managers evaluate the potential outcomes of different strategic choices. These tools can model complex business environments and simulate the impact of various strategic decisions, allowing managers to make more informed choices (Makridakis, 2017). Despite the benefits, integrating AI into decision-making processes presents challenges, including data quality issues, the need for skilled personnel, and ethical considerations related to algorithmic transparency and bias (Binns, 2018). Organizations must address these challenges to fully leverage the potential of AI-driven decision-making.

Predictive Analytics and Strategy Formulation

Predictive analytics, a subset of artificial intelligence (AI), involves using statistical algorithms, machine learning techniques, and historical data to forecast future outcomes. This technology has become a pivotal tool in strategy formulation, allowing organizations to anticipate market trends, consumer behavior, and potential risks, thereby crafting more informed and effective strategic plans (Delen & Ram, 2018). Predictive analytics enables organizations to develop more accurate and detailed strategic plans. By analyzing historical data and identifying patterns, predictive models can forecast future market conditions and business environments. This foresight allows managers to prepare for various scenarios, making strategic planning more

proactive rather than reactive (Shmueli & Koppius, 2011). One of the key applications of predictive analytics in strategy formulation is market trend analysis. By examining large datasets, organizations can identify emerging trends and shifts in consumer preferences. This insight helps companies to align their product development, marketing strategies, and resource allocation with anticipated market demands (Verma, Bakshi, & Ghosh, 2020).

Predictive analytics also plays a crucial role in understanding and forecasting customer behavior. By analyzing data from various customer touchpoints, such as purchase history, social media interactions, and online behavior, organizations can predict future buying patterns and preferences. This information is invaluable for developing targeted marketing campaigns, improving customer service, and enhancing customer retention strategies (Baesens et al., 2016). Effective risk management is another significant benefit of predictive analytics in strategy formulation. By identifying potential risks and vulnerabilities through data analysis, organizations can develop strategies to mitigate these risks before they materialize. For example, financial institutions use predictive analytics to detect potential fraud and assess credit risk, thereby protecting themselves from financial losses (Provost & Fawcett, 2013). Predictive analytics helps in optimizing resource allocation by identifying the most efficient ways to use organizational resources.

By forecasting demand and identifying areas of inefficiency, organizations can allocate their resources more effectively, ensuring that they are used in a manner that maximizes strategic value (Davenport & Harris, 2017). Organizations that leverage predictive analytics gain a competitive advantage by making more informed strategic decisions. The ability to anticipate market changes, understand customer needs, and manage risks proactively allows these organizations to stay ahead of their competitors and capitalize on emerging opportunities (Siegel, 2013). Despite its benefits, implementing predictive analytics in strategy formulation poses several challenges. These include data quality issues, the need for specialized skills, and the integration of predictive analytics into existing business processes. Organizations must address these challenges to fully realize the potential of predictive analytics (Fayyad, Piatetsky-Shapiro, & Smyth, 1996).

AI in Competitive Analysis

Artificial intelligence (AI) has emerged as a transformative tool in competitive analysis, enabling organizations to gain deep insights into their competitive landscape. By leveraging AI technologies such as machine learning, natural language processing, and data analytics, businesses can monitor competitors' activities, predict market trends, and identify strategic opportunities and threats with greater accuracy and speed. AI enables organizations to gather and analyze vast amounts of data in real-time, providing up-to-date insights into competitors' strategies, market movements, and consumer sentiment. For example, AI-powered tools can scrape competitors' websites, social media platforms, and news articles to track their product launches, marketing campaigns, and customer feedback (Fan, Lau, & Zhao, 2015). This real-time intelligence allows companies to make timely strategic adjustments and stay ahead of their rivals. Machine learning algorithms can predict competitors' future actions by analyzing historical data and identifying patterns.

Predictive analytics helps organizations anticipate competitors' moves, such as pricing changes, new product introductions, or market entry strategies. This foresight enables companies to proactively develop counter-strategies and maintain their competitive edge. Natural language processing (NLP) techniques can analyze social media posts, reviews, and other textual data to gauge public sentiment towards competitors. Understanding consumer sentiment provides valuable insights into competitors' strengths and weaknesses from the customers' perspective. Organizations can use this information to capitalize on competitors' shortcomings and enhance their own offerings (Liu, 2012). AI-driven data analytics can identify emerging market trends by analyzing large datasets from various sources. These trends help organizations understand shifts in consumer preferences, technological advancements, and regulatory changes that may impact their competitive position. By staying informed about market dynamics, businesses can adapt their strategies to align with evolving trends. AI tools can perform competitive benchmarking by comparing an organization's performance metrics with those of its competitors. These metrics may include financial performance, market share, customer satisfaction, and operational efficiency. Benchmarking helps organizations identify areas where they lag behind competitors and develop strategies to improve their relative performance (Porter & Poppelman, 2017). Despite its benefits, AI-driven competitive analysis faces several challenges. Data quality and availability, algorithmic transparency, and the need for specialized skills are significant hurdles. Additionally, ethical considerations

related to data privacy and the potential misuse of competitive intelligence must be addressed.

AI for Operational Efficiency

Artificial intelligence (AI) has proven to be a game-changer in enhancing operational efficiency across various business sectors. By automating routine tasks, optimizing resource allocation, and improving decision-making processes, AI technologies can significantly boost productivity and reduce operational costs (Brynjolfsson & McAfee, 2014; Davenport & Ronanki, 2018). AI technologies, such as robotic process automation (RPA) and machine learning, can automate repetitive and mundane tasks, allowing employees to focus on more strategic and creative activities. For instance, RPA can handle tasks like data entry, invoice processing, and customer service inquiries, which not only speeds up these processes but also reduces the likelihood of human errors (Lacity & Willcocks, 2016). This shift not only enhances efficiency but also increases job satisfaction among employees by freeing them from tedious tasks. AI systems can analyze vast amounts of data to optimize the allocation of resources such as labor, materials, and energy.

For example, in the manufacturing sector, AI algorithms can predict equipment failures and schedule maintenance activities proactively, thereby minimizing downtime and maximizing the utilization of machinery (Lee, Kao, & Yang, 2014). Similarly, AI can optimize supply chain operations by predicting demand fluctuations and adjusting inventory levels accordingly, reducing both stock outs and overstock situations (Wang, Gunasekaran, Ngai, & Papadopoulos, 2016). AI enhances decision-making by providing real-time insights and predictive analytics. For example, AI-powered analytics can help managers make data-driven decisions regarding production schedules, workforce management, and logistics planning. These systems use historical data and machine learning models to forecast future trends and outcomes, allowing businesses to respond more effectively to changing market conditions (Sharda, Delen, & Turban, 2020). AI technologies can also contribute to energy efficiency by optimizing the use of resources in real-time. Smart grids, powered by AI, can balance energy supply and demand, reducing waste and lowering costs. AI algorithms can analyze data from various sources to predict energy consumption patterns and adjust the distribution accordingly, resulting in significant energy savings (Kalogirou, 2000). In manufacturing and production environments, AI can enhance quality control by using computer vision and machine learning to detect defects and anomalies in real-time.

These systems can inspect products more accurately and consistently than human inspectors, ensuring higher quality standards and reducing waste (Tao, Qi, Liu, & Kusiak, 2018). AI-driven predictive maintenance systems can analyze data from sensors and equipment to predict when maintenance is needed, preventing unexpected breakdowns and extending the lifespan of machinery. This proactive approach to maintenance not only improves operational efficiency but also reduces maintenance costs and downtime (Schwabacher & Goebel, 2007). AI chatbots and virtual assistants can handle a large volume of customer inquiries simultaneously, providing instant responses and resolving issues without human intervention. This capability improves customer satisfaction by reducing wait times and ensuring that customers receive accurate information promptly (Huang & Rust, 2018). While AI offers numerous benefits for operational efficiency, its implementation can be challenging. Issues such as data privacy, algorithmic bias, and the need for skilled personnel to manage AI systems must be addressed. Additionally, organizations need to ensure that AI integration aligns with their overall strategic goals and does not disrupt existing processes (Floridi et al., 2018).

Future Directions

The integration of artificial intelligence (AI) in strategic management is continuously evolving, with several emerging trends poised to shape the future landscape of business strategy. Organizations increasingly rely on data-driven decision-making, AI technologies will continue to advance, providing even more sophisticated tools for predictive analytics and real-time data analysis. This trend will enable companies to make more informed and timely strategic decisions, leveraging large datasets to uncover insights that were previously inaccessible (Brock & von Wangenheim, 2019). The future will see a rise in autonomous business processes driven by AI. These processes will operate with minimal human intervention, handling complex tasks such as supply chain management, financial forecasting, and customer relationship management. The implementation of autonomous systems will significantly enhance operational efficiency and strategic agility (Brougham & Haar, 2018). As AI becomes more pervasive in strategic management, there will be an increased focus on ethical AI and responsible innovation. Organizations will need to develop frameworks to ensure transparency,

fairness, and accountability in AI-driven decision-making. This includes addressing issues of data privacy, algorithmic bias, and the social impact of AI technologies (Floridi et al., 2018). AI will play a crucial role in strategic foresight, helping organizations anticipate and prepare for future challenges and opportunities.

AI-powered tools will enhance scenario planning and strategic forecasting, enabling companies to simulate various future scenarios and develop robust strategies to navigate uncertainty (Makridakis, 2017). The future of strategic management will likely involve enhanced collaboration between humans and AI. AI systems will augment human decision-making by providing advanced analytical capabilities, while human managers will bring contextual understanding and ethical judgment to the table. This synergy will result in more effective and balanced strategic decisions (Wilson & Daugherty, 2018).

To effectively integrate AI into strategic management practices, practitioners should consider the following recommendations: Organizations should invest in training and development programs to enhance AI literacy among their employees. This includes understanding the basics of AI technologies, their potential applications, and the ethical considerations involved (Raisch & Krakowski, 2021). Companies should develop a clear AI strategy that aligns with their overall business objectives. This strategy should outline the specific AI technologies to be adopted, the areas of the business they will impact, and the expected outcomes (Davenport & Ronanki, 2018). Encouraging a culture of innovation and experimentation is crucial for successful AI integration. Organizations should create an environment where employees are encouraged to explore new AI applications and experiment with innovative solutions (Huang & Rust, 2018). Implementing ethical AI practices is essential to maintain trust and integrity.

Organizations should establish guidelines for ethical AI use, including transparency in AI-driven decisions, mitigation of algorithmic bias, and protection of data privacy (Floridi et al., 2018). Engaging with AI experts, technology providers, and other stakeholders can help organizations stay updated on the latest AI developments and best practices. Collaborations and partnerships can provide valuable insights and resources for effective AI adoption (Chui, Manyika, & Miremadi, 2018).

The integration of AI into strategic management has significant implications for both theory and practice:

1. *Advancing Strategic Management Theory:* The use of AI in strategic management challenges traditional theories and introduces new perspectives. Researchers need to explore how AI alters strategic decision-making processes, the nature of competitive advantage, and the dynamics of organizational behavior (Teece, 2018).

2. *Practical Applications and Case Studies:* Practitioners can benefit from case studies and real-world applications of AI in strategic management. Documenting successful AI implementations and their impact on business outcomes can provide valuable lessons and best practices for other organizations (Brynjolfsson & McAfee, 2014).

3. *Bridging the Gap between Theory and Practice:* There is a need for closer collaboration between academia and industry to bridge the gap between theory and practice. Academic research should focus on addressing practical challenges faced by organizations in AI adoption, while practitioners should leverage theoretical insights to guide their AI strategies (Delen & Ram, 2018).

4. *Ethical and Social Implications:* The ethical and social implications of AI in strategic management are critical areas of study. Researchers should investigate the broader impact of AI on society, including issues related to job displacement, inequality, and ethical governance, to ensure that AI technologies are used responsibly and for the greater good (Floridi et al., 2018).

Conclusion

This study has comprehensively explored the transformative impact of artificial intelligence (AI) on strategic management, illustrating how AI-driven decision-making, predictive analytics, competitive analysis, and operational efficiency can significantly enhance business performance. By integrating AI into strategic processes, organizations can harness vast amounts of data to derive actionable insights, enabling more accurate and timely decision-making. Predictive analytics facilitates strategic foresight, allowing companies to anticipate market trends and customer behaviors, which in turn leads to more proactive and informed strategy formulation. AI in competitive analysis offers real-time intelligence on market dynamics and competitors' activities, empowering organizations to develop effective counter-strategies and maintain a competitive edge.

Furthermore, AI's role in operational efficiency through automation and optimization of resources leads to increased productivity, reduced costs, and improved quality control.

However, the study also highlights the importance of ethical considerations and the need for responsible AI practices to ensure transparency, fairness, and accountability. As AI technologies continue to advance, their integration into strategic management will become increasingly crucial, driving innovation and strategic success. Organizations must therefore stay abreast of AI developments and invest in building AI capabilities to fully leverage its potential. This entails fostering a culture of continuous learning, investing in AI infrastructure, and developing comprehensive AI strategies that align with their overall business goals. The findings of this study underscore the imperative for businesses to embrace AI not just as a tool, but as a strategic partner that can significantly influence their future growth and sustainability in a rapidly evolving market landscape.

References:

- Binns, R. (2018). Fairness in Machine Learning: Lessons from Political Philosophy. *Proceedings of the 2018 Conference on Fairness, Accountability, and Transparency*. doi:10.1145/3287560.3287592
- Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. New York, NY: W.W. Norton & Company.
- Davenport, T. H., & Ronanki, R. (2018). Artificial Intelligence for the Real World. *Harvard Business Review*, 96(1), 108-116.
- Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., & Vayena, E. (2018). AI4People — An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations. *Minds and Machines*, 28(4), 689-707. doi:10.1007/s11023-018-9482-5
- Huang, M. H., & Rust, R. T. (2018). Artificial Intelligence in Service. *Journal of Service Research*, 21(2), 155-172. doi:10.1177/1094670517752459
- Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in My Hand: Who's the Fairest in the Land? On the Interpretations, Illustrations, and Implications of Artificial Intelligence. *Business Horizons*, 62(1), 15-25. Doi: 10.1016/j.bushor.2018.08.004
- Porter, M. E., & Heppelmann, J. E. (2017). Why Every Organization Needs an Augmented Reality Strategy. *Harvard Business Review*, 95(6), 46-57.
- Russell, S., & Norvig, P. (2020). *Artificial Intelligence: A Modern Approach* (4th ed.). Hoboken, NJ: Pearson.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120. doi:10.1177/014920639101700108
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston, MA: Harvard Business School Press.
- Kim, W. C., & Mauborgne, R. (2005). *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*. Boston, MA: Harvard Business School Press.
- Binns, R. (2018). Fairness in Machine Learning: Lessons from Political Philosophy. *Proceedings of the 2018 Conference on Fairness, Accountability, and Transparency*. doi:10.1145/3287560.3287592
- Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., & Vayena, E. (2018). AI4People — An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations. *Minds and Machines*, 28(4), 689-707. doi:10.1007/s11023-018-9482-5
- Goodfellow, I., Bengio, Y., & Courville, A. (2016). *Deep Learning*. Cambridge, MA: MIT Press.
- Jurafsky, D., & Martin, J. H. (2021). *Speech and Language Processing* (3rd ed.). Hoboken, NJ: Pearson.
- LeCun, Y., Bengio, Y., & Hinton, G. (2015). Deep Learning. *Nature*, 521(7553), 436-444. doi:10.1038/nature14539
- Murphy, K. P. (2012). *Machine Learning: A Probabilistic Perspective*. Cambridge, MA: MIT Press.

- Russell, S., & Norvig, P. (2020). *Artificial Intelligence: A Modern Approach* (4th ed.). Hoboken, NJ: Pearson.
- Shmueli, G., & Koppius, O. R. (2011). Predictive Analytics in Information Systems Research. *MIS Quarterly*, 35(3), 553-572. doi:10.2307/23042796
- Siciliano, B., & Khatib, O. (Eds.). (2016). *Springer Handbook of Robotics* (2nd ed.). Berlin: Springer.
- Szeliski, R. (2010). *Computer Vision: Algorithms and Applications*. London: Springer.
- Binns, R. (2018). Fairness in Machine Learning: Lessons from Political Philosophy. *Proceedings of the 2018 Conference on Fairness, Accountability, and Transparency*. doi:10.1145/3287560.3287592
- Brynjolfsson, E., Rock, D., & Syverson, C. (2018). Artificial Intelligence and the Modern Productivity Paradox: A Clash of Expectations and Statistics. In A. Agrawal, J. Gans, & A. Goldfarb (Eds.), *The Economics of Artificial Intelligence: An Agenda* (pp. 23-57). Chicago, IL: University of Chicago Press. doi:10.7208/chicago/9780226613475.003.0002
- Chui, M., Manyika, J., & Miremadi, M. (2018). What AI Can and Can't Do (Yet) for Your Business. *McKinsey Quarterly*. Retrieved from <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/what-ai-can-and-cant-do-yet-for-your-business>
- Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., & Vayena, E. (2018). AI4People—An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations. *Minds and Machines*, 28(4), 689-707. doi:10.1007/s11023-018-9482-5
- Huang, M. H., & Rust, R. T. (2018). Artificial Intelligence in Service. *Journal of Service Research*, 21(2), 155-172. doi:10.1177/1094670517752459
- Wamba, S. F., Akter, S., Edwards, A., Chopin, G., & Gnanzou, D. (2015). How 'Big Data' Can Make Big Impact: Findings from a Systematic Review and a Longitudinal Case Study. *International Journal of Production Economics*, 165, 234-246. doi: 10.1016/j.ijpe.2014.12.031
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Creswell, J. W., & Plano Clark, V. L. (2017). *Designing and Conducting Mixed Methods Research* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). London: SAGE Publications.
- Flick, U. (2018). *An Introduction to Qualitative Research* (6th ed.). London: SAGE Publications.
- Kvale, S., & Brinkmann, S. (2015). *InterViews: Learning the Craft of Qualitative Research Interviewing* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th ed.). Harlow, UK: Pearson Education.
- Agrawal, A., Gans, J., & Goldfarb, A. (2018). *Prediction Machines: The Simple Economics of Artificial Intelligence*. Boston, MA: Harvard Business Review Press.
- Barton, D., & Court, D. (2012). Making Advanced Analytics Work for You. *Harvard Business Review*, 90(10), 78-83.
- Binns, R. (2018). Fairness in Machine Learning: Lessons from Political Philosophy. *Proceedings of the 2018 Conference on Fairness, Accountability, and Transparency*. doi:10.1145/3287560.3287592
- Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business Intelligence and Analytics: From Big Data to Big Impact. *MIS Quarterly*, 36(4), 1165-1188. doi:10.2307/41703503
- Davenport, T. H. (2018). *The AI Advantage: How to Put the Artificial Intelligence Revolution to Work*. Cambridge, MA: MIT Press.
- Makridakis, S. (2017). The Forthcoming Artificial Intelligence (AI) Revolution: Its Impact on Society and Firms. *Futures*, 90, 46-60. doi: 10.1016/j.futures.2017.03.006
- Sharda, R., Delen, D., & Turban, E. (2020). *Business Intelligence, Analytics, and Data Science: A Managerial Perspective* (5th ed.). New York, NY: Pearson.
- Baesens, B., Van Vlasselaer, V., & Verbeke, W. (2016). *Fraud Analytics Using Descriptive, Predictive, and Social Network Techniques: A Guide to Data Science for Fraud Detection*. Hoboken, NJ: Wiley.
- Davenport, T. H., & Harris, J. G. (2017). *Competing on Analytics: The New Science of Winning*. Boston, MA: Harvard Business Review Press.
- Delen, D., & Ram, S. (2018). Research Challenges and Opportunities in Business Analytics. *Journal of Business Analytics*, 1(1), 2-12. doi:10.1080/2573234X.2018.1507602

- Fayyad, U., Piatetsky-Shapiro, G., & Smyth, P. (1996). From Data Mining to Knowledge Discovery in Databases. *AI Magazine*, 17(3), 37-54.
- Provost, F., & Fawcett, T. (2013). *Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking*. Sebastopol, CA: O'Reilly Media.
- Shmueli, G., & Koppius, O. R. (2011). Predictive Analytics in Information Systems Research. *MIS Quarterly*, 35(3), 553-572. doi:10.2307/23042796
- Siegel, E. (2013). *Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die*. Hoboken, NJ: Wiley.
- Verma, P., Bakshi, M., & Ghosh, P. (2020). Predictive Analytics: A Review of Trends and Techniques. *International Journal of Advanced Research in Computer Science*, 11(1), 123-134. doi:10.26483/ijarcs.v11i1.6679
- Raisch, S., & Krakowski, S. (2021). Artificial Intelligence and Management: The Automation-Augmentation Paradox. *Academy of Management Review*, 46(1), 192-210. doi:10.5465/amr.2018.0072

3. SECURITY AND RESILIENCE



Understanding National Security - Part I The Component of Military Security

Lieutenant Colonel (Ret.) Georgios KOUKAKIS (Greece)

”Military power serves the cause of security by making prohibitive the cost of any aggressive attack. It serves the cause of peace by holding up a shield behind which the patient constructive work of peace can go on.”

Dwight D. Eisenhower (1890-1969)

Abstract

This article is the first part of a series of articles that aim to present the various components of national security, a dimension of security that has recently been under the spotlight due to the numerous crises and threats that prevail in the contemporary security environment endangering the well-being of citizens and the proper functioning of states. It focuses on military security, the most known ‘traditional’ component of national security, as the initial meaning of the latter was almost identical with the protection of a state against the use of military force from another. Its purpose is to clarify the context of military security, present its interconnection with the rest of the components of national security and other policy fields and highlight its importance for peace and stability, while its main conclusion is that military security will always be the foundation of national security and must not be overlooked.

Introduction

Russia’s invasion of Ukraine on *February 24, 2022* highlighted once more the importance of ‘hard power’ as one of the main factors that –either in a direct (military operations) or indirect (defence diplomacy) way– contribute to the implementation of a state’s foreign policy¹. The aforementioned aggressive way of achieving national goals that evolved to the on-going War in Ukraine was only to be confirmed on *October 7, 2023* the date when the strategic surprise of Israel by Hamas led to a second armed conflict in the Gaza strip between the two actors². Both crises demonstrated the timeless value of military security (and resilience) –that due the long time period of peace in the European continent was almost forgotten by most European actors– leading to several institutional changes such as the accession of Sweden and Finland to NATO, the increase of

¹Koukakis, G. (2022). *Did Russia fall into Thucydides trap?. Center for International Strategic Analyses. <https://www.doi.org/10.13140/RG.2.2.34400.29446>*

²Κουκάκης, Γ. (2023). *Η διεθνής σκακιέρα, η επόμενη μέρα στη Μ. Ανατολή και η θέση της Ελλάδας. Liberal. <https://www.liberal.gr/amyndiplomatia/i-diethnis-skakiera-i-epomeni-mera-sti-m-anatoli-kai-i-thesi-tis-elladas>*

the defense expenditures of the majority of European states, and the issuance of the first-ever *National Security Strategy* (NSS) of Germany³ and the *European Defence Industrial Strategy* (EDIS) of the European Union (EU)⁴. It must also be stressed that the contemporary security environment –besides of military crises– is full of energy, food, health and economic crises, leading many scholars to characterize our era as an era of *polycrises* and *permacrises*⁵. *Globalisation* and *technological advancement* have also facilitated the spread of several security threats such terrorism and violent extremism, mainly due to the ability of actors to access and share (mis-/dis-)information through a variety of means of communication. Geopolitical competitiveness and major shifts in regional balance of power have also rise tension in the bilateral and multilateral relations of several state and non-state actors, which in addition to the contestation as far as the values and norms of the western civilization is concerned have brought regional and international instability and turmoil. In this context, national security – especially its military component– is of vital importance for every state, as it contributes greatly not only to the promotion of its national interests but the wellbeing of its citizens as well.

The article presents the context of military security, one of the two –the other one being economic security– basic components of national security. Its importance lies in the fact that military security is vital for the survival of every state, as it ensures the states' *territorial integrity* and *national sovereignty* through the effective tackling and/or management of military threats. Current research indicates that most states around the world are emphasizing on military security, thus the article contributes in existing literature as it provides additional information that can help *citizens* understand the need for enhancing military security and *policy makers* plan and implement respective policies in a more effective way. Its purpose is to clarify the context of military security, present its interconnection with the rest of the components of national security and other policy fields, and highlight its importance for peace and stability. The main conclusion is that military security will always be the foundation of national security and must not be overlooked. As far as the structure of the article is concerned, it initially clarifies the concept of national security, it then explains the context of military security, after that it presents the main collaborative military schemes and the contemporary military crises worldwide, it proceeds to a brief analysis of the interconnection between military security and other policy fields, and concludes by referring to the future challenges and opportunities.

The Concept of Security

The term *security* originates from the Latin word *securitas/securus* whose first compound is the word *sine* meaning *without* and the second compound the word *cura* meaning *fear, worry, anxiety*, etc⁶. Thus, security is the state in which fear, worry, and anxiety are absent, due to the necessary actions taken by an actor (individual, group, state, organization, etc.) in order to be protected against threats and/or risks. Therefore, security can be categorized according to the level of analysis (*Picture 1*) into *four types*; *Human Security* at the individual level, *National Security* at the state level, *Regional Security* at the group level, and *International Security* at the system level (**Picture 1**).

At first security was mainly related to *national security* (the protection of the state), a concept that was introduced by the United States of America (USA) through the *National Security Act* signed in 1947⁷. This new paradigm related security to the internal structure of each state, reflecting its interaction with the security environment, a relation that is based on the state's perception of insecurity⁸. Later on, the United Nations (UN)

³Koukákis, Γ. (2023, Ιούνιος 18). Η πρώτη «ιστορική» Στρατηγική Εθνικής Ασφάλειας της Γερμανίας: Πώς βλέπει το Βερολίνο τον εαυτό του στον 21ο αιώνα και τι σημαίνει αυτό για τον κόσμο και την Ελλάδα. *Foreign Affairs - The Hellenic Edition*. https://www.researchgate.net/publication/373194953_E_prote_istorike_Strategike_Ethnikes_Asphaleias_tes_Germanias_Pos_blepei_to_Berolino_ton_eauto_tou_ston_21o_aiona_kai_ti_semainei_aito_gia_ton_kosmo_kai_ten_Ellada.

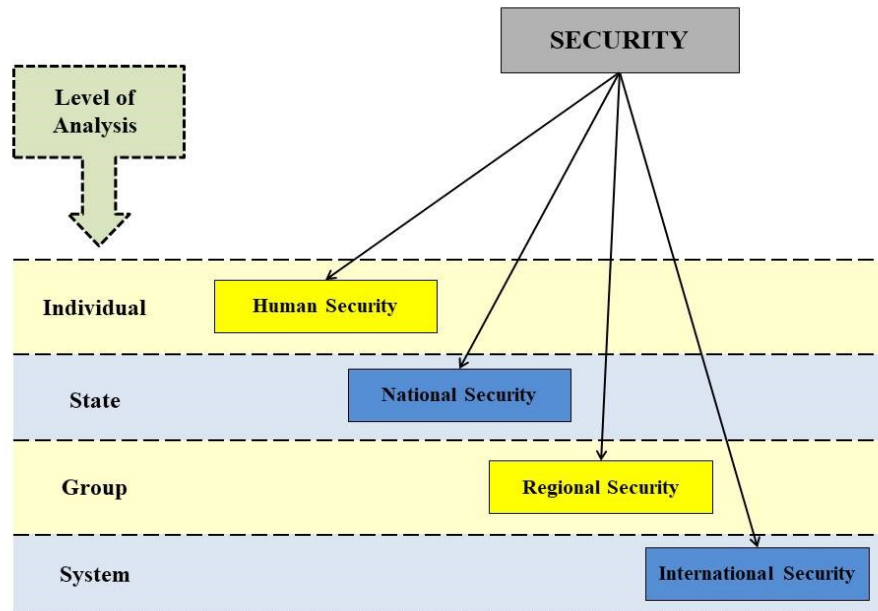
⁴Koukakis, G. (2024). *The First Ever 2024 European Defence Industrial Strategy: Background, Challenges and Future Considerations Regarding the European Security and Defense* [Occasional Paper 2/2024]. HERMES Institute of International Affairs, Security & Geoeconomy. <https://doi.org/10.13140/RG.2.2.27247.44961>.

⁵Koukakis, G. (2023). *Permacrises and Polycrises: Outlining the Contemporary Security Environment through References to Strategic Documents of Regional and International Actors*. HAPSc Policy Briefs Series, Vol 4 (2). pp. 55-64. <https://doi.org/10.12681/hapscpbs.36661>.

⁶Neocleous, M. (2000). *Against security*. *Radical Philosophy*, 100, pp. 7-15. <https://www.radicalphilosophy.com/article/against-security>.

⁸Buzan, B. (1983). *People, States, and Fear: The National Security Problem in International Relations*. Sussex: Wheatsheaf Books, p. 69.

related security to people and the eradication of poverty and underdevelopment⁹, introducing the concept of *human security* through the *Human Development Report* that was published in 1994.¹⁰ As far as *regional security* is concerned, despite the fact that it (etymologically) comprises the national security of the states of a specific region, it also expresses the strong relations developed among them due to their similar cultural, political and legal systems¹¹. Therefore, it enables them to act collectively against common threats and cooperate in several fields in order to facilitate development –as security and development are two closely related terms¹²– leading to the establishment of several regional organisations such as the EU¹³.



Picture 1: The 4 types of security
Source: Edited by Georgios Koukakis

Finally, *international security* is closely related to globalization¹⁴, mostly dealing with global threats through international organizations such as the United Nations.¹⁵ Moreover, security –regardless the institutional level in which it is examined– encompasses several *dimensions/components*, depending on the specific aspect/policy field that is endangered and/or the origin of threats/risks. These include, but are not limited to the following: (1) military security, (2) economic security, (3) energy security, (4) critical infrastructure security, (5) maritime security, (6) food security, (7) environmental security, (8) health security, (9) domestic/internal security, (10) cyber security, (11) cultural security, (12) water security, (13) demographic security, (14) information security, and (15) space security (**Picture 2**).

⁹Buzan, B. & Hansen, L. (2009). *People, States, and Fear: The National Security Problem in International Relations*. New York: Cambridge University Press, p. 203.

¹⁰United Nations Development Programme. (1994). *Human Development Report 1994*. <https://hdr.undp.org/system/files/documents/hdr1994encompletenostatpdf.pdf>.

¹¹Graham, K. & Felicio, T. (2005). *Regional Security and Global Governance: A Proposal for a 'Regional-Global Security Mechanism' in Light of the UN High-Level Panel's Report*, Egmont Paper, 4. <http://aei.pitt.edu/8985/> (21/04/2024).

¹²Krause, K. & Jütersonke, O. (2005). 'Peace, Security and Development', *Security Dialogue*, 36(4), pp. 447-462. <https://journals.sagepub.com/doi/10.1177/0967010605060449>.

¹³Bailes, A. & Cottey, A. (2006). *Regional security cooperation in the early 21st century*, in Bailes, A. (ed.) *SIPRI Yearbook 2006: Armaments, Disarmament and International Security*. New York: Oxford University Press, pp. 195–223.

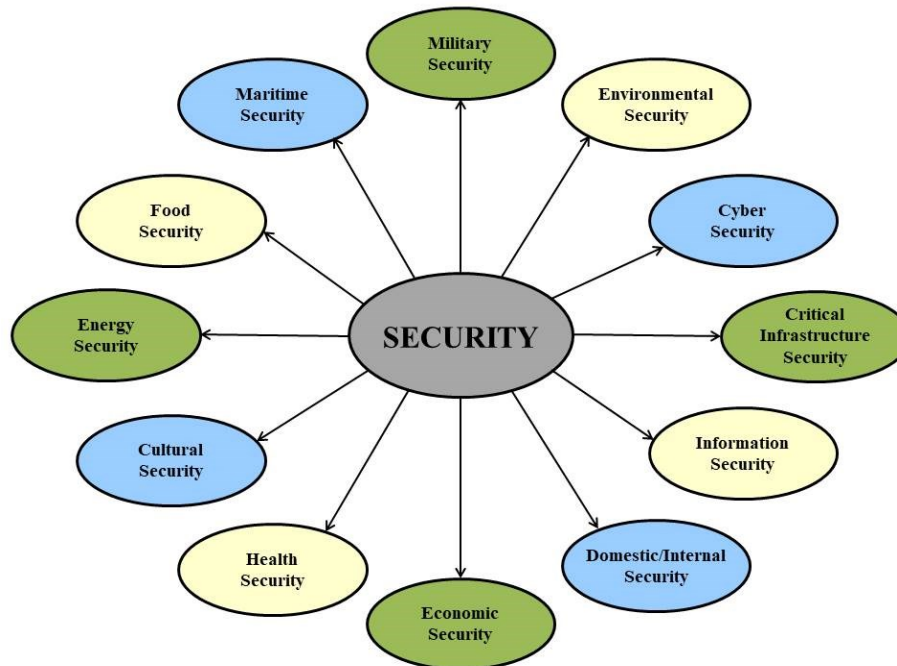
¹⁴Cha, V. (2000). *Globalization and the Study of International Security*, *Journal of Peace Research*, 37(3), pp. 391-403. <https://journals.sagepub.com/doi/10.1177/0022343300037003007>.

¹⁵United Nations. (2023). *Determined: Report of the Secretary-General on the Work of the Organization*. https://www.un.org/sites/un2.un.org/files/sg_annual_report_2023_en_0.pdf.

The Context of Military Security

Taking into consideration the aforementioned definition of security, it is understood that military security is the protection of an actor against military threats. In order though for someone to fully comprehend the context of military security, the article analyzes the following military security elements:

1. Threats: As far as military threats are concerned, it must be stressed that they usually include other actors such the *Armed Forces* (Army, Marines, Navy, Air Force, Space Force, and Cyberspace Force) of a state and/or *Private Military and Security Companies* (PMSC) that are involved in *interstate conflict*. Moreover, despite the fact that military means can be used by several other actors such terrorist groups, terrorism is usually considered due to its nature as an international security threat that affects domestic/internal security. The same –as far as the component of security affected– applies for intrastate conflict (civil war) that is also related to the use of military means.



Picture 2: Indicative dimensions/components of security
Source: Edited by Georgios Koukakis

2. Means: As far as the military means that an actor uses to threaten the military security of another actor, they usually include military personnel, rifles, mortars, machine guns, A-T weapons, explosives, missiles, mines, radars, tanks and fighting vehicles, helicopters, airplanes and fighter jets, military boats and warships, air carriers, submarines, Unmanned Aerial Vehicles (UAV), lasers, etc.

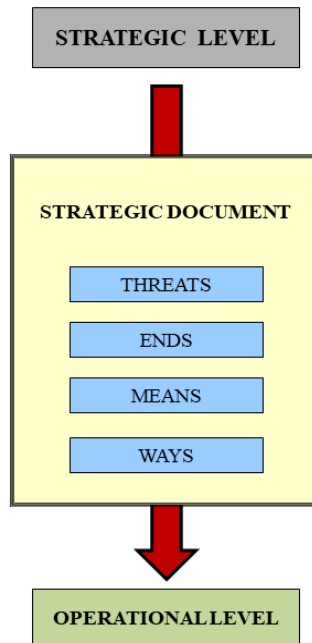
3. Ways: As far as the ways that military means are used, the most common use is through the conduction of military operations, that it the *use of military force*. Another way of threatening and/or achieving military security though is through *defence/military diplomacy*. The latter that can also be characterised as the *soft power of hard power*, comprises a state's participation in *defence partnerships*, the signature of *military/defence cooperation agreements*, the conduction of joint *military exercises*, the exchange of *official high-level visits* between states, etc.

4. Goals/Objectives: The main goal that an actor wishes to accomplish through the use of military forces or defence/military diplomacy, the main one according to *Clausewitz* is to impose its will to the opponents, as war is the continuation of politics¹⁶.

¹⁶Shephard, J. E. (1990). *On War: Is Clausewitz Still Relevant?. Parameters*. pp. 85-99. <https://apps.dtic.mil/sti/tr/pdf/ADA515723.pdf>

As far as the military objectives are concerned, they usually include the causing of *casualties* and the seizure of *key terrain* (high ground, main avenues of approach, crossroads, etc.) or *critical infrastructure* (main ports, railway stations, airports, nuclear plants, electric stations, etc.) in order to be able to control/influence the opponent's actions.

5. Strategic documents: As far as the strategic documents that are related to military security, they include White Papers, National Defence Strategies (NDS), National Defence Policies (NDP), National Defence Reviews, Military Doctrines, Military Concepts, etc. Their main purpose is to provide the framework – by defining the main threats, desired ends (goals), necessary means, and preferable ways of using them– in which Branches of the Armed Forces of the state will implement their respective strategies (**Picture 3**).



Picture 3: *The function of Strategic Documents*

Source: Edited by Georgios Koukakis

6. Decision-making: Finally, as far as the decision making process regarding the use of military force is concerned, due to the fact that it is an action with severe political, economic, diplomatic and social consequences –not only for the actor that is being threatened but also for the actor that uses military means– the decision for engagement of a state's Armed Forces in an operation against another actor is usually taken in the higher strategic political level. To be more precise, the respective decision must be approved by the state's *National Security Council* (NSC) –or its relevant institutions¹⁷– and in case the state hasn't established one, by the *Head of State*.

Military Collaborative Schemes (Alliances) and Strategic Partnerships

Having understood that cooperation is the best way to counter military threats, many actors have proceeded to the establishment of several collaborative schemes (also known as Alliances) of military nature – either in the form of an *international/regional organization* or a *strategic partnership*– in order to enhance their *defense capabilities* and/or achieve *deterrence*. Some of the most known collaborative schemes are the following:

¹⁷The United States was the first state to establish a National Security Council in 1947. While some states such as Japan, the UK, Cyprus, and Türkiye have also established their own NSC, other states have established similar institutions such as the National Defence and Security Council (NDSC) of France, the Security Council (SC) of Russia, the National Security Commission (NSCo) of China and the Governmental National Security Council (GNSC) of Greece.

1. North Atlantic Treaty Organization (NATO): The NATO was established in 1949 in order to preserve *peace & security*, it currently includes 32 *member-states*¹⁸, and according to *article 5* –also known as the collective defence clause– which is considered as the ‘heart’ of its founding treaty:

*“The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defence recognized by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.”*¹⁹

2. Collective Security Treaty Organization (CSTO): The CSTO –also known as the *Russian NATO*– was established in 1994 in order to ensure *collective security*, it currently includes 6 *member-states*²⁰ and according to *article 4* of its founding treaty:

*“If one of the States Parties is subjected to aggression by any state or group of states, then this will be considered as aggression against all States Parties to this Treaty. In the event of an act of aggression against any of the participating States, all other participating States will provide him with the necessary assistance, including military, and will also provide support at their disposal in exercising the right to collective defence in accordance with Article 51 of the UN Charter.”*²¹



Picture 4: The flags (from left to right) of NATO, CSTO and the EU

Source: Wikipedia

3. European Union (EU): Despite the fact that the EU was established in 1951 as an economic union by the name of *European Coal and Steel Community (ECSC)*,²² it gradually became a political union and since 2003 an aspiring *security provider*, as it published its first *European Security Strategy (ESS)* to be followed by the *Global Strategy* in 2016 and the *Strategic Compass* in 2022²³. It must also be stressed that *article 42(7)* –also known as the *mutual defence clause*– of the *Treaty of Lisbon* (Treaty on the European Union) that was signed in 2007²⁴, provides that:

“If a Member State is the victim of armed aggression on its territory, the other Member States shall have towards it an obligation of aid and assistance by all the means in their power, in accordance with Article 51 of the United Nations Charter.

¹⁸North Atlantic Treaty Organization. (n.d.). What is NATO?. <https://www.nato.int/nato-welcome/>.

¹⁹North Atlantic Treaty Organization. (1949, April 04). The North Atlantic Treaty [Official Document]. https://www.nato.int/cps/en/natohq/official_texts_17120.htm.

²⁰Collective Security Treaty Organisation. (n.d.). History of creation, fundamentals of activity, organizational structure.. <https://en.odkb-csto.org/25years/>.

²¹Collective Security Treaty Organisation. (n.d.). Collective Security Treaty dated May 15, 1992 [Official Document].. https://en.odkb-csto.org/documents/documents/dogovor_o_kollektivnoy_bezopasnosti/#loaded.

²²European Union. (n.d.). History of the EU. https://european-union.europa.eu/principles-countries-history/history-eu_en.

²³Koukakis, G. (2024) ‘The evolution of the European Union Security Strategy: Towards the establishment of a European Army?’. Center for International Strategic Analyses, Research Paper No. 105. <https://doi.org/10.13140/RG.2.2.34521.12648>.

²⁴European Parliament. (n.d.). Treaty of Lisbon. <https://www.europarl.europa.eu/about-parliament/en/in-the-past/the-parliament-and-the-treaties/treaty-of-lisbon>.

This shall not prejudice the specific character of the security and defense policy of certain Member States.”²⁵

4. AUKUS Trilateral Security Partnership: The AUKUS trilateral partnership was established in 2021 between Australia, the United Kingdom (UK) and the United States of America (USA),²⁶ and is mostly known for the support provided from the UK and the USA to Australia regarding the acquiring of *nuclear-powered submarines*. The main purpose of AUKUS is:

“[...] strengthen the ability of each government to support security and defense interests, building on longstanding and ongoing bilateral ties. It will promote deeper information sharing and technology sharing; and foster deeper integration of security and defense-related science, technology, industrial bases and supply chains”²⁷

5. Greece’s Defense Partnerships: Finally, as far as Greece is concerned, it must be noted that despite the fact that is considered a *small state* it has recently established two important bilateral defence partnerships. The first one was established between Greece and the *United Arab Emirates (UAE)* on *November 18, 2020* by the signing of the *Joint Foreign Policy and Defence Cooperation Agreement* which includes article 1 that provides for the mutual contribution to the defence and maintenance of security, sovereignty, unity, safety, and independence of the signing parts in case a threat arises²⁸, and the second one was established between Greece and *France* on *September 28, 2021* by the signing of the *Strategic Partnership for Cooperation in Defence and Security Agreement* which includes *article 2* that provides for the mutual assistance and support with all appropriate means available including the use of military force in case of an armed attack against their homeland.²⁹

Contemporary Military Crises & Military Security’s Interconnection with other Fields

As far as the major contemporary military crises are concerned, the most important ones – as one or both actors possess nuclear weapons – are the following:

1. **The War in Ukraine** between *Ukraine* and *Russia* that was initiated on *February 24, 2022* when *Russia* invaded *Ukraine* and is still active (**Picture 5**).³⁰

2. **The War in Gaza** between *Israel* and *Hamas* that was initiated on *October 07, 2023* when *Hamas* invaded *Israel* and is still active.³¹

3. **The Kashmir Conflict** between *India* and *Pakistan* that was initiated on *October 22, 1947* (1st Kashmir War) and is still active (**Picture 6**).³²

²⁵European Parliament. (n.d.). *Mutual defence clause (Article 42.7 TEU) and Solidarity clause (Article 222 TFEU)*. https://www.europarl.europa.eu/meetdocs/2009_2014/documents/sede/dv/sede200612mutualdefsolidarityclauses_/sede200612mutualdefsolidarityclauses_en.pdf.

²⁶U.S. Department of Defence. (n.d.). *AUKUS: The Trilateral Security Partnership Between Australia, U.K. and U.S.* <https://www.defense.gov/Spotlights/AUKUS/>.

²⁷Ibid.

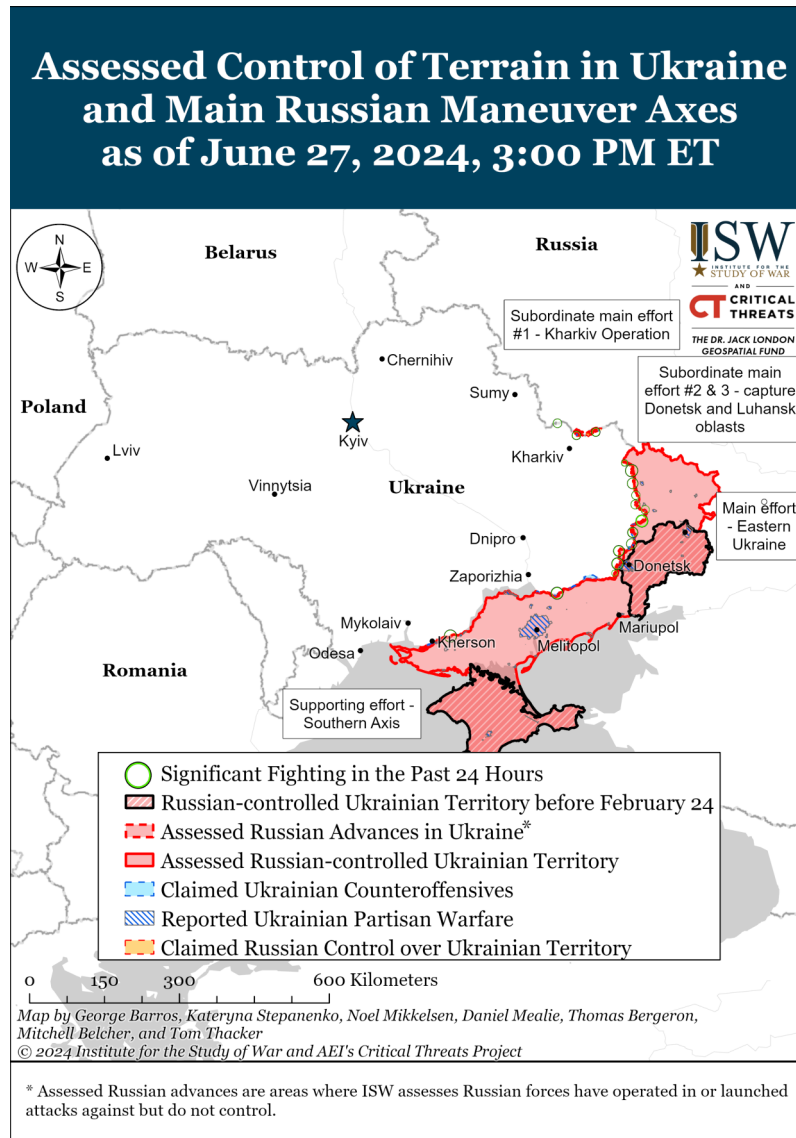
²⁸Υπουργείο Εξωτερικών. (2024, Φεβρουάριος 12). *Πολιτικές Σχέσεις-Ηνωμένα Αραβικά Εμιράτα. Ελληνική Δημοκρατία*. <https://www.mfa.gr/dimereis-sheseis-tis-ellados/uae/politikes-skheseis.html>.

²⁹Κουκάκης, Γ. (2023). *Η Στρατηγική Εταιρική Σχέση για την Άμυνα & την Ασφάλεια μεταξύ Ελλάδας & Γαλλίας: Μία «τεχνοκρατική» προσέγγιση και αποτίμηση του πρώτου έτους ισχύος της, στο Τετράδια Γεωπολιτικής Ανάλυσης και Μελετών. Τεύχος 6 (Διμερείς διακρατικές συμφωνίες της Ελλάδος που εμπεριέχουν και αμυντική διάσταση). Ελληνικό Ινστιτούτο Στρατηγικών Μελετών, σσ. 75-95. https://www.researchgate.net/publication/373238862_E_Strategike_Etairike_Schese_gia_ten_Amyna_ten_Asphaleia_metaxy_Elladas_Gallias_Mia_techokratike_prosengise_kai_apotimese_tou_protou_etous_ischyos_tes.*

³⁰Bailey, R., Harward, C., Mappes, G., Evans, A., & Kagan, F. W. (2024, June 27). *Russian Offensive Campaign Assessment, June 27, 2024*. Institute for the Study of War. https://www.iswresearch.org/2024/06/russian-offensive-campaign-assessment_27.html.

³¹Jhaveri, A., Braverman, A., Parry, A., Carl, N., Kathryn, Tyson, K., Wells, K. & Moore, J. (2024, June 27). *Iran Update, June 27, 2024*. Institute for the Study of War. <https://www.understandingwar.org/backgrounder/iran-update-june-27-2024>.

³²Noor, S. (2023, July 25). *Timeline: India-Pakistan relations*. Medium. <https://sidranooraayqamar.medium.com/timeline-india-pakistan-relations-fbdc0f701dc4>.



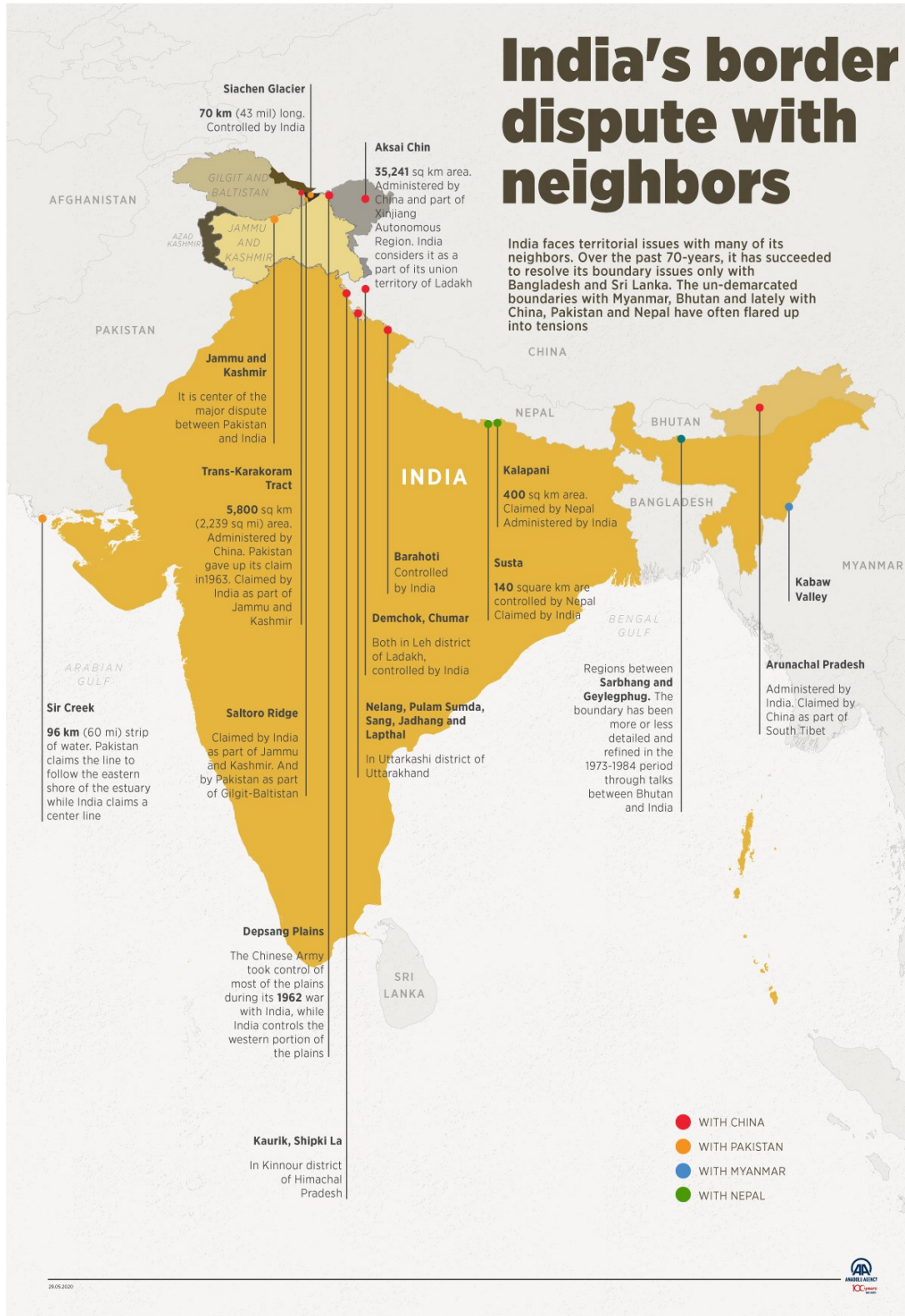
Picture 5: The War in Ukraine (as of June 27, 2024)

Source: https://www.iswresearch.org/2024/06/russian-offensive-campaign-assessment_27.html

Moreover, the 2024 *Annual Threat Assessment (ATA)* of the Intelligence Community of the USA³³, estimates that the conflicts that could spill over affecting other actors include –besides the aforementioned one in Kashmir– the following interstate conflicts:

1. **China Maritime** in the South and East China Seas between China and Taiwan (**Picture 7**).
2. **India - China** in the shared disputed border (**Picture 6**).
3. **Azerbaijan - Armenia** in Nagorno-Karabakh.

³³Office of Director of National Intelligence. (2024, February 05). *Annual Threat Assessment of the U.S. Intelligence Community [Official Document]*. <https://www.dni.gov/files/ODNI/documents/assessments/ATA-2024-Unclassified-Report.pdf>.



Picture 6: India's border dispute with its neighboring actors

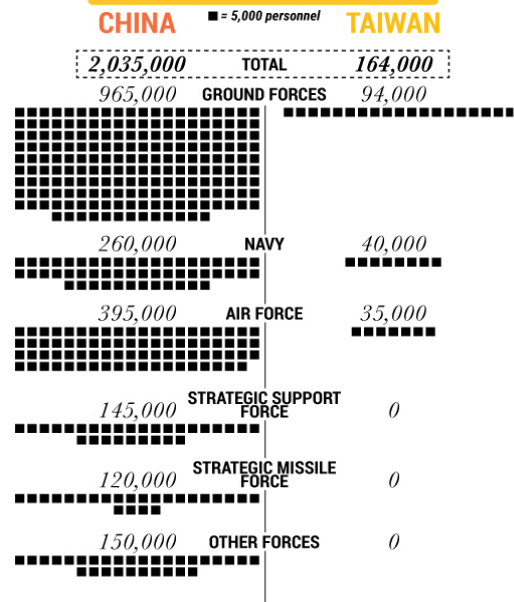
Source: <https://www.aa.com.tr/en/asia-pacific/indias-border-dispute-with-neighbors/1859854>

TAIWAN & CHINA'S COMPLEX HISTORY

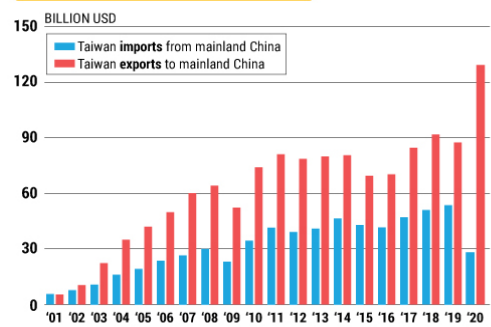
History of the long fight over Taiwan



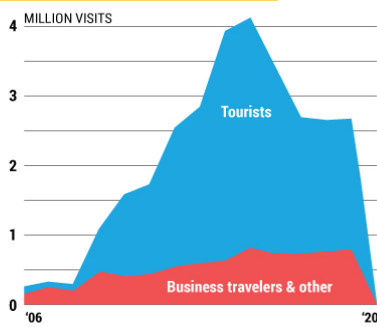
ACTIVE-DUTY ARMED FORCES



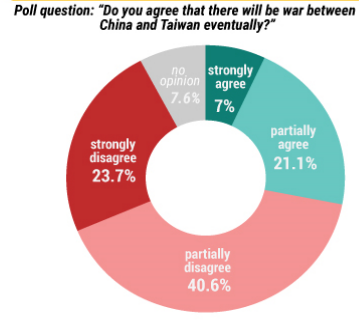
Trade across the Taiwan Strait



Visitors from China to Taiwan



Taiwanese opinion on war with China



Sources: IISS, Customs Administration, Ministry of Finance, National Immigration Agency, Ministry of the Interior, Taiwanese Public Opinion Foundation © 2022 Geopolitical Futures

Picture 7: The Taiwan issue in the South and East China Seas
 Source: <https://geopoliticalfutures.com/the-long-fight-to-control-taiwan/>

The Interconnection of Military Security with other Fields

As far as the interconnection of military security with other fields is concerned, it must be noted that when military security is endangered –e.g. during a military crisis, a conflict or at war– most public sectors and supply chains malfunction, leading gradually to several other crises such as food crises, energy crises, and humanitarian crises of which the international community was a witness both in Ukraine and in Gaza. In addition to that, military security is interconnected to the following fields:

1. Resilience: Though it is not always stressed enough, every component of national security is interconnected with the respective component of resilience, as in order the latter is prerequisite of the former. For example, in order for an actor to achieve military security (be protected from military threats) it must ensure that its vulnerabilities are the minimum possible and it is able to implement countermeasures to regain the

advantage/initiative over the threat, thus to be resilient. That is exactly the reason why resilience is highlighted in several strategic documents of major actors.³⁴

2. Development: Another field that is interconnected with military security is development, as it ensures the necessary stability for a state in order for foreign and domestic *enterprises* to invest in several *projects* and proceed to the construction of *infrastructure*, facilitating the decrease of *unemployment* and *economic growth*. Moreover, military security is closely related to the *industry sector*, as from the time of peace the defense industry ensures the production of weapons, ammunitions, and the rest of the military means needed.

3. International Law/Human Rights: As far as international law is concerned, military operations are guided by is generally referred to as *Law of War* which includes special provisions for crimes conducted during these operations, as history has shown that military personnel sometimes tends to use excessive force against the opponent and/or civilians, violating their *human rights* and *fundamental freedoms*.

4. Intelligence: Finally, intelligence is a crucial field for maintaining military security by providing *early warning*, revealing the opponent's *vulnerabilities*, and providing information about the weather and the terrain that is vital for the effective planning of military operations. That is the main reason why most Armed Forces have established their own *military intelligence* units in order to be able to produce their own assessments on these matters and not rely on other services.

Concluding Remarks

Taking into consideration the information presented in the article it is assessed that the main *challenges* for international community is to provide an acceptable solution that will result in the end of the War in Ukraine and the War in Gaza, also preventing the escalation of the aforementioned conflicts. As far as every other international or regional military actor is concerned, the main *opportunity* that lies ahead is taking advantage of the vast development of technology in order to enhance its defense capabilities and of the insecurity that prevails in order to form regional and/or international defense partnerships that will strengthen its military security.

To conclude, it must be stressed that even though everyone is aware of the severe consequences of the use of military force, defense capabilities are crucial for every state in order to be able to protect its *territorial integrity*, *national sovereignty* and of course the freedom and well-being of its *citizens* against military threats, thus ensuring military security which eventually lead to the establishment of peace. In other words, everyone must keep in mind the Roman military writer *Vegetius*' (379-395 AD) quotation according to which:

“Si vis pacem, para bellum”³⁵.

³⁴Koukakis, G. (2023). *Resilience: Highlighting its Importance for Security and Development through References to (National) Security Strategic Documents of International Actors*. HAPSc Policy Briefs Series, 4(1), pp. 77–87. <https://doi.org/10.12681/hapscpbs.35186>.

³⁵The original quotation is “*Qui desiderat pacem, praeparet bellum*” meaning “*Let him who desires peace, prepare for war*”. *Vegetius, F. (2018). Qui desiderat pacem, praeparet bellum. Oxford Reference. https://www.oxfordreference.com/display/10.1093/acref/9780191866692.001.0001/q-oro-ed6-00011152*.

Bibliography:

- Bailey, R., Harward, C., Mappes, G., Evans, A., & Kagan, F. W. (2024, June 27). Russian Offensive Campaign Assessment, June 27, 2024. *Institute for the Study of War*. https://www.iswresearch.org/2024/06/russian-offensive-campaign-assessment_27.html
- Bailes, A. & Cottey, A. (2006). Regional security cooperation in the early 21st century, in Bailes, A. (ed.) *SIPRI Yearbook 2006: Armaments, Disarmament and International Security*. New York: Oxford University Press, pp. 195–223.
- Buzan, B. (1983). *People, States, and Fear: The National Security Problem in International Relations*. Sussex: Wheatsheaf Books, p. 69.
- Buzan, B. & Hansen, L. (2009). *People, States, and Fear: The National Security Problem in International Relations*. New York: Cambridge University Press, p. 203.
- Cha, V. (2000). Globalization and the Study of International Security, *Journal of Peace Research*, 37(3), pp. 391-403. <https://journals.sagepub.com/doi/10.1177/0022343300037003007>
- Collective Security Treaty Organisation. (n.d.). Collective Security Treaty dated May 15, 1992 [Official Document].. https://en.odkb-csto.org/documents/documents/dogovor_o_kollektivnoy_bezopasnosti/#loaded
- Collective Security Treaty Organisation. (n.d.). History of creation, fundamentals of activity, organizational structure.. <https://en.odkb-csto.org/25years/>
- Department of State. (n.d.). *National Security Act of 1947*. [https://history.state.gov/milestones/1945-1952/national-security-act#:~:text=The%20National%20Security%20Act%20of,National%20Security%20Council%20\(NSC\)](https://history.state.gov/milestones/1945-1952/national-security-act#:~:text=The%20National%20Security%20Act%20of,National%20Security%20Council%20(NSC))
- European Parliament. (n.d.). Mutual defence clause (Article 42.7 TEU) and Solidarity clause (Article 222 TFEU). https://www.europarl.europa.eu/meetdocs/2009_2014/documents/sede/dv/sede200612mutualdefsolidarityclauses_/sede200612mutualdefsolidarityclauses_en.pdf
- European Parliament. (n.d.). Treaty of Lisbon. <https://www.europarl.europa.eu/about-parliament/en/in-the-past/the-parliament-and-the-treaties/treaty-of-lisbon>
- European Union. (n.d.). History of the EU. https://european-union.europa.eu/principles-countries-history/history-eu_en
- Graham, K. & Felicio, T. (2005). Regional Security and Global Governance: A Proposal for a ‘Regional-Global Security Mechanism’ in Light of the UN High-Level Panel’s Report, *Egmont Paper*, 4. <http://aei.pitt.edu/8985/>
- Jhaveri, A., Braverman, A., Parry, A., Carl, N., Kathryn, Tyson, K., Wells, K. & Moore, J. (2024, June 27). Iran Update, June 27, 2024. *Institute for the Study of War*. <https://www.understandingwar.org/backgrounder/iran-update-june-27-2024>
- Koukakis, G. (2022). Did Russia fall into Thucydides trap?. *Center for International Strategic Analyses*. <https://www.doi.org/10.13140/RG.2.2.34400.29446>
- Koukakis, G. (2023). Permacrises and Polycrises: Outlining the Contemporary Security Environment through References to Strategic Documents of Regional and International Actors. *HAPSc Policy Briefs Series*, Vol 4 (2). pp. 55-64. <https://doi.org/10.12681/hapscpbs.36661>.
- Koukakis, G. (2023). Resilience: Highlighting its Importance for Security and Development through References to (National) Security Strategic Documents of International Actors. *HAPSc Policy Briefs Series*, 4 (1), pp. 77–87. <https://doi.org/10.12681/hapscpbs.35186>
- Koukakis, G. (2024) ‘The evolution of the European Union Security Strategy: Towards the establishment of a European Army?’. *Center for International Strategic Analyses*, Research Paper No. 105. <https://doi.org/10.13140/RG.2.2.34521.12648>
- Koukakis, G. (2024). The First Ever 2024 European Defence Industrial Strategy: Background, Challenges and Future Considerations Regarding the European Security and Defense [Occasional Paper 2/2024]. *HERMES Institute of International Affairs, Security & Geoeconomy*. <https://doi.org/10.13140/RG.2.2.27247.44961>
- Κουκάκης, Γ. (2023). Η διεθνής σκακιέρα, η επόμενη μέρα στη Μ. Ανατολή και η θέση της Ελλάδας.

- *Liberal*. <https://www.liberal.gr/amyna-diplomatia/i-diethnis-skakiera-i-epomeni-mera-sti-m-anatoli-kai-i-thesi-tis-elladas>
- Κουκάκης, Γ. (2023, Ιούνιος 18). Η πρώτη «ιστορική» Στρατηγική Εθνικής Ασφάλειας της Γερμανίας: Πώς βλέπει το Βερολίνο τον εαυτό του στον 21ο αιώνα και τι σημαίνει αυτό για τον κόσμο και την Ελλάδα. *Foreign Affairs - The Hellenic Edition*. https://www.researchgate.net/publication/373194953_E_prote_istorike_Strategike_Ethnikes_Asphaleias_tes_Germanias_Pos_blepei_to_Beroli_no_ton_eauto_tou_ston_21o_aiona_kai_ti_semainei_auto_gia_ton_kosmo_kai_ten_Ellada
- Κουκάκης, Γ. (2023). Η Στρατηγική Εταιρική Σχέση για την Άμυνα & την Ασφάλεια μεταξύ Ελλάδας & Γαλλίας: Μία «τεχνοκρατική» προσέγγιση και αποτίμηση του πρώτου έτους ισχύος της, στο *Τετράδια Γεωπολιτικής Ανάλυσης και Μελετών*. Τεύχος 6 (Διμερείς διακρατικές συμφωνίες της Ελλάδος που εμπεριέχουν και αμυντική διάσταση). Ελληνικό Ινστιτούτο Στρατηγικών Μελετών, σσ. 75-95. https://www.researchgate.net/publication/373238862_E_Strategike_Etairike_Schese_gia_ten_Amyna_ten_Asphaleia_metaxy_Elladas_Gallias_Mia_technokratike_prosengise_kai_apotimese_tou_protou_etous_ischyos_tes
- Krause, K. & Jütersonke, O. (2005). 'Peace, Security and Development', *Security Dialogue*, 36(4), pp. 447-462. <https://journals.sagepub.com/doi/10.1177/0967010605060449>
- Neocleous, M. (2000). Against security. *Radical Philosophy*, 100, pp. 7-15. <https://www.radicalphilosophy.com/article/against-security> (21/04/2024)
- Noor, S. (2023, July 25). Timeline: India-Pakistan relations. *Medium*. <https://sidranooraayqamar.medium.com/timeline-india-pakistan-relations-fbdc0f701dc4>
- North Atlantic Treaty Organization. (1949, April 04). The North Atlantic Treaty [Official Document]. https://www.nato.int/cps/en/natohq/official_texts_17120.htm
- North Atlantic Treaty Organization. (n.d.). What is NATO?. <https://www.nato.int/nato-welcome/>
- Office of Director of National Intelligence. (2024, February 05). *Annual Threat Assessment of the U.S. Intelligence Community* [Official Document]. <https://www.dni.gov/files/ODNI/documents/assessments/ATA-2024-Unclassified-Report.pdf>
- Shephard, J. E. (1990). On War: Is Clausewitz Still Relevant?. *Parameters*. pp. 85-99. <https://apps.dtic.mil/sti/tr/pdf/ADA515723.pdf>
- United Nations Development Programme. (1994). *Human Development Report 1994*. <https://hdr.undp.org/system/files/documents/hdr1994encompletenostatspdf.pdf>
- United Nations. (2023). *Determined: Report of the Secretary-General on the Work of the Organization*. https://www.un.org/sites/un2.un.org/files/sg_annual_report_2023_en_0.pdf
- U.S. Department of Defence. (n.d.). AUKUS: The Trilateral Security Partnership Between Australia, U.K. and U.S. <https://www.defense.gov/Spotlights/AUKUS/>
- Vegetius, F. (2018). Qui desiderat pacem, praeparet bellum. *Oxford Reference*. <https://www.oxfordreference.com/display/10.1093/acref/9780191866692.001.0001/q-oro-ed6-00011152>
- Υπουργείο Εξωτερικών. (2024, Φεβρουάριος 12). Πολιτικές Σχέσεις-Ηνωμένα Αραβικά Εμιράτα. *Ελληνική Δημοκρατία*. <https://www.mfa.gr/dimereis-sheseis-tis-ellados/uae/politikes-skheseis.html>

3. SECURITY AND RESILIENCE



Disinformation: Strategic Weapon of the Israel-Hamas War

Andreea Cristina STANCA

Abstract

This article explores the impact of disinformation on public opinion and the evolution of the conflict between Israel and Hamas. In the digital age, disinformation becomes a strategic weapon with major impact, used to shape people's perceptions and global decisions. The relevance of this study lies in understanding how false information is deliberately spread to influence the evolution and outcomes of conflicts. The article analyzes the disinformation techniques used by both camps, their impact on public opinion and proposes measures to combat this phenomenon.

The Concept of Disinformation

Over time it has been proven that disinformation is a tool used to manipulate public opinion and political decisions. The dissemination of false or distorted information has a significant impact on political perceptions and decisions, especially in the context of armed conflicts and crisis situations. Therefore, it can be argued that information can undermine the integrity of the truth, presenting it in a more or less distorted form compared to reality. The effects are as serious as they are profound. Today, thanks to technological advancement, information is widely accessible, making it easy for people to access events around the world in real time. However, this accessibility also carries the risk of manipulating the masses. Social media platforms, digital communication channels and online media allow the rapid propagation of false information. Disinformation is the presentation of false or distorted information with the purpose of making a profit, causing harm, or promoting political or ideological goals.¹

In times of crisis or armed conflict, information can become a strategic weapon used by the parties involved to advance their own interests, influencing public perceptions and opinions. In the digital age, we see how disinformation has become a particularly influential and accessible weapon in the context of war situations.



Source: <https://www.digi24.ro/stiri/externe/mapamond/sua-creeaza-o-noua-agentie-in-domeniul-securitatii-cibernetice-358035>

¹Freelon D., Wells C. (2020). *Disinformation as political communication*. *Political Communication*, 37(2), 145–156. <https://doi.org/10.1080/10584609.2020.1723755> accesat la data de 20/06/2024.

The Impact of the Spread of False Information in the Context of the Conflict between Israel and Hamas

In the context of the conflict that broke out on October 7 between Israel and Hamas, false narratives shape and heighten public opinion, amplifying hatred and segregation between the two camps. We mean not only the impact on Israelis and Palestinians, but also on the whole world, including those who identify with one of the parties involved in the conflict, those who have a cultural or historical connection with one of the parties, supporters of specific ideologies and other categories of people. In this context we are talking about a pandemic of misinformation that is creating chaos and exacerbating the emotions and opinions of millions of people around the globe². So, the degree of disinformation in this conflict has reached alarmingly high levels. The director of the American consulting company SITE Intelligence Group, Rita Katz, describes the level of disinformation about this war as "shocking": "I have followed the conflicts for several decades. I've never seen anything like it [...] It's really making its way into respected news outlets in ways I never thought possible."³ The extent of disinformation can be considered directly proportional to the complexity and depth of the conflict. That is why its deepening is also caused by the spread of misinformation that polarizes perceptions, opinions and causes.

The current conflict between Israel and Hamas, part of a series of armed conflicts that began almost a century ago, highlights the hypothesis that false or distorted information has a devastating impact on public opinion, international politics and, last but not least, on the evolution of the conflict itself. Both camps use disinformation and manipulation strategies to support their cause by providing false information, incomplete or distorted, which amplifies tensions and deepens the divide between the two parties involved. Disinformation therefore contributes to exacerbating conflict, spreading hatred and strengthening extremist positions. According to researchers in the field, there is a technique known as "trading up the chain" through which news agencies promote false information in order to expose the audience to extremist points of view⁴. In concrete terms, the power of information produces devastating effects, amplifying feelings of hatred and creating significant obstacles to the achievement of lasting peace. So is it in the actors' interest to promote false information? Even if the fabrication of information represents an active political process that serves specific interests⁵, we can affirm that this strategy leads to the deepening of the conflict. At the same time, another important aspect to discuss is related to the rationalization of violence. Actors spread false, distorted or manipulated information in order to legitimize and rationalize violence⁶. The morality of this strategy often remains difficult to understand, but we regularly see disinformation being used for nefarious purposes.

This phenomenon can take various forms, unsubstantiated accusations, photo manipulations, incomplete or false reports and more. An important point to note is that these techniques are not a unique feature of the current war, in the Israeli-Palestinian conflict there is always this strategy of both camps to provide incomplete, false or distorted information.

Pro-Israeli and pro-Palestinian Disinformation Campaigns

We will provide some concrete examples to better understand what this phenomenon entails and how it shapes the conflict that began on October 7 in Israel and continued in Gaza. It should be noted that disinformation does not occur in isolated situations and is not used only by one of the camps. Therefore, we will list the disinformation campaigns of both sides to create as complex a picture as possible of the high level of disinformation that we find within this conflict.

A campaign involving the Government of Israel targeting US officials and members of Congress was recently discovered. The campaign involved the use of approximately 600 fake social media profiles, which

²Yusuf Can (2023), *Digital Deception: Disinformation's Impact in the Israel-Hamas War*, Wilson Center, October 20, 2023 <https://www.wilsoncenter.org/article/digital-deception-disinformations-impact-israel-hamas-war> accesat la data de 27/06/2024

³Jennifer Bell (2023), *Fact or fiction? The damage of misinformation, disinformation in the Israel-Hamas war*, Al Arabiya, English, November 20th, 2023, <https://english.alarabiya.net/infocus/2023/11/10/Fact-or-fiction-The-damage-of-misinformation-disinformation-in-the-Israel-Hamas-war> accesat la data de 27/06/2024

⁴Rachel Kuo, Alice Marwick (2021), *Critical disinformation studies: History, power, and politics*, Harvard Kennedy School Misinformation Review1, August 2021, Volume 2, Issue 4, p. 3.

⁵Ibidem, p. 4.

⁶Ibidem, p. 4.

published more than 2,000 comments. They supported Israel's military actions in Gaza and condemned Palestinian groups for violating human rights, thus promoting pro-Israel content⁷. At the same time, the investigation led by the companies Meta and OpenAI proves that this disinformation campaign belongs to the Israeli company STOIC. Its online operations were primarily aimed at audiences in the United States of America and Canada. STOIC has created considerable volumes of articles and commentary with the goal of manipulating the public in a pro-Israel and anti-Hamas⁸ direction. Even though META has removed these accounts from social platforms, it is difficult to assess the impact of the campaign. While negative in itself, one thing is certain: this information has fueled Islamophobic beliefs, providing the public with further evidence to reinforce their extremist beliefs.

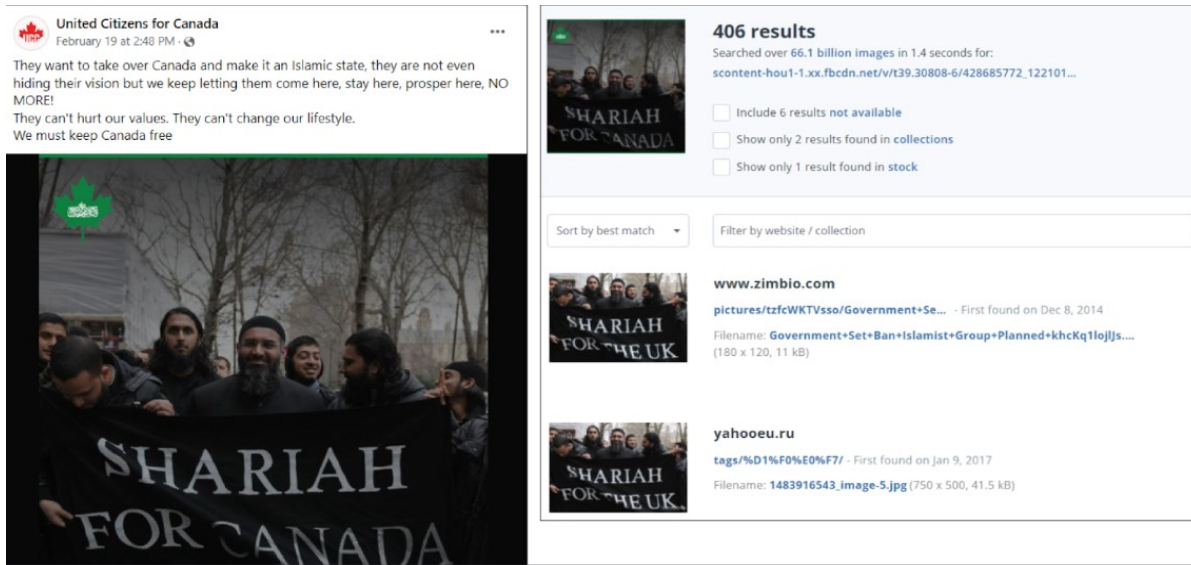


Fig.1 - United Citizens for Canada social media account uses AI-generated images to promote Islamophobia.

Source: <https://cyberscoop.com/israel-influence-operations-stoic/>

Pro-Palestinian or pro-Hamas disinformation campaigns are also found online, with false information about Israel making the rounds of the world daily. So it is not just Israel that is using disinformation as a weapon against Hamas, with pro-Hamas and anti-Israel disinformation being supported by state actors such as Russia, Iran, China and more. Russia, taking advantage of the war between Israel and Hamas, has an opportunity to reassert anti-Western narratives. An eloquent example concerns the provision of false information stating that Hamas is supplied with weapons by Ukraine, but so far there is no evidence of this.⁹

Pro-Palestinian disinformation involves numerous examples of fake image and video manipulations. AI-generated images are created and used to amplify the perception of victimization and accuse Israel of disproportionate aggression. At the same time, images from previous conflicts or from other parts of the world are used. Specialists analyzed photos and videos that were viewed by hundreds of thousands of users of social platforms and discovered that they were fake.¹⁰ The use of this type of imagery amplifies anti-Semitic sentiments among the global public, telling distorted and immoral narratives. In this way disinformation intensifies and fuels pre-existing anti-Semitic prejudices and stereotypes.

⁷Sheera Frenkel (2024), *Israel Secretly Targets U.S. Lawmakers With Influence Campaign on Gaza War*, *The New York Times*, June 6th, 2024, <https://www.nytimes.com/2024/06/05/technology/israel-campaign-gaza-social-media.html> accesat la data de 26/06/2024

⁸Derek B. Johnson (2024), *Israeli influence operation highlights global disinformation industry*, *CYBERSCOOP*, June 5th, 2024, <https://cyberscoop.com/israel-influence-operations-stoic/> accesat la data de 26/06/2024.

⁹*Capitalising on crisis: Russia, China and Iran use X to exploit Israel-Hamas information chaos*, *Institute for Strategic Dialogue*, October 25th, 2023, https://www.isdglobal.org/digital_dispatches/capitalising-on-crisis-russia-china-and-iran-use-x-to-exploit-israel-hamas-information-chaos/.

¹⁰Ines Eisele, Uta Steinwerh (2023), *Fact check: AI fakes in Israel's war against Hamas*, *DW*, October 10th, 2023, <https://www.dw.com/en/fact-check-ai-fakes-in-israels-war-against-hamas/a-67367744>, accesat la data de 28/06/2024.

Combating Disinformation

Digital literacy is those skills, knowledge and skills that people need to develop in order to avoid the pitfalls of misinformation. Promoting this type of literacy is essential to help the public differentiate between correct and false information. At the same time, disinformation is present on a large scale within social networks, a fact that requires the responsibility of these platforms in order to combat disinformation. Even though there are now algorithms that have the ability to detect fake information, social platforms are still a danger from this point of view, with many fake or distorted news circulating and manipulating millions of users. The existence of fact-checking platforms is an important step in the process of eliminating false information. Through their analysis, the impact of disinformation is mitigated. Last but not least, the importance of making the audience responsible must be remembered, as it is necessary to verify information and sources, especially in the event of a conflict. Even though news agencies or internet users have a responsibility to ensure that they share correct, verified and authentic information, the audience must be vigilant and flag any false information. The involvement of international actors in the fight against disinformation is essential and can contribute to a decrease in the volume of false information.

Conclusions

Disinformation is an extremely powerful weapon in the context of this war, having the ability to shape perceptions and influence the course of events. The conflict between Israel and Hamas, which erupted on October 7, demonstrates that disinformation exacerbates tensions and has significant destabilizing power. Through concerted efforts at fact-checking, media literacy and accountability on the part of platforms, the spread and impact of disinformation can be lessened, allowing for a clearer understanding of the evolution of the conflict. The Israeli-Palestinian conflict is perhaps the most divisive and polarizing, which is why people tend to support one side of the camp, consciously or unconsciously fueling the amplification and spread of false information. Disinformation fuels the atmosphere of intolerance, Islamophobic and anti-Semitic sentiments, deepening this inter-ethnic conflict. The gravity of the disinformation is amplified by the intensity of the conflict. It is worrying that internationally respected publications have admitted to publishing false information, only to have it retracted. Finally, with the hope that this conflict will reach a peaceful solution in the near future, it is essential to reflect on the seriousness of the disinformation phenomenon. Peace can only be achieved when people are not manipulated into division, but encouraged into cooperation.

Bibliography:

- Brian Fung, Donie O’Sullivan (2023) , EU warns Elon Musk of ‘penalties’ for disinformation circulating on X amid Israel-Hamas war, CNN, October 10th, 2023, <https://edition.cnn.com/2023/10/10/tech/x-europe-israel-misinformation/index.html> accessed on June 28, 2024;
- Capitalising on crisis: Russia, China and Iran use X to exploit Israel-Hamas information chaos, Institute for Strategic Dialogue , October 25th, 2023, https://www.isdglobal.org/digital_dispatches/capitalising-on-crisis-russia-china-and-iran-use-x-to-exploit-israel-hamas-information-chaos/;
- Derek B. Johnson (2024), Israeli influence operation highlights global disinformation industry, CYBERSCOOP, June 5th, 2024, <https://cyberscoop.com/israel-influence-operations-stoic/> accessed on June 28, 2024;
- Freelon D., Wells C. (2020). Disinformation as political communication. *Political Communication*, 37(2), 145–156. <https://doi.org/10.1080/10584609.2020.1723755> accessed on June 28, 2024;
- Jennifer Bell (2023), Fact or fiction? The damage of misinformation, disinformation in the Israel-Hamas war, Al Arabiya, English, November 20th, 2023, <https://english.alarabiya.net/infocus/2023/11/10/Fact-or-fiction-The-damage-of-misinformation-disinformation-in-the-Israel-Hamas-war> accessed on June 27, 2024;
- Ines Eisele, Uta Steinwerh (2023), Fact check: AI fakes in Israel’s war against Hamas, DW, October 10th, 2023, <https://www.dw.com/en/fact-check-ai-fakes-in-israels-war-against-hamas/a-67367744>, accessed on June 28, 2024;

- Rachel Kuo, Alice Marwick (2021), *Critical disinformation studies: History, power, and politics*, Harvard Kennedy School Misinformation Review 1, August 2021, Volume 2, Issue 4;
- Sheera Frenkel (2024), *Israel Secretly Targets U.S. Lawmakers With Influence Campaign on Gaza War*, The New York Times, June 6th, 2024, <https://www.nytimes.com/2024/06/05/technology/israel-campaign-gaza-social-media.html> accessed on June 26, 2024;
- Yusuf Can (2023), *Digital Deception: Disinformation's Impact in the Israel-Hamas War*, Wilson Center, October 20, 2023 <https://www.wilsoncenter.org/article/digital-deception-disinformations-impact-israel-hamas-war> accessed on June 27, 2024

3. SECURITY AND RESILIENCE



Hybrid Cold War, Non-Kinetic Pressures and Kinetic Subliminal Aggression – Current and Future Challenges for NATO and the EU

Ph. Eng. Stelian TEODORESCU

“Sometimes You Have To Fight The Battle More Than Once Before You Win”

Margaret Thatcher

Russia has stepped up its hybrid warfare actions and, as expected, is looking to increase its pressure on Central Europe. This fact is not a surprise, especially if we remember that Central Europe is targeted by propaganda, hybrid actions, disinformation and, last but not least, political influence and domination. Among those countries are: two big ones - Germany and Poland, as well as the five smaller ones - Slovakia, Austria, Switzerland, Romania, Hungary, Czech Republic. All these nations were, and still are subjects of heated debates at an international level regarding to Russia’s interests and actions.

As expected, Russia is not holding back and is making a significant campaign of warning and threat pronounced in the Baltic States along the Polish border as well.

In such an evolving context, the governments of NATO’s eastern flank increasingly see the major need for planning, organizing and conducting joint allied actions. It is increasingly clear that a second cold war against the West is currently intensifying in Europe, as the main target is NATO. In essence, this cold war is similar to the first of the 20th century. It is a confrontation between nuclear powers that are capable of destroying each other. The contest is being waged on the brink of open war, using the nuclear threat as an essential tool of blackmail. However, the current variety of cold war differs greatly from its predecessor, as it uses a larger and more complex toolkit of diverse operations and activities that are often referred to as “hybrid” and, therefore, this second cold war can also be called a hybrid cold war.



Source: <https://romaniabreakingnews.ro/razboiul-informational-parte-a-razboiului-hibrid-actual-mijloace-de-lupta-si-contramasuri/>

The main source of risk for this cold war to turn into a hot one between Russia and NATO is the evolution of the situation in Ukraine, which, aside from direct fighting between Russian and Ukrainian troops, is also a proxy war between Russia and the West, with NATO participating indirectly to the conflict by supporting Ukraine. In such a context, we should not omit or be surprised by the involvement of so-called allies of Russia such as mainly China, Iran and North Korea, but we can never omit other states in the Middle East, Africa or Asia, who through the voice of their leaders make this known. It has become abundantly clear to all circles of strategic analysis that the war in Ukraine has a direct impact and consequences on the entire global security environment, generating more than ever hybrid campaigns of confrontation between Russia on the one hand and NATO and the EU on the other on the other hand, as I pointed out previously. These Cold War II campaigns take the form of non-kinetic pressure and kinetic subliminal aggression.

Hybrid non-kinetic modes of operation are primarily in the field of intelligence, including disinformation operations and sabotage in cyberspace; political pressures in a year with many electoral processes, including diplomatic campaigns; espionage and so-called influence operations; migration and arming of other states in other important regions of the world; military blackmail (also related to nuclear weapons); challenges of significant diversity. All these operations are intended to indirectly manipulate the targeted governments and societies, i.e. to influence their cognitive, evaluative and decision-making processes, so that the response actions of the targeted countries are consistent with the objectives of the attacking party, such activities being also called cognitive warfare. Earlier I also referred to kinetic hybrid operations, which would constitute the next step in the evolution of the current situation: they lead to physical destruction in the attacked countries and to the intimidation of their societies - but such operations are still below the threshold of triggering open armed aggression. It is a covert, camouflaged, "false flag" use of the aggressor's or local accomplices' combat resources to carry out acts of sabotage (such as setting fire to large facilities, disrupting transportation and communications), and terrorist activities intended to cause public panic, and to reduce the force of the authorities of the targeted country and, implicitly, the decision-making force to the level desired by the aggressor. As a result, kinetic hybrid operations may be conducted by secret service or special-forces agents, mercenaries, private military contractors, or recruited local criminals.

Recently, there has been a notable escalation of hybrid activity on the eastern flank of NATO and the EU: a shift from non-kinetic pressure to kinetic aggression. Migratory pressure at the Polish-Belarusian border is an example of this, being an element of Russia's campaign - with the participation of Belarus - which has been taking a stand against Poland for several years. Border attacks combined with acts of espionage, increasingly intense cyber- attacks and acts of sabotage show that Russia is targeting Poland, but also other NATO and EU border countries as objects of its subliminal war. The Kremlin probably hopes that, given the lack of a unified approach to these issues with full consensus in NATO and the EU, it can be predicted that the countries on the eastern flank may remain isolated at some point in trying to respond to this type of aggression.

It has become very clear that we are dealing with a situation where consensus is elusive, and NATO member states further from the Russian border feel less threatened by this form of cold war, the Kremlin being well aware of this and making the most of this situation and, implicitly, aiming to escalate the confrontation. As a result, in the face of this unrelenting pressure, Poland decided to launch an extensive defense initiative, for four years, called East Shield¹ to increase security in the border area with Belarus and Russia (Kaliningrad). The program aims to strengthen the current anti-hybrid defenses in the area and to prepare the country for to repel possible armed aggression from the east in a direct confrontation on the border. The East Shield program consists of several elements: building operational and tactical situational awareness capabilities (radio-electronic and aerial reconnaissance with drones and advanced military surveillance systems); the technical development of the area in such a way as to prevent the possible advance of

¹East Shield is a national defense initiative launched by the Polish government to fortify its eastern borders with Belarus and the Russian enclave of Kaliningrad. The program represents one of the most significant investments in national security and border defense in Poland's post-war history. The Polish government announced the East Shield program on 18 May 2024. The program aims to improve Poland's military readiness and border security through a comprehensive combination of modern surveillance systems, physical barriers and infrastructure development. The program is supported by a substantial investment of approximately USD 2.55 billion, which will be allocated over the next four years. This funding will support the construction and deployment of various defense installations and systems along the border.

enemy troops, while facilitating the maneuver of own forces; ensuring the protection of soldiers and civilians against possible attacks.

Other countries on NATO's northeastern flank have reached similar conclusions as their concerns about the threat from Russia continue to grow. Lithuania, Latvia and Estonia plan to extend the Baltic Defense Line. Finland, known more recently as a NATO member state and long known for the thorough preparations carried out to defend its territory, plans to renovate and adapt former fortifications along its border with Russia. In this way, the countries on the north-eastern flank, by improving their defense systems, contribute to the security of NATO and the EU. In the context of the developments presented above, however, it has become very clear that, in recent times, the perception has been strengthened that defense consists not only of deterrence and resilience, but also of neutralizing or even striking the adversary. To be effective, defensive systems must be closely integrated with other strategic activities, such as general and technical intelligence, satellite and aerial surveillance, and air defense (including anti-missile, anti-aircraft and anti-drone access zones, actively deployed well ahead of the border of land defense). These elements must be supported by the ability to launch long-range precision weapons strikes against an aggressor's troops throughout the depth and breadth of the theater of operations. In analytical circles, the idea is increasingly perpetuated that only an effectively overwhelmed and weakened enemy can remain locked in defensive fortifications, and that the attacking force will retain the initiative in choosing the time, place, and categories of forces employed, securing an advantage in the initial phase of a war. Such a reality argues strongly for the adoption and execution of a strategy of pre-emptive defense early in a war – including pre-emptive strikes on the adversary's troops when they initiate their own attacks. Modern surveillance capabilities make detection, assessment and decision-making much more reliable than previously possible.

In such an evolving context today, it has become clear in the fields of international analysis that the strategy described above should be based on a doctrine of the entire Alliance, not only on an individual one of the frontline states. However strategically justified it may be, both in terms of its deterrence effectiveness and its defensive effectiveness, such a strategy is unlikely to be quickly adopted by allied states, even at the next summit in Washington (July 9-12, 2024). The various political attitudes of Alliance members – visible, for example, in the context of supporting Ukraine in its defensive war against Russia – do not bode well for the likelihood that the Eastern Flank approach will be adopted as common doctrine. This situation somehow suspends in a vacuum the political declaration of the 2023 NATO summit in Vilnius to defend "every centimeter" of the Alliance's territory and calls into question the overall credibility of Article 5 that if an ally is attacked, it will be considered an attack against everyone. A possible lack of consensus and cohesion also reduces the potential strategic effectiveness of frontline states' defense initiatives in this second hybrid Cold War. If Poland's Eastern Shield and Baltic Defense Line are not sustained by the threat of Allied pre-emptive strikes, they may share the fate of countless failed defense lines throughout history - from the Great Wall of China to the Maginot Line² and the Alpine Line. For this reason, the countries on the north-eastern flank of NATO strive for the greatest possible internationalization of responses and EU support for their defense initiatives to deter hybrid warfare attacks.

Poland, for example, relies on Frontex, the European Border and Coast Guard Agency, which will be heavily involved in securing its border with Belarus as the EU's eastern external border. They also hope for solidarity and more foresight from other European countries and that they will deploy their forces on the front line of anti-hybrid defense. Warsaw is also undertaking diplomatic measures and efforts to ensure that defense investments along the border area will be co-financed from EU common funds. Warsaw insists that, as an urgent necessity, both Poland's Eastern Shield and the Baltic countries' initiatives should be reviewed at the next Alliance summit and accepted as allied tasks, implemented with the participation of member states and within Alliance structures.

²The Maginot Line (French: Ligne Maginot, named after the French Minister of Defense André Maginot) consisted of a series of concrete fortifications, anti-tank obstacles, heavy artillery, casemates, machine guns and other defenses, built between the 1920s and 1930s and modernized between the 1930s and 1940s, which France built along the border with Germany, Belgium, Luxembourg, Switzerland and Italy, as a result of the experience of the First World War and to prepare against a possible attack, especially from Germany. In general, the term Maginot Line refers to the line of fortifications on the German border (350 km), while the Alpine Line refers to the fortifications on the Franco-Italian border.

In the context of ongoing anti-hybrid defense, a review of rules and procedures is needed to identify how existing operational plans need to be updated and enhanced to counter emerging risks.

In conclusion, we can say that the essential challenge facing NATO and the EU is adapting to a security environment that is constantly and rapidly changing, among the main challenges being those generated by Russia in Europe, China in any part of the world, Iran in the Middle East and North Korea in the Sea of Japan on the borders of South Korea and Japan. An urgent and crucial element of this adaptation is to adequately harden the eastern flank against hybrid attacks – including defense against subliminal aggression. Subsequently, it will be extremely important to adjust NATO's deterrence and defense capabilities to match any outcome of the war in Ukraine (Russian victory, Ukrainian victory, permanent war, or frozen conflict).

These measures are considered as fundamental security needs by the states in the front line of the second cold war, but this time hybrid, which are obliged to adopt the optimal decisions and put into operation critical initiatives in this regard. However, a natural question arises: will NATO and the EU as a whole be able to carry out this necessary adaptation strategically, proactively ahead of the expected needs – or will they continue to react only reactively operationally (as with support for Ukraine) in response to the next challenges?

3. SECURITY AND RESILIENCE



Europe Should Learn from the Efficient Use of South Korea's Defence Budget

PhD. Jean MARSIA (Belgium)

Russia, whose economy is much weaker than Europe's, has been able to wage a full-scale war in Ukraine for more than two years, because it has set up a war economy, thanks to an oppressive political and economic system. The war in Ukraine has highlighted that Europeans, despite being among the world's biggest spenders on defence, do not have military power. This is why they are struggling to provide meaningful military support to Ukraine¹. European countries are not up to the military challenge that Russia poses to European security; they must find a way to translate their economic advantage into a military advantage. To correct this, South Korea can offer them useful lessons².

75 Years of the Korean War Have not Harmed South Korea's Development

Since 1950, South Korea has faced North Korea's aggressiveness. This one has a population of 26 million inhabitants, a gross domestic product (GDP) of only 40 billion €, i.e. barely 1,800 € per capita³, but it is the most militarised country in the world: its people's army is said to be 1,125,000 active soldiers and 5 to 10 million reservists, equipped notably with 3,800 battle tanks and 15,000 artillery pieces, provided during the Cold War by the Soviet Union and Communist China.

South Korea had the political will to counter this threat and to establish the economic and industrial bases to maintain a deterrent armed force. It has steadily increased its defence budget and modernized its armed forces even after the end of the Cold War, to be able to counter Pyongyang. The political stability due to the consensus between conservatives and liberals has been beneficial to the sustainability of defence plans and the ability of the defence industry to develop weapons systems in a cost-effective manner.



Source: <https://eastasiaforum.org/2021/12/22/putting-south-koreas-proactive-national-defence-strategy-in-perspective/>

¹Max Colchester, David Luhnow and Bojan Pancevski, "Alarm Grows Over Weakened Militaries and Empty Arsenals in Europe" in *Wall Street Journal*, 11 December 2023.

²See Bence Nemeth, "South Korean Military Power" in *The RUSI Journal*, <https://rusi.tandfonline.com/doi/full/10.1080/03071847.2024.2355136>, 19/6/2024.

³Joseph H. Chung, Florian Gauthier, Éric Boulanger, Kim Jung-un's North Korea: Challenges and Opportunities, Université du Québec à Montréal, <https://ceim.uqam.ca/db/spip.php?article9829#:~:text=contre%20à%20peine%2040%20milliards,fois%20plus%20élevé%20au%20Sud,2015>.

At the origin not very industrialized and lacking significant natural and human resources, because in 1945 78% of its population was illiterate⁴, it seemed doomed to underdevelopment⁵, but it benefited from Western aid. In the 1960s and 1970s, it carried out accelerated industrialization in the steel industry, shipbuilding, and electronics. This allowed the South Korean economy to move closer to the West, but political and trade union freedoms remained limited⁶. It was not until the end of the Cold War that South Korea became a democratic country. It has remained competitive in many sectors, as South Koreans work longer hours than Europeans and South Korean companies invest heavily in new technologies, such as automation, to keep their costs low⁷.

In 2024, the 51.6 million South Koreans generate a GDP of €1,672 billion. With a GDP per capita of \$32,418, comparable to that of Italy and Spain, they are twenty times richer than their northern neighbours⁸. South Korea is the second largest shipbuilder after China, with a 25% share of the global market⁹. It is the second-largest producer of semiconductors after Taiwan¹⁰, the fourth-largest exporter of electronics¹¹, the fifth-largest auto producer, producing more cars than Germany¹², and the sixth-largest steel producer, producing nearly twice as much steel as Germany and five times as much as France¹³.

A Robust and Competitive Defence and Defence Industry

South Korea's defence budget is 2.8% of the GDP or 47 billion €. It is used rationally. One-third of South Korea's active military personnel, or 365,000 soldiers, including 29,000 marines¹⁴, 70,000 sailors and 65,000 air force personnel¹⁵, are professionals, two-thirds are conscripts who serve for 18 to 21 months, according to the service. They are much better equipped and have a much higher military readiness than European armies, which spend five times as much. NATO's largest military exercise since the Cold War took place in 2024. It brought together 90,000 military personnel from 32 countries¹⁶. South Korea holds annual drills that involve about 200,000 South Korean military personnel and 10,000 to 20,000 Americans¹⁷.

⁴Jun-kyung Kim and KS Kim, *2011 Modularization of Korea's Development Experience: Impact of Foreign Aid on Korea's Development*, Korea Development Institute School of Public Policy and Management, 2012, p. 41, https://archives.kdischool.ac.kr/bitstream/11125/41935/1/%282011%29%20Modularization%20of%20Korea%27s%20development%20experience_impact%20of%20foreign%20aid%20on%20Korea%27s%20development.PDF.

⁵Ramon Pacheco Pardo, *Shrimp to Whale: South Korea from the Forgotten War to K-Pop*, London: Hurst Publishers, 2022, p. 36–37.

⁶Il-woo Lee and Alan Chong, "Curing National Insecurity through Developmental Authoritarianism in South Korea's Civil–Military Relations" in Alan Chong and Nicole Jenne (eds.), *Asian Military Evolutions: Civil–Military Relations in Asia*, Bristol, Bristol University Press, 2023, p. 255.

⁷Hanako Montgomery, "Asia's Most Overworked Country Wants to Improve Work-Life Balance—By Raising Work Hours" in *Vice*, 24 March 2023, <https://www.vice.com/en/article/wxjyqy/south-korea-69-hour-work-week>; Sam Kim, *South Korea's Robots Are Both Friends and Job Killers*, Bloomberg, 11 November 2019, <https://www.bloomberg.com/graphics/2019-new-economy-drivers-and-disrupters/south-korea.html>.

⁸International Monetary Fund, 'World Economic Outlook Database: April 2024', <https://www.imf.org/en/Publications/WEO/weo-database/2024/April/weo-report/>.

⁹Amanda Lee and Ralph Jennings, "China Becoming World's Go-to for Shipbuilding after "Boom of Overseas Orders", but Global De-risking Threatens to Rock the Boat" in *South China Morning Post*, <https://www.scmp.com/economy/global-economy/article/3225973/china-becoming-worlds-go-shipbuilding-after-boom-overseas-orders-global-de-risking-threatens-rock>, 12/7/2023.

¹⁰World Population Review, "Semiconductor Manufacturing by Country 2024", <https://worldpopulationreview.com/country-rankings/semiconductor-manufacturing-by-country>.

¹¹Seair Exim Solutions, *Top 10 Electronics Exporters by Country 2022–23*, 10/4/2023, <https://www.seair.co.in/blog/top-10-electronics-exporters-by-country-2022-23.aspx>.

¹²International Organization of Motor Vehicle Manufacturers, *2022 Production Statistics*, <https://www.oica.net/category/production-statistics/2022-statistics/>.

¹³World Steel Association, *World Steel in Figures 2023*, <https://worldsteel.org/steel-topics/statistics/world-steel-in-figures-2023/#major-steel-producing-countries-%3Cbr%3E-2021-and-2022>.

¹⁴IISS, *The Military Balance*, pp. 285, 287.

¹⁵*Ibid*, p. 91, 96, 151, 285.

¹⁶Jonathan Beale, "Sweden and Finland join NATO's Biggest Military Exercise in Decades" in *BBC News*, 11/3/2024.

¹⁷Tong-Hyung Kim, "South Korea, US to Begin Expanded Military Drills Next Week" in *The Diplomat*, <https://thediplomat.com/2022/08/south-korea-us-to-begin-expanded-military-drills-next-week/>, 17/8/2022.

The South Korean Air Force has U.S. F-35, F-15 and F-16 combat aircrafts and indigenous FA-50s, which make up 60 percent of the fleet. The remaining 40% are made up of F-5s and F-4s, which are being replaced by KF-21s. In the army, half of the equipment and weapons systems date from the 1960s and 1970s. This makes it possible to maintain a mass significantly higher than those of the European armies, which are struggling to give Ukraine more than a few dozen howitzers and armoured vehicles¹⁸ and a limited amount of ammunition¹⁹.

The manufacture of weapons, including the M16 rifle, began in South Korea in the early 1970s, under US licenses, to reduce dependence on imports, reduce costs and achieve technology-intensive industrialization²⁰. In the 1980s and 1990s, South Korea switched to licensed production of U.S. combat aircrafts, first the old-design F-5, then the F-16, then German Type 209 and 214 submarines and Italian CM6614 armoured infantry carriers. It began research and development in the 1990s.²¹

In 2024, South Korea is the eighth largest arms exporter and aims to be the fourth largest by 2027²². It produces 80% of its armament. The size of an army allows economies of scale in maintenance and lowers the unit costs of armaments, provided that the organization is efficient. The K2 main battle tank is as good as the German Leopard 2.²³ The K9 155 mm tracked self-propelled howitzer is equipped with an automatic loading system for a high rate of fire. The K239 multiple launch rocket system competes with the American HIMARS²⁴. The KF-21 fighter aircraft is being developed in collaboration with Indonesia, and its serial production will begin in 2024²⁵. South Korea is becoming more and more self-sufficient in missile systems²⁶. It builds highly sophisticated warships, including submarines and amphibious ships²⁷. It is capable of producing on a large scale, quickly and cheaply, which is why the K9 howitzer, which costs less than half of its European equivalents²⁸, has been sold to Estonia, Finland, Norway, Poland and Turkey²⁹. Romania is considering its purchase in 2024³⁰. Germany will only be able to deliver a first batch of tanks and artillery systems to Poland in the early 2030s, Seoul did it in five months³¹. Poland will also purchase 48 FA-50 fighter jets, 672 K9s, 288 K239s and 180 K2 tanks, which will be delivered within three years. A further 800 K2s will be produced in Poland before 2030³².

¹⁸Kiel Institute for the World Economy, "Number of Disclosed Artillery, Mortar, and Multiple Rocket Launcher (MRL) Units Committed to Ukraine as of January 2024, by Type Donor Country" in Statista, 16/2/2024, <https://www.statista.com/statistics/1314456/ukraine-military-aid-artillery/>.

¹⁹Grace Eliza Goodwin, "Ukraine's Unending Demand for Artillery Shells to Fight Russia is Tapping Out Critical Western Ammo Stockpiles, which officials say are almost empty" in Business Insider, 4/10/2023, <https://www.businessinsider.com/ukraines-demand-for-artillery-is-drying-out-western-stockpiles-2023-10?r=US&IR=T>

²⁰Richard A. Bitzinger, "The Defense Industry of the Republic of Korea", *op. cit. op. cit.*, p. 378.

²¹*Ibid.*, p. 379–80.

²²*sn*, "Meet the World's New Arms Dealers" in *The Economist*, 19 September 2023, <https://www.economist.com/international/2023/09/19/meet-the-worlds-new-arms-dealers>.

²³Blake Herzinger, "South Korea Could Sweep Up Europe's Tank Market" in *Foreign Policy*, 30/1/2023, <https://foreignpolicy.com/2023/01/30/south-korea-europe-k2-tanks-defense-partnerships-germany/>.

²⁴Sakshi Tiwari, "Cheaper & Readily Available, South Korea's K239 Chunmoo MLRS is Giving HIMARS a Run for Its Money" in *EurAsian Times*, <https://www.eurasiantimes.com/cheaper-readily-available-south-koreas-chunmoo-mlrs-is-giving/>, 28/7/2023.

²⁵Seung-woo Kang, "Korea to Start Mass Production of KF-21 in 2024" in *Korea Times*, 23/3/2023, https://www.koreatimes.co.kr/www/nation/2023/10/113_347689.html.

²⁶Richard A. Bitzinger, "The Defense Industry of the Republic of Korea", *op. cit. cit.*, p. 380.

²⁷*sn*, 2022 Defense White Paper, Seoul, National Defense Strategy Division, p. 327–328.

²⁸Kyung-jin Kim and So-yeon Yoon, "Korea Defense Exports: More Bang for the Buck" in *Korea JoongAng Daily*, <https://koreajoongangdaily.joins.com/2022/05/23/business/industry/Korea-defense-K9/20220523094919087.html>, 23/5/2022.

²⁹*sn*, "Hanwha Defense Signs 2.4 Billion Contract to Supply K9 Self-Propelled Howitzers to Poland" in *EDR On-Line*, <https://www.edrmagazine.eu/hanwha-defense-signs-2-4-billion-contract-to-supply-k9-self-propelled-howitzers-to-poland>, 29/8/2022.

³⁰Hyung-Kyu Kim, "Hanwha Expected to Sign \$751 Million Howitzer Deal with Romania" in *Korea Economic Daily*, <https://www.kedglobal.com/aerospace-defense/newsView/ked202402260005>.

³¹Seung-woo Kang, "First Batch of K2, K9 Arrives in Poland" in *Korea Times*, https://www.koreatimes.co.kr/www/nation/2023/10/113_341288.html, 7/12/2022.

³²Saeme Kim and Bence Nemeth, "South Korea: An Emerging NATO Partner" in Zeno Leoni, Maeve Ryan and Gesine Weber (eds.), *War in Ukraine: One Year On* (London: King's College, 2023), p. 46, <https://www.kcl.ac.uk/warstudies/assets/war-in-ukraine-one-year-on.pdf>.

Conclusion

South Korea has shown us the importance for a country to apply the basic principles of political science when developing its defence policy and defence industrial policy. The sustainability of political plays a crucial role. It is the only way to set relevant, therefore consensual, therefore stable, priorities. Only a state organization allows this. Coalitions of states, associations of states and confederations bring together only disparate and fluctuating wills. They do not allow the general interest to take precedence over individual interests.

Europe is prosperous enough to still maintain in 2024 an impressive mass of more than one million active military personnel, but they absorb the bulk of defence budgets. European weapons systems are now produced in small numbers, making them more expensive to acquire, implement and maintain. Our military is therefore for the most part poorly equipped and undertrained. NATO's recommended resumption of investment, if sustained in the long term, will lead to economies of scale, provided that the increase in spending is not limited to the increase in waste induced by the multiplicity of decision-makers.

The global geopolitical situation and the internal tensions between very antagonistic political tendencies require Europeans to study the example of South Korea to relearn these basic principles. It is very urgent. Europe can draw inspiration from this to finally equip itself with an efficient defence and to develop its defence industry. To do this, Europe should become a federal state, capable of establishing its priorities, setting its defence plans and its defence industrial policy.

Europe must put an end to 75 years of military weakness, but also stop its scientific, technological, and industrial decline. It still has an industrial sector including, for example, steel, automotive and micro-electronics activities, which will help our defence industry to keep the costs of defence products and services low, reduce our dependence on imports, make our supply chains safer, increase our competitiveness and achieve a technology-intensive reindustrialisation of Europe.

3. SECURITY AND RESILIENCE



Europe's Future Hinges on Ending Monopolistic Power Amid Global Turmoil

Marian Ovidiu RAUTOIU

In an era marked by unprecedented global challenges, Europe's future stability and prosperity increasingly hinge on dismantling monopolistic power. The ongoing war in Ukraine, North Korean aggression, China's ambitions regarding Taiwan, climatic changes, and economic dependencies reveal the critical need for Europe to foster a competitive, resilient economy free from the stranglehold of monopolies. These complex geopolitical and environmental dynamics underscore the urgency of ending monopolistic practices to safeguard Europe's strategic autonomy and ensure sustainable growth.

Ukraine's War and the Need for Energy Independence

The war in Ukraine has starkly highlighted Europe's energy vulnerabilities. For years, European countries have been heavily dependent on Russian energy supplies, a relationship that has proven to be a strategic liability. The concentration of energy supply in the hands of a few powerful entities, particularly state-controlled monopolies like Gazprom, has left Europe exposed to economic blackmail and supply disruptions.

To counter this, Europe must:

Diversify Energy Sources: Investing in renewable energy and alternative suppliers can reduce dependency on monopolistic energy providers. Expanding the use of wind, solar, and other renewable sources not only promotes energy security but also aligns with climate goals.

Strengthen Energy Infrastructure: Developing a robust, interconnected energy grid within Europe can facilitate better distribution and reduce the impact of localized disruptions.

North Korean Aggression and Technological Vulnerabilities

North Korea's cyber capabilities and aggressive stance pose significant security threats. The country's involvement in high-profile cyberattacks has exposed vulnerabilities in critical infrastructures globally, often targeting monopolistic tech giants that control vast amounts of data and infrastructure.

To mitigate these risks, Europe needs to:



Source: [https://www.euractiv.ro/eu-elections-2019/parlamentul-european-lanseaza-procesul-de-modificare-a-tratatelor-ue-](https://www.euractiv.ro/eu-elections-2019/parlamentul-european-lanseaza-procesul-de-modificare-a-tratatelor-ue)

Enhance Cybersecurity: Implementing stringent cybersecurity measures and fostering a competitive tech sector can reduce vulnerabilities. Encouraging innovation and competition in the tech industry ensures diverse and robust solutions to cyber threats.

Support Tech Startups: Providing support for small and medium-sized tech enterprises can drive innovation and reduce reliance on a few dominant players, making the sector more resilient to cyber threats.

China's Ambitions and Strategic Autonomy

China's ambitions to regain Taiwan and its broader geopolitical strategy pose significant challenges. Europe's economic dependence on China, particularly in sectors like technology and manufacturing, has strategic implications.

To enhance strategic autonomy, Europe should:

Reduce Dependency on Chinese Supply Chains: Encouraging the development of local industries and diversifying trade partnerships can mitigate the risks associated with over-reliance on Chinese imports.

Promote Domestic Manufacturing: Investing in domestic manufacturing capabilities, especially in high-tech sectors, can reduce strategic vulnerabilities and create economic resilience.

Climatic Changes and the Need for Sustainable Practices

Climatic changes present a profound challenge for Europe. Monopolistic practices in industries such as energy and agriculture often prioritize short-term profits over sustainable practices, exacerbating environmental degradation.

To address climatic changes, Europe must:

Promote Sustainable Practices: Enforcing regulations that encourage sustainable practices and penalize monopolistic entities that engage in environmentally harmful activities is crucial.

Invest in Green Technologies: Supporting innovation in green technologies and renewable energy can drive sustainable economic growth and reduce the environmental impact of monopolistic industries.

Economic Dependence and the Drive for Diversification

Europe's economic dependence on a few key sectors and companies has significant implications for its economic stability. The monopolistic control in sectors like finance, technology, and pharmaceuticals can lead to market imbalances and reduce economic resilience.

To foster a more balanced economy, Europe should:

Strengthen Antitrust Regulations: Vigorous enforcement of antitrust laws can break up monopolistic entities and promote fair competition.

Support SMEs: Providing financial incentives and reducing regulatory burdens for small and medium-sized enterprises can stimulate economic diversification and innovation.

Encourage Competition in Finance: Diversifying the financial sector by supporting fintech startups and alternative banking solutions can reduce the dominance of major financial institutions and enhance economic stability.

Conclusion

The cessation of monopolistic power is imperative for Europe's future, particularly in light of the multifaceted global challenges it faces. By dismantling monopolies and fostering a competitive, resilient economy, Europe can enhance its strategic autonomy, ensure sustainable growth, and better withstand geopolitical and environmental pressures. The path forward requires decisive action to promote competition, support innovation, and reduce dependencies, securing a prosperous and stable future for the continent.

3. SECURITY AND RESILIENCE



Emergency Management and Community Resilience through Augmented Reality (AR)

PhD. Eng. Constantin REBEDEA

Abstract:

Our physical environment is more fragile, contrary to what we may think. It is prone to earthquakes, tsunamis, fires or other man-made threats. Since some of these disasters occur unpredictably, emergency management is something that as a society must be continually worked on to help those in need. This is where technology comes in. With Augmented Reality (AR) and Virtual Reality (VR), personnel can be trained by recreating real-life situations to prepare them for responding to such disasters. RA in rescue management can help train emergency personnel and improve their situational awareness. Disaster management has always been a critical aspect of emergency response. From natural disasters to unforeseen accidents, effective disaster management can save lives and minimize the impact on affected areas. With technological advances, especially in augmented reality (AR) and geolocation, a new era of disaster management is emerging.

Keywords: Virtual and augmented reality, resilience of communities, AR in rescue management, emergency management, development of analytical tools.

Introduction

Augmented reality is a technology that combines virtual elements with the real environment, usually using devices such as augmented reality glasses or other dedicated devices. This technology provides users with an enhanced experience of the environment by adding virtual elements such as images, sounds or additional information.

Augmented reality is used in various fields, starting with video games, education, design, medicine, marketing, but also in the field of critical services (emergency situations) and military.

Augmented reality in emergency situations is a technology that combines the real world with virtual elements to help manage and respond to emergency situations. Through the use of devices such as virtual reality (VR) goggles and/or headsets, this technology can provide additional information, instructions and guidance to emergency responders in real time.

The use of augmented reality in emergency situations can have several advantages. This can provide response teams with relevant information about the incident site, such as maps, diagrams or floor plans of the affected buildings. It can also provide visual instructions and step-by-step guidance on proper procedures for handling critical situations.

Additionally, by using this technology, teams can collaborate more effectively through information sharing and improved communication between the various departments involved in managing an emergency.



Source: Image generator, graphic editing of images created with the help of AI

The concept of resilience it occupies a prominent place in discussions of disaster risk reduction, emergency management and community safety. Emergency services procedures and scenarios also include the major role in promoting and encouraging community resilience. However, there is little appreciation of the importance of resilience as a necessary characteristic of emergency service organizations, so I advocate that they address their own resilience issues in order to adequately fulfill their community protection responsibilities. The concept of organizational resilience in relation to volunteer-based emergency service organizations is also very important precisely because of the importance of organizational climate and organizational culture in relation to resilience.

Emergency management involves taking quick and effective measures to manage and minimize the impact of a dangerous or unforeseen situation. If for risk assessment, identification of potential threats and vulnerabilities, as well as assessment of the degree of risk associated with them, human assessment is strictly necessary, for the development of a detailed action plan, which includes specific measures for different types of situations, artificial intelligence (AI) has an essential role. Also, ensuring clear and effective communication with all parties involved, including employees, authorities and other responsible entities, relies on technology. The organization of regular staff training sessions (training and simulations) is done through platforms managed by AI. At the same time, the quick reaction, the analysis of the causes that led to the emergence of the critical situation and the lessons learned, the post-event evaluation are based on the interoperability of technical data, managed by complex systems. The use of augmented reality allows operational teams to receive critical tactical information in real time. Tactical Augmented Reality (TAR) is a technology that integrates GPS and geographic registration.

The Field of Emergency Situations

Resilience in emergency disaster risk management refers to the ability of individuals, communities and systems to withstand and recover from the impact of disasters. It involves preparing for potential risks, responding effectively during a crisis, and adapting and recovering afterwards. There are several factors that contribute to the resilience of disaster risk emergency management, illustrated in the accompanying figure:

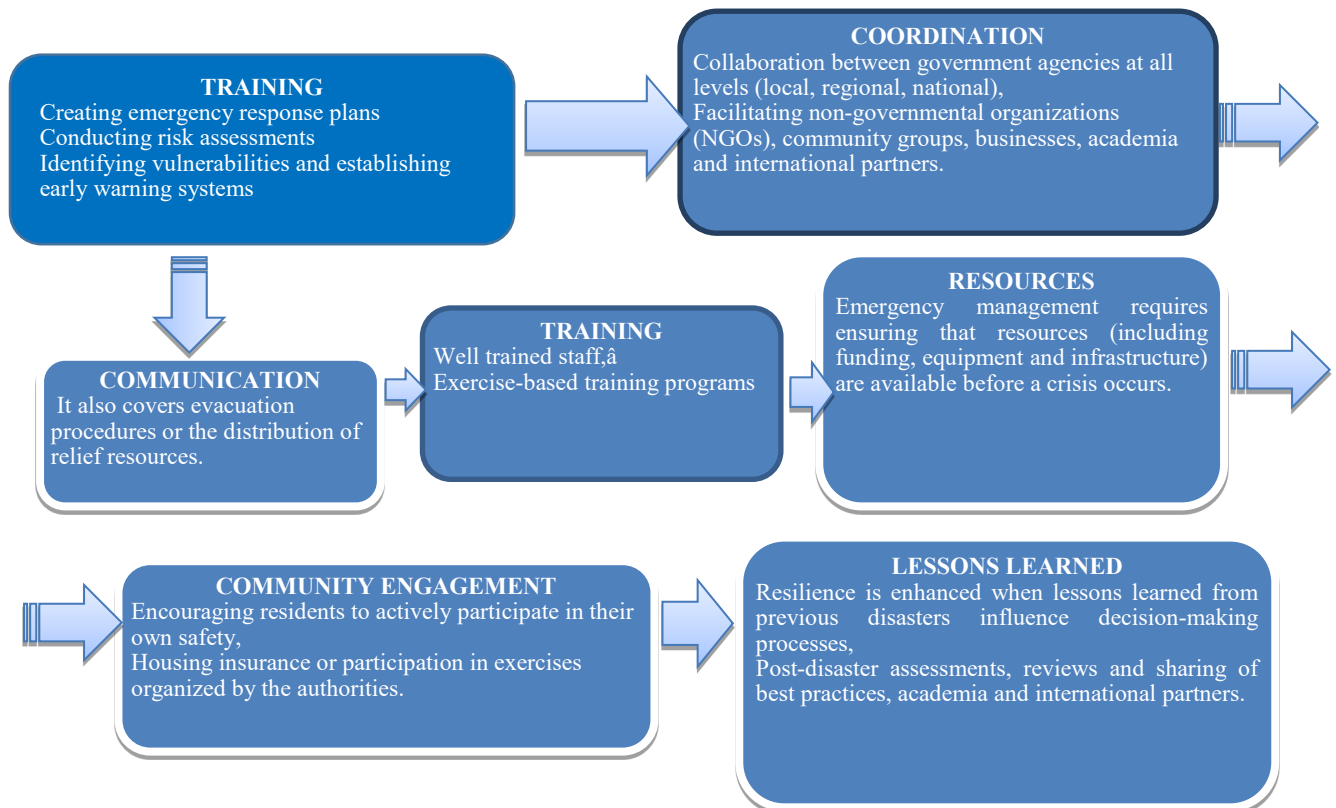


Figure 1: Factors of Emergency Management Resilience
(Source: Figure created by the author based on his own research)

In general, emergency management resilience to disaster risk is based on proactive planning, collaboration and learning. The ability to bounce back from a crisis depends on these factors working together effectively.

Augmented reality has the potential to be used in the field of emergency situations to improve communication, coordination of response teams and quick and effective decision making.

Here are some ways augmented reality can be useful in emergency situations:

1. Visualize critical information: Through augmented reality glasses, response teams can view critical information such as maps, emergency data or response instructions in real time without having to look at separate devices.

2. Simulations and training: Augmented reality can be used to create realistic simulations of emergency situations, allowing response teams to train in a controlled and safe environment.

3. Navigation and Orientation: Through augmented reality, response teams can receive real-time navigation and orientation directions, helping them navigate efficiently and reach the scene of the incident quickly.

4. Cooperation and communication: Augmented reality can facilitate communication and collaboration between different response teams, allowing them to share information, coordinate actions and make decisions effectively.

5. First Responder Assistance: RA can provide first responders (paramedics, firefighters, police officers) with vital information about patients or the emergency scenario. For example, augmented reality glasses can display plans of buildings, locations of victims, or indicate the presence of hazardous substances.

6. Navigation and search-rescue: In the case of search and rescue operations, AR can overlay maps and coordinates over the real landscape to help rescuers navigate in unfamiliar terrain or in low visibility conditions.

7. Training and simulation: AR allows the creation of realistic training scenarios for emergency situations without the risks associated with a real environment. This can improve the training of emergency personnel and reduce reaction time in real situations.

8. Telemedicine: In medical emergencies, doctors can use AR to remotely guide paramedics or even people without medical training in providing first aid or performing life-saving procedures. The use of AR technology in healthcare is extremely important, especially in ultrasound, in military medicine on the battlefield and even in the ambulance. Currently, a portable ultrasound scanner has been created that can be used with smart glasses, offering the same functionality as a traditional scanner.

9. Disaster Management: In the case of natural disasters or large-scale incidents, RA can help coordinate response efforts by visualizing affected areas, available resources, and evacuation routes.

10. Step-by-step instructions: The RA can provide emergency personnel with step-by-step instructions for using complex equipment or performing specific procedures, which can be especially helpful in stressful situations or when every second counts.

11. Rapid identification of hazards: Using AR, response equipment can quickly identify sources of danger, such as gas leaks, downed power lines, or unstable structures.

Bibliography:

[1] <https://www.twinkl.ro/teaching-wiki/realitatea-augmentata>, [Accessed 15 06 2024].

[2] A. B. Craig, "Understanding Augmented Reality. Concepts and Applications.," Elsevier publisher, 2013.

[3] M. P. Ivanov, L. Mistodie, C. C. Rusu, "Research on the current state of Virtual or Augmented Reality technology to identify the solutions needed to create the framework application (framework), "Research report carried out within the EDUVR-Apps project" Application for generating interactive multimedia courses using virtual and augmented reality, 2021.

- [4] Encyclopaedia Britannica, "Augmented reality," 2021.
- [5] "https://www.oracle.com/ro/artificial-intelligence/machine-learning/what-is-machine-learning/" [Accessed 15 06 2024].
- [6] R. Puchiu, M. Stoian and M. Foca, Digital Romania-Concepts and operational tools, Bucharest: Club Romania, 2018.
- [7] J. A. O'Brien, G. M. Marakas, "Management Information Systems," McGraw Hill publisher, 2010.
- [8] Examples of good practice in the use of e-government tools for the provision of public services, Bucharest, 2020.
- [9] C. Săvulescu and C. Anatovici, "Alba Iulia - Landmark for Smart Cities in Romania," in Creating an Environment Suitable for the Development of Smart Cities, Bucharest, 2017. [10] M. Frackiewicz, "https://ts2.space/ro/viitorul-realitatiei-augmentate-si-al-realitatiei-virtuale-convergenta-sau-divergenta/".

3. SECURITY AND RESILIENCE



Middle East Conflict: the Impact on Energy Security and Efficiency

Stella BOURBOUTELI (Greece)

The Eastern Mediterranean region has been an area of intense conflict for many decades. It could be described as a boiling pot with unpredictable consequences for global markets and international politics. The creation of an orderly and peaceful framework, acceptable to all parties concerned, could be the diplomatic triumph and the conquest of the political posterity of any leader who wants to leave behind a remarkable legacy for future generations. The Middle East is considered a region of intense political, economic, energy and ethnic conflicts capable of creating international imbalances at every turn. This seems to have been the case for several months now between Israel and the Palestinians, with repeated bombings on both sides.

The conflict, however, is causing a domino effect of serious repercussions in the field of energy security and supply, with the main focus on the increase in hydrocarbon prices and beyond. Europe seems to be following the course of events almost numbly, as it watches the US take crucial decisions that directly affect the life of the European citizen. Like the war in Ukraine, the conflict in the Middle East has huge geopolitical implications. What will be the next steps for Greece, Cyprus, Israel, Egypt, Egypt and Turkey regarding the exploitation of the deposits in the Eastern Mediterranean? How will US-EU-NATO relations with Russia evolve in an environment where instability is the only constant? One could say that armed conflicts in different parts of the globe resemble the butterfly effect, a situation of intense dependence of the international system on the initial events.

Middle East: Military Conflicts Meet Hydrocarbons

The Middle East and the Eastern Mediterranean in general are a geographical area where wars have been raging for many years, the results of which determine the conduct of international politics. The rise of ISIS, the countless refugee flows to the West, Israel's relations with its neighbours and the instability of Greek-Turkish relations are some of the problems that stand in the way of normalising relations at the regional level. In this context, the discovery of huge quantities of energy products, oil and natural gas, which makes the already tense situation even more difficult. This economic factor determines policy at every possible level, creating a dilemma for the states managing hydrocarbons, either of cooperation or of competition¹.

¹*Stergiou A., Ulusoy K., Blondheim M., Conflict and Prosperity, Geopolitics and Energy in the Eastern Mediterranean, 2019, Klidarithmos Publications, Athens.*



Figure 1

Source: www.capital.gr/ecfr-eu/3725316/i-meta-amerikaniki-mesi-anatoli/

The Middle East is at the forefront of the global energy map. Saudi Arabia, Iran, Iraq, Kuwait and the United Arab Emirates are the world's largest oil producers, accounting for around two-thirds of the world's exported barrels of oil. Similarly, they are also among the leaders in natural gas production, playing a key role in determining price and supply volumes.

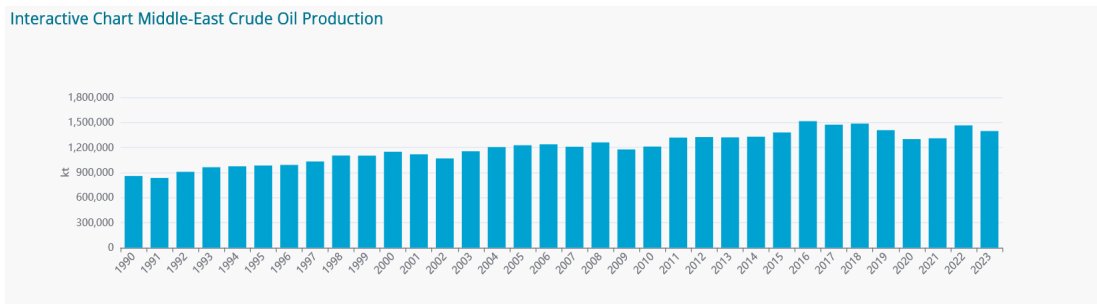


Figure 2

Source: www.enerdata.net/estore/energy-market/middle-east/

However, these countries also face many and varied challenges, both in the issue of climate change and in the rapid escalation of conflict situations. Around 95% of electricity is produced from natural gas and oil, while there is also the potential to harness solar resources to produce clean energy. The transition to a fossil fuel-free environment is a huge economic challenge to find new sources of revenue².

At the United Nations Climate Change Conference of the Nations, COP28, in Dubai, decisions of major importance for the future of the planet and its path to a future free of carbon pollutants and fossil fuels were taken. It was a stocktaking of international efforts to achieve the goals set in the Paris Agreement. Conference participants pledged to take immediate action and to make progress by 2030 in providing financial and technological support to vulnerable populations, in reducing greenhouse gas emissions, and to

²Energy system of Middle East, www.iea.org/regions/middle-east.

focus on resilience. In this way, the aim is to increase the share of renewable energy in the global energy mix, to strengthen hydrogen-based technologies and CO2 capture and storage³. But on the other hand, no one can guarantee that the \$85 billion raised in Dubai will help meet the goals, said Dr. Verhoeven, Professor and Senior Research Scholar at Columbia University's Center on Global Energy Policy. The oil-producing states do not seem to fully share the international need for a change in energy policy, which makes it even more difficult to complete the effort. A striking example of this difficulty was Iran's withdrawal from the

Conference, as it ranks second in the world in natural gas reserves and fourth in oil reserves.

In this era, with so many challenges, the Israeli-Palestinian conflict from October 2023 has been added. But is it possible to talk about resilience and democratic debate when the major oil-producing countries are unable to cooperate in a future where renewable claim the lion's share of the global energy mix? What could be the countervailing benefit to society? Palestine could have a lot to offer in terms of climate but the current context as well as the priorities set by the leading groups leave no room for decisions based on energy policy and climate. Not only is there this disregard for the climate, it should also be pointed out that, to date, around 44% of the sewage and water supply system in the Gaza Strip has been destroyed, resulting in a large amount of sewage flowing into the Mediterranean Sea, capable of contributing to the spread of diseases caused by bacteriogenic agents.

Finally, with the constant bombing of Gaza, all plans to install photovoltaic panels, which could provide 60% of the energy consumed from the sun, have been cancelled⁴.

It therefore seems that the crossfire between Israel and the Palestinians is triggering a domino effect on the energy chessboard. The ongoing attacks by the Iranian-backed Houthis on merchant ships in the Red Sea are putting oil and gas transport at great risk, with the immediate issues being the increase in the prices of energy products.

The Eastern Mediterranean region has been the focus of international attention in recent years with the discovery of significant natural gas reserves. Countries such as Greece, Cyprus, Israel, Egypt, Turkey and Lebanon are hiding huge quantities of natural gas, which shifts geopolitical interest to this side of the globe. Israel's need to exploit the Leviathan field in the Levantine Basin and to play a leading role on the energy map in relation to the oil-producing states of the Middle East may be one of the reasons for the military conflict with the Palestinians, in addition to the dismantling of the Hamas terrorist organization. By placing it in its own sphere of influence, it gets the strategic advantage of exploiting a larger area of the field.

While the US supports the ongoing Israeli military counter-offensive, the EU, having economic relations with Israel, mainly commercial, is seeking to achieve a ceasefire, as it realizes that fossil fuel prices and then transport and distribution will face particularly significant challenges.

In this geopolitical game, Russia could not remain uninvolved, seeking to bring together key oil countries such as the United Arab Emirates, Saudi Arabia and Iran with the BRICS. The US-Russia duopoly with energy as a common denominator seems to be a major concern in the coming years⁵.

³COP28: What Was Achieved and What Happens Next?, <https://unfccc.int/cop28>.

⁴<https://lab.imedd.org/en/cop-28-climate-diplomacy-the-israel-palestine-conflict-and-the-global-fossil-fuel-landscape/>

⁵Economic Forces are at play in Israeli- Palestinian conflict, March2024, <https://theconversation.com/economic-forces-are-at-play-in-israeli-palestinian-conflict-221410>.

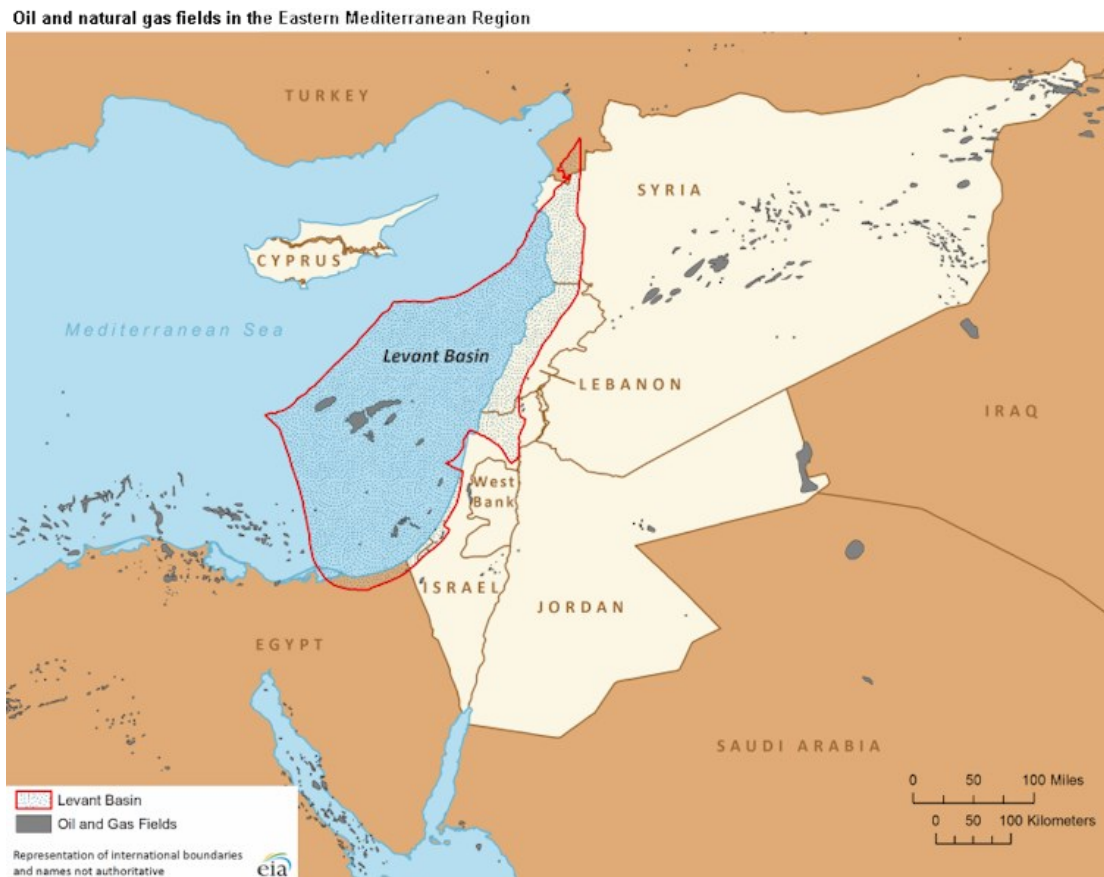


Figure 3

The map of Levantine Basin, where the Leviathan gas field is located. US EIA

Source: <https://theconversation.com/economic-forces-are-at-play-in-israeli-palestinian-conflict-221410>

With the development of the Leviathan and Tamar fields, it will be possible to offer the countries of the European Union yet another diversified source of natural gas, as it tries to distance itself energetically from Russia. For this reason, in June 2022, a memorandum of cooperation was signed between the EU, Egypt and Israel with the aim of supplying natural gas to the Union through Egypt⁶.

⁶Raydan N., November 2023, *The Gaza war's impact on energy security in East Mediterranean*, www.washingtoninstitute.org/policy-analysis/gaza-wars-impact-energy-security-east-mediterranean.

Key Israeli Gas Infrastructure and Potential Export Options



Figure 4

Source: <https://www.washingtoninstitute.org/sites/default/files/2023-11/israel-gas-infrastructure-mees-POL3809-map.jpg>

Europe, aware of the difficulties in energy supply and aiming to reduce greenhouse gas emissions, has included in the 10th PCI list the "GRECY" project, a project of pivotal importance as it will connect Egypt with Greece with an electrical interconnection and expanding Europe. This is a project where electricity generation will come from clean, green energy. In addition, another project of great geopolitical importance is the electrical interconnection of Greece-Cyprus-Israel. We are referring to an extremely innovative project, which will contribute catalytically to the reduction of CO2 pollution by strengthening the national networks of these states with clean, green energy. We also remind you that this project also falls under the PCI programs, which shows Europe's need for clean energy on the one hand, and on the other the effort it is making to become independent from Russia.

One realizes that the Eastern Mediterranean region will occupy the course of geopolitical decisions, enabling states and national entities to influence international energy developments, on the one hand based on addressing climate change and on the other in forming new alliances. We live in an era of insecurity and fragmentation of power. The balance has been lost and states and nations will have to re-design their political agenda with future geopolitical challenges as the main factor.

4. ROMANIA



The Prominent Role of Romania in Mitigating the North - South Divide in the Multilateral System

Amalia-Irina PUFULESCU

The universality of the United Nations Organization seems like an aphorism, but the importance of this unique characteristic is particularly evident in recent years, as a direct consequence of the transition from a unipolar world to a multilateral system with several regional poles of power, or what in the literature specialty is taking shape as the new multilateral global order. The process of reconfiguration of the international community should not be viewed with surprise, but rather as a natural evolution and a reflection of the political changes that have taken place in the almost 80 years since the founding of the UN. One of the determining factors of the resettlement of power relations in the international community concerns the movement known as decolonization and the emergence of a large number of new sovereign states in the regions of Africa, Latin America and the Caribbean, and Asia - Pacific.

Along with these developments, the composition of the UN changed profoundly, becoming the majority category of small and medium-sized states. Over time, this process spawned a movement challenging the status quo and the influence of major state actors on the international stage. Since this restructuring did not have a direct correspondent in the decision-making plan of the most important bodies, such as the Security Council, the reform of the multilateral system with the UN as its core became a leitmotif in the annual debates in the organization's plenary session.

The emancipation movement of the former colonies and the desire of these states to accelerate the transition and assume an increased role on the international stage was undoubtedly a catalyst for the appearance of the North-South cleavage phenomenon. Against this backdrop of weakened trust between developed and developing states, impactful events such as the war in Ukraine and the Gaza crisis have found fertile ground for deepening the divide and eroding the international and multilateral system. But all these transformations would not pose major risks to the well-being of the international community, if the UN were not endowed with a central role in restoring international order, promoting development and advancing human rights globally.



Source: <https://newstrack.ro/nazare-uniunea-paneuropeana->

The importance of regional or thematic forums such as the EU, NATO, G7, BRICS+, the World Bank, etc. it should not be minimized, but the UN remains the only organization with a global vocation and mandate and universal applicability. What rests from the universal character is the implicit effect of acceptance of its norms and decisions, by comparison with other multilateral organizations of regional type, especially in the case of those decisions and resolutions whose adoption is carried out consensually by all its member states. Consequently, in the context of intensifying polarization and geopolitical changes, it is difficult to imagine how topics of major interest such as the end of the wars in Ukraine and Gaza and the negotiation of a lasting peace, the application of a uniform regulatory framework regarding the use of Artificial Intelligence (AI) or ensuring a solid normative framework for limiting the effects of climate change, can be successfully agreed outside the UN umbrella.

Against this background, Romania has an increased potential and a good opportunity for a stronger profile in the UN system, being well placed to be able to relate and act as a bridge between the two congregations of states: *de facto*, it is an integral part of the group of Western states (the North), however, history and political course do not lead to the implicit association with states whose historical legacy generates the hostility of the South.

This image of Romania is precisely one of the assets that contribute substantially to the success in the interaction with the developing states. Southern states challenge the purported moralistic approach of the more developed states, as well as the supposed superiority that continues to characterize interactions with them. As a method of retaliation, the South embraced its numerical advantage and learned over time that this was the best bargaining chip in an organization where, regardless of size, economic power, or geographic position, the power of the national vote is most often equivalent, under the motto, one state - one vote.

In this context, it is clear to understand that the main actors no longer have the same power to impose their characteristic principles and value systems, but a reanimation of dialogue and multilateral cooperation is needed. Romania finds itself very well positioned to assume an increased role in the process of consultation and mobilization of small and medium-sized states, by reference to its own status and the experience acquired during the relatively recently acquired position of a developed state.

The premises for the natural growth of Romania's role in the UN were highlighted including by obtaining some remarkable results in the context of the recent elections of Romanian nationals in the most important positions in the international legal system (the first election of the first Romanian judges to the International Court of Justice and the International Criminal Court), as well as by involving Romania in various ongoing processes and impact projects under the auspices of the UN (co-chairing the Revitalization process of the UN General Assembly, co-sponsoring and mobilizing the support of members from the Global South in numerous resolutions) and joining political and cultural initiatives in support of promoting a revitalized and effective multilateral system.

Romania remains a strong ally of the community of Western states and a solid promoter of democracy, the rule of law and the rules-based international order, but the new challenge is to translate this influence and guiding principles among states that show the aspiration to follow a similar trajectory, positive. Keeping the states of the Global South connected, interested and willing to follow the model of developed states is a *sine qua non* condition for a viable and performing multilateral system. In this context, Romania has a special role in the transfer of experience, best practices and training of developing states to persevere in efforts to increase capacities and rally to the community of values of democratic states. Reaffirming the importance of the UN and its place among Romania's foreign policy priorities will also strengthen the power of influence that Romania can exercise in relation to the states of the Global South, as proof of assuming the role of a responsible and visible actor in the international community.

In a world constantly changing and adapting to new technological and geopolitical realities, one constant remains: the primacy of the rules-based international order and belonging to the community of values based on the principles of international law and the UN Charter. The main mission of Romania in the multilateral system is to capitalize on the profile of a credible actor by exporting the success story that characterizes the transition of the Romanian state from a low level of development to joining the league of developed states providing security and prosperity.

5. SUA



Analyzing the Presidential Debate: Biden and Trump's Responses to Climate Change Policy Through an Ecolinguistic Lens

Fouad AKKI¹

Abstract

In a debate exceeding one and a half hours (01:38:36) from CNN (2024), president Joe Biden and former president Donald J. Trump addressed a myriad of political, social, and economic issues both domestic and international. Among the issues debated was climate change. The debate has spotlighted climate change as a pivotal issue, eliciting reactions from the candidates on their policy plans towards the issue. This study analyzes the June 27, 2024 debate between J. Biden and D. J. Trump, focusing on their narratives regarding climate change. For this aim, Ecolinguistics was employed as a framework of analysis to scrutinize the language used by both speakers in response to questions posed by CNN journalist Dana Bash. The question sought insights into the climate initiatives of speakers, along with their proposed actions to mitigate the climate crisis. Over four minutes and fifty-one seconds, both speakers presented their perspectives on this persistent challenge. A detailed examination of the debate reveals stark disparities in both the time allocated and rhetorical strategies employed by each candidate. The climate change segment, comprising 4 minutes and 51 seconds out of a total debate time of 1 hour, 38 minutes, and 36 seconds, accounts for only 4.92%. When distributed among participants, Trump spoke for 30%, and Biden for 45.69%. In terms of narrative analysis, this research dissects the linguistic tactics utilized by Biden and Trump in response to climate-related inquiries posed by journalist Dana from CNN. Despite climate change emerging as a critical concern following 2023's record-breaking temperatures and ensuing environmental crises nationwide, the candidates' responses diverged significantly. Biden positioned climate change as an existential threat, highlighting his administration's policy initiatives such as rejoining the Paris Accord and promoting pollution reduction efforts like the Climate Corps. Conversely, Trump predominantly shifted focus away from environmental imperatives, emphasizing law enforcement and immigration policy while downplaying environmental urgencies. This analysis underscores not only the pivotal role of language in shaping public discourse but also the profound divergence in policy priorities and environmental stewardship perspectives between the two candidates.

Keywords: Biden, climate change, ecolinguistics, Trump, US presidential debate

1. Introduction

Several aspects become clear when examining the CNN Presidential Debate analysis of President Joe Biden and former president Donald J. Trump's answers to climate change policy from an ecolinguistic standpoint. First, analyzing how the candidates' language choices affect how the general public views and

¹ **Fouad Akki** Corresponding Author, Assistant Professor of Applied Linguistics, Department of English studies, Moulay Ismail University, Meknes, Morocco, e-mail: f.akki@umi.ac.ma.

comprehends policies related to climate change sheds light on the influence of linguistic techniques on voter attitudes toward environmental concerns. Furthermore, a study of Biden and Trump's discourse on metaphors in relation to climate change demonstrates how various audiences respond differently to the way that metaphors frame the issue in terms of urgency, responsibility, or action. Discourse analysis highlights recurrent themes and values that influence voter persuasion while exposing underlying ideologies and rhetorical devices present in the candidates' speeches.

Analyzing their language's coherence, persuasiveness, and clarity helps determine how these qualities affect the public's perception of proposed climate policies' efficacy and level of trust. A comparative study of Biden and Trump's language methods reveals the differences in their rhetoric, tone, and messaging appeal between various voter categories. Finally, talking about more general ecolinguistic implications highlights how language shapes public discourse on environmental concerns, looks at how language framing affects policy outcomes, and talks about ethical issues in environmental communication. Through the lens of ecolinguistics, the goal is to investigate the deep influence of language on public debate around climate change and other environmental concerns.



*Figure 1: Former President Donald Trump and President Joe Biden
(Getty Images via CNN Newsource)*

1.2. Debate on Climate Change in the American Presidential Elections

The topic has become more well-known in recent years; one significant turning point was Al Gore's support of it during the 2000 presidential contest (Los Angeles Times, 2021). As the Democratic contender, Al Gore made climate change a major issue, utilizing his position to push environmental laws and increase public awareness of global warming. His effort aided in making climate change a more widely discussed political problem, drawing more attention from the public and media (ABC News, 2000).

Climate change received varied degrees of attention in the wake of subsequent elections. Although their suggested plans were very different, 2008's Democratic contender Barack Obama and Republican nominee John McCain agreed that addressing climate change was important (Broder, 2008). McCain's position at the time represented a more moderate Republican posture, and Obama's administration later attempted, if unsuccessfully, to enact laws like the American Clean Energy and Security Act (Eilperin, 2016). There were notable differences between the candidates in the 2016 election. Hillary Clinton, the Democratic nominee, emphasized the importance of climate change and promised to uphold and improve Obama-era environmental regulations (Mueller, 2024). However, Republican candidate Donald Trump expressed doubts about climate science, pledging to back out of the Paris Agreement and prioritizing energy independence over environmental protections (Mastroianni, 2016).

With contenders like Elizabeth Warren and Bernie Sanders putting up bold climate ideas in the

Democratic primary debates leading up to the 2020 election, climate change took center stage (Gross, 2019). Re-entering the Paris Agreement and emphasizing climate action as part of a larger policy agenda were among the campaign promises made by Joe Biden, the ultimate Democratic contender and winner of the presidency (Kurtzleben et al., 2019).

Candidates' stances on climate change have changed over the course of various election cycles, reflecting shifting public opinion as well as scientific agreement and policy divergences as well as global environmental concerns. The discourse around climate change among US presidential contenders is always changing due to factors such as international accords, scientific discoveries, social demands for climate action, and economic concerns.

1.3. The Debate of June 27, 2024

The first broadcast debate between Democratic President Joe Biden and former Republican President Donald J. Trump was tense because, barring any last-minute upsets, the two men are anticipated to square off in November's elections. They had a one and a half hour meeting (01: 38:36) on Thursday, June 27, 2024, on CNN (CNN, 2024). Testing the candidates' knowledge, forbearance, and reasoning was another goal of the discussion, as these qualities are crucial to winning over American people's hearts and minds. The economy, inflation, unemployment, taxes, immigration, abortion, border security, foreign policy with relation to Russia, Ukraine, and Israel, American democracy, Black unemployment and Black voters, climate change, social security, the US military, drugs, the candidates' ages (cognitive tests and stamina), political violence, and the fairness of the elections and acceptance of the results were among the important topics discussed during the debate. While President Trump stressed his accomplishments in border security and foreign policy, President Biden focused on his efforts to solve the economic difficulties carried over from the previous administration. Notwithstanding the heated discussions, neither candidate wavered from their convictions. While President Trump defended his record and programs as president, President Biden highlighted democratic values and responsibility. Voters gained insight into the leadership philosophies and policy agendas of the two candidates as the discussion illuminated their divergent viewpoints and strategies. Aside from the aforementioned domestic and global concerns, climate change was brought up at 0:59:57 in the discussion, which lasted for less than five minutes. People who are worried about climate change were dissatisfied by the topic's briefness and superficiality, since both presenters spent more time talking golf than climate. The fact that there was no substantive debate of the climate catastrophe, which is widely seen as an existential danger, was a wasted opportunity to inform voters about the candidates' drastically different positions on this pressing issue.

2. Methodology

This study combines both quantitative and qualitative analysis to look at the candidates' discussion of climate change at the June 27, 2024 presidential debate. The length of the discussion video, which was taken from CNN's live broadcast, was one hour, 38 minutes, and 36 seconds. Initially, the length of the climate change section was measured in order to ascertain the percentage of time devoted to this topic in relation to the total length of the debate. The debate on climate change lasted 4 minutes and 51 seconds, or 4.92% of the total duration. Next, in order to evaluate each candidate's relative participation, the speaking time allotted to them during the climate change portion was calculated. In the climate change portion, Biden spoke for 45.69% of the time and Trump for 30%.

An ecolinguistic method was used to examine the candidates' language and narratives in a qualitative manner. It is important to highlight that ecolinguistics studies deals with how language influences attitudes and conversations related to the environment. To find important themes, rhetorical devices, and divergent viewpoints amongst the candidates' narratives, the climate change part was transcribed and coded (See appendix 1). It was discovered that Biden constantly portrayed climate change as an existential concern and emphasized the policies of his administration, including supporting efforts to reduce emissions and rejoining the Paris Agreement. Trump, on the other hand, repeatedly minimized the seriousness of environmental problems while focusing attention elsewhere, namely on immigration and law enforcement, rather than climate change.

Through the integration of quantitative metrics for time allocation and qualitative analysis of language strategies, this study offers a thorough evaluation of the 2024 presidential contenders' discourse on climate

change at the June 27th discussion. The results highlight how language plays a critical role in influencing public conversation about environmental concerns and highlight how the two candidates' policy agendas are radically different.

2.1. Ecolinguistics

After Haugen (1972), when he coined the term „*language ecology*,” eminent linguists like Fill (1998), Mühlhäusler (2000a, 2000b, 2002, 2003; Mühlhäusler & Fill, 2001; Mühlhäusler & Peace, 2006), and Halliday (2001) started examining the intricate relationships between language, ecology, and society. Consequently, ecolinguistics became a distinct area of study within linguistics.

These scholars urged their contemporaries to carefully evaluate language in social and environmental contexts, particularly in view of the mounting environmental threats that technological growth is causing to human civilizations. Since then, two primary research avenues in the field of ecolinguistics have evolved. The primary focus of the first trajectory is the relationship between human civilizations and their natural environments (Nash, 2011; Zhou, 2021).

The issue of language endangerment and extinction as a result of environmental degradation and the loss of natural habitats for a range of plant and animal species is also examined in this field of study. Because of this, human groups that depend on these resources could be in danger of being extinct. Some of the contributions to this field of research include the 2014 studies on toponymy by Couto, Nash (2011, 2015, 2016; Nash & Mühlhäusler, 2014), and linguistic variation in Africa by Nettle (1996).

Ecolinguistics is the modern term for the study of the intricate links that exist between language, ecology, and environmental issues. It attempts to understand how our linguistic practices are shaped by language and, in turn, how ecological conditions impact how we perceive and engage with the natural world (Sanina et al., 2023). Ecolinguistics is essentially concerned with developing theories of language that take into account the place of humans in larger ecosystems and society. It also aims to demonstrate how linguistics can be applied to address significant ecological issues such as biodiversity loss, environmental justice, and climate change (CC) (Mliless & Larouz, 2022).

Whichever method is used, the primary objective is to find the tales that shape our lives by analyzing language patterns (Stibbe, 2015). Next, the story's potential positive or negative environmental impact is evaluated. Positive storylines should be encouraged while negative ones should be ignored. According to the International Ecolinguistics Association, a global network of over 1100 scholars, ecolinguistics is defined as a branch of language that includes:

“...explores the role of language in the life-sustaining interactions of humans, other species and the physical environment. The first aim is to develop linguistic theories which see humans not only as part of society, but also as part of the larger ecosystems that life depends on. The second aim is to show how linguistics can be used to address key ecological issues, from climate change and biodiversity loss to environmental justice. (www.ecolinguistics-association.org)”

2.3. Data Description

The data that is offered includes durations and timestamps associated with a video that features a debate about climate change. The entire length of the film is one hour, forty-eight minutes, and thirty-six seconds (01:38:36). The discussion of climate change began at 59 minutes and 57 seconds (0:59:57) and ended at 00:05:57, or 5 minutes and 57 seconds. This amount of time includes the time a CNN journalist needs to ask participants questions and offer remarks.

Table 1 above shows that former President Donald J. Trump spoke on climate change for a total of two minutes and forty seconds (00:02:40). Upon closer examination, it becomes evident that his discourse on the issue was significantly abbreviated. Trump merely talked about climate change for 27 seconds in his second statement (00:00:27). His third response included an even briefer reference in the span of 21 seconds (00:00:21) after this. The total amount of time that Trump spent talking about climate change for the entire 2 minutes and 40 seconds was only 48 seconds (00:00:48), or 30% of the total.

Table 1. Comparison of Speaking Occurrences and Durations: Trump vs. Biden

Speaker	Occurrence	Start Time	End Time	Duration	Context
Biden	1	1 :02 :21	1 :03 :25	00 :01 :04	-
	2	1 :04 :21	1 :05 :28	00 :01 :07	-
Trump	1	1 :00 :22	1 :01 :45	00 :01 :23	Not a response to CC issue
	2	1 :01 :52	1 :02 :19	00 :00 :27	-
	3	1 :03 :27	1 :04 :17	00 :00 :50	00 :00 :29 devoted to CC
Total	5	-	-	00 :04 :51	

Despite the larger total time span provided, this data shows how little attention Trump paid to the topic of climate change throughout the recorded debate. Regarding President Biden, he spoke about climate change for 00:02:13, or 45.69% of the total time the debate on climate change allowed. The information shows how long the video is, when the climate change discussion began and how long it lasted, and how long each of Trump and Biden spoke throughout the debate. This data makes it possible to analyze the video’s content and the participants’ attitudes on the subject of climate change in great detail.

CNN journalist Dana Bash posed the first question that started the Biden-Trump discussion on climate change. *„The climate catastrophe is another ongoing issue. The year 2023 was the warmest on record, and the country’s towns are already dealing with the catastrophic consequences of intense heat, escalating wildfires, more powerful hurricanes, and increasing sea levels. "Ex-President Trump, you’ve promised to halt your rival’s climate initiatives, but as President, will you do anything to mitigate the climate crisis?"*

At first, Trump sidestepped the subject and spoke about crime and immigration instead. Trump lied when Bash pressed him further, saying that his administration had *„the best environmental numbers ever.”* Biden dubbed the Inflation Reduction Act *„the most significant climate change legislation in US history,”* but he did not elaborate on his remarks about rejoining the Paris Agreement or enacting the law. The candidates’ narratives, which were taken from the whole video transcript made available by CNN Staff (2024), demonstrated their glaring contrasts in their positions on climate change. While Biden has re-engaged the US in international climate negotiations and passed historic climate legislation, Trump has consistently branded climate change a hoax.

3. Discussion of Results

The subject of climate change was so brief and superficial that climate scientists were disappointed, stating that *„more time [was spent] discussing golf than climate.”* It was a squandered chance to educate voters on the candidates’ radically divergent stances on this urgent problem that there was no meaningful discussion on the climate disaster, which is commonly seen as an existential threat.

President Joe Biden and former President Donald Trump squared up in the first presidential debate on June 27, 2024, to exchange views on environmental policy and climate change. Ecolinguistically, their replies show glaring differences in how they approached this important problem.

President Biden praised the achievements of his administration, citing the enactment of the 2022 Inflation Reduction Act, the largest piece of climate change legislation in history, which funded \$369 billion in clean energy tax credits and financing for energy and climate initiatives. He underlined the necessity of keeping global warming below 1.5°C and the existential threat presented by climate change.

On the other hand, the former president Trump talked down the significance of taking action on climate change, asserting that his administration produced the „*best environmental numbers ever*.” But in his four years in government, he reversed more than 200 environmental policies. Trump incorrectly stated that sea levels may rise by just an inch over the next 497 years and called the Paris Agreement a „*rip-off*” for the United States.

The candidates’ rhetorical devices and word choices reveal their underlying values and worldviews. Biden seems to be taking a more knowledgeable and aggressive approach to combating climate change based on his use of scientific language and allusions to international accords. On the other hand, Trump’s contemptuous remarks and reliance on false data reveal a lack of awareness and urgency for the problem. The contenders’ divergent views on climate change policy and its possible effects on the environment and future generations were brought to light throughout the discussion. It is vital to evaluate the stances of the candidates and their possible effects on the health of the planet as voters get ready for the next election.

3.1. J. Biden

Comparing President Joe Biden’s attitude to environmental policy and climate change during his presidency to that of his predecessor, former President Donald Trump, is evident. In his administration, Biden has made solving the climate catastrophe a top priority. He restored American involvement in the Paris Climate Agreement shortly after assuming office; under Trump, the US had withdrawn (Kennedy et al., 2023). Additionally, Biden established lofty national goals, pledging to eliminate carbon pollution from the energy sector by 2035 and cut greenhouse gas emissions in the United States by 50–52% below 2005 levels by 2030 (The White House, 2023).

The Biden administration has used a multipronged approach to assist achieve these objectives. Decarbonizing the energy sector is part of this. This plan is predicated on making significant investments in clean energy technologies and infrastructure via laws such as the Bipartisan Infrastructure Law and the Inflation Reduction Act (The White House, 2021); establishing new emissions regulations for oil and gas operations and power plants to reduce carbon pollution (Lashof, 2024); and hastening the adoption of electric vehicles and other zero-emission modes of transportation (The White House, 2023). Moreover, Biden uses the

Protection of Natural Resources as one of his domain tactics. Thus, Biden upheld the preservation and safeguarding of public lands and waters that Trump had rolled back (Lashof, 2024) as well as the encouragement of global alliances such as the Forest and Climate Leaders’ Partnership to put an end to deforestation and fund climate resilience and adaptation strategies to assist localities in preparing for catastrophic weather (The White House, 2021). Moreover, he prioritized elevating climate in national security. In order to do this, Biden designated John Kerry as the special presidential envoy for climate change and placed climate change under the purview of the National Security Council, ordering intelligence services to evaluate the effects of climate change on national security (Lashof, 2024). Lastly, Biden’s administration also saw the implementation of Advancing Environmental Justice. For example, his administration has encouraged collaboration with Indigenous peoples on environmental concerns and guaranteed that forty percent of the benefits from government investments in clean energy and climate change flow to underprivileged areas (The White House, 2021; Lashof, 2024).

Joe Biden’s speech on climate change on CNN (2024) is distinguished by certain language techniques that influence opinions and conversations about environmental issues. First, highlighting the need of addressing climate change, Biden attacks the environmental record of his predecessor while highlighting his own legislative accomplishments: „*The concept that he kind of is claiming to have done something that had the purest water, the cleanest water? He had not altered the atmosphere in the slightest.*” Second, he draws attention to how his administration, in contrast to Trump’s strategy, is committed to international climate agreements: „*Out of the Paris Peace Accord – Climate Accord, I immediately joined it...*” Critically, Biden frames climate change as humanity’s top priority by connecting climate action to existential risks and global responsibility: „*Climate change is the sole existential threat to humanity. And he took no action whatsoever.*”

In addition, he describes certain laws and programs designed to combat pollution and promote environmental stewardship, such as the Climate Corps program, which he describes as „*an initiative where thousands of young people will learn how to deal with climate, just like the Peace Corps.*” Biden regularly presents his administration’s environmental initiatives as making real progress, citing audacious objectives like reducing pollution by 2035: „*By 2035, we will have cut pollution in half.*”

In his final remarks, he casts doubt on his rival's sincerity regarding environmental issues and cites his own actions as proof of his sincere desire to stop climate change: „*But the idea that he claims that he has the biggest heart up here and he's really concerned about – about pollution and about climate, I've not seen any indication of that.*” To sum up, Biden uses these rhetorical devices to promote global collaboration, counter competing narratives about environmental honesty, emphasize urgency, establish leadership in climate action, describe specific measures, and highlight success. His administration's approach to tackling environmental issues is demonstrated by these language decisions, which also impact public debate on climate change.

In stark contrast to his predecessor's condescending stance, Biden would stress immediate action on climate change in a prospective second term, highlighting its existential threat and making it the administration's top priority. He would emphasize the need for international leadership and collaboration in tackling environmental issues, and he would restate US support to international climate accords such as the Paris Accord. In addition to setting bold goals like halving emissions by 2035, Biden's plan would contain specific policy recommendations like the Climate Corps initiative, which would include young people in climate solutions.

Biden will openly refute any criticism of his environmental record by highlighting the observable advancements made during his administration and emphasizing the commitment of his staff to environmental stewardship. In summary, his proposal will expedite climate action by means of increased urgency, international cooperation, targeted legislation, observable results, and aggressive challenges to competing environmental narratives.

3.2. D. J. Trump

Donald Trump has often adopted a cynical and confrontational posture toward environmental preservation and climate change during his administration. The search results indicate that Trump constantly denied the existence of climate change, calling it a „*hoax*” (Sarnoff, 2024) and attempting to reverse more than a hundred environmental regulations and policies put in place by the previous Obama administration.

Trump declared that the Paris Climate Accord was a „*rip-off*” for the United States and formally withdrew the country from the global pact to slow down climate change (Dabbs & Bravender, 2024). Falsely asserting that wind turbines „*kill*” whales, he also pledged, if re-elected, to stop offshore wind energy projects „*on day one*” (Sarnoff, 2024).

According to reports, Trump asked oil executives to raise \$1 billion for his campaign in exchange for „*scrapping*” Biden's policies on wind energy and electric vehicles. These search results show that Trump's policies were greatly influenced by his close ties to leaders in the fossil fuel industry (Sarnoff, 2024). Speaking points for the debate were also supplied by Andrew Wheeler, the former head of the EPA under Trump, who pointed out that carbon emissions had decreased while he was in office and blamed Biden for energy price increases and his decision to enter the Paris Accord (Budryk, 2024).

All things considered, the search results depict a Trump administration determined to put the interests of fossil fuel companies first and to weaken environmental laws, even at the cost of tackling the threat posed by climate change. According to one study, a second Trump term may result in an additional 4 billion metric tons of greenhouse gas emissions in the United States by 2030, making this strategy a serious danger to the country's ability to reach its emissions reduction objectives under the Paris Agreement (Harvey, 2024; Winters, 2024).

Donald Trump uses certain language techniques in his CNN (2024) speech about climate change to influence people's opinions and conversations about environmental issues. His answers demonstrate a unique ecolinguistic methodology: First, Trump diverts attention from the gravity of the environmental crisis by focusing on other issues like immigration and law enforcement: „*Well, let me just go back to what he said about the police, how close the police are to him.* Nearly all state and national police groups are endorsing Donald J. Trump.”

Second, he touts the environmental accomplishments made possible by his leadership, portraying himself as a guardian of pure air and water: „*Therefore, we achieved what I wanted—completely pure air and absolutely flawless water. We had water. We had our best-ever numbers.*” International environmental agreements, such as the Paris Accord, are criticized by Trump, who claims that they are economically detrimental to the US: „*The Paris Accord was going to cost us a trillion dollars, and China, Russia, and India*

nothing.” It was a „betrayal of American interests.”

Additionally, he suggests that growing migration limits national resources by connecting immigration difficulties to environmental concerns: *”But why do you see these millions of people flooding into our country and they’re going to steal the jobs? It has already started. You haven’t yet seen anything, either. It’s a catastrophe”*. Throughout his administration, Trump has made a point of emphasizing what he believes to be record-breaking environmental successes. *”And yet, during my four years, I had the best environmental numbers ever.”* Finally, he downplays the significance of tackling environmental challenges by characterizing environmental laws as onerous and unjust, especially when applied to foreign situations: *”The Paris Accord was a financial burden for us.”* No one else was contributing to it. It was a complete failure.”

In order to influence public opinion on climate change, Trump’s narrative uses rhetorical strategies. These strategies include downplaying the urgency of the issue, claiming success, criticizing international agreements, making connections between immigration and environmental issues, and undermining environmental concerns with the use of economic arguments. His environmental policies are defined by these language choices, which also have an impact on how the public views climate change and how policies are discussed. In order to further his political objectives, the rhetorical strategies seek to minimize the severity of climate change, make shaky claims about environmental accomplishments, and erode international collaboration on environmental concerns.

Trump would probably implement an extreme anti-environment agenda if re-elected, severely undermining both US climate policy and international climate cooperation. All energy and climate rules from the Biden administration would be quickly overturned by his administration, including those that addressed greenhouse gas emissions from power plants and automobiles. Trump’s moves would also include the symbolic withdrawal of the US from the Paris Climate deal and the repeal of the EPA’s imposed pollution restrictions. The purpose of this step is to impede progress by submitting the deal to the Senate for likely rejection.

Federal initiatives to combat climate change would be discontinued, along with billions of dollars in tax breaks for renewable energy sources and clean energy subsidies. Trump will also emphasize the production of fossil fuels by increasing drilling activities, particularly in delicate regions like the Arctic, and resuming projects that have been put on hold, including the construction of new gas export terminals. In addition, his administration would contest the conclusions of government climate experts, which may change reports and increase public mistrust in climate research. In the end, a second Trump administration would undo almost all that Biden accomplished, putting fossil fuel interests ahead of environmental conservation and opposing the international agreement on the need for immediate climate action.

Conclusion

The U.S. presidential election of 2024 has become a crucial occasion in the ongoing battle against climate change, as the candidates’ stances on this pressing matter influence both their policy platforms and public opinion. Former President Donald Trump and President Joe Biden squared up in a discussion on June 27, 2024, giving both men a chance to discuss their positions on climate change and suggested solutions to this urgent issue.

A close examination of the discussion shows glaring differences in the amount of time each candidate spent on climate change and the rhetorical devices they used. The record-breaking temperatures and natural catastrophes in 2023 demonstrated the gravity of the climate situation, but the candidates’ answers varied greatly. Trump’s speech primarily turned the conversation away from the need to address environmental issues and toward immigration and law enforcement, downplaying the importance of taking action on climate change. Biden, on the other hand, highlighted his administration’s policy initiatives meant to promote clean energy solutions and reduce pollution, positioning climate change as an existential threat.

The contenders’ language strategies highlight how important language is in influencing the public conversation about climate change. In sharp contrast to Biden’s focus on the existential threat presented by climate change and the necessity for immediate action, Trump’s rhetoric diminished the gravity of environmental challenges. The two candidates’ differing views on environmental stewardship and policy goals will have a big impact on how the US approaches climate change going forward.

Voters need to carefully evaluate the candidates’ opinions on climate change and their dedication to tackling this important issue as the 2024 presidential election draws near.

The election's result will have a significant impact on the planet's future and the welfare of future generations. Voters must be well-informed and base their choices on the candidates' platforms, policies, and readiness to take decisive action to lessen the consequences of climate change.

To sum up, the 2024 U.S. presidential election will be a critical turning point in the effort to combat climate change. The glaring differences between the policies and language of Trump and Biden highlight how critical it is to choose leaders who value environmental stewardship and are dedicated to acting decisively to confront the climate catastrophe. It is our duty as voters to make wise decisions that will impact the planet's destiny and guarantee a successful and sustainable future for everybody.

Appendix 1: Responses to CNN Question on Climate Crisis During Presidential Debate

CNN: Thank you. Another persistent challenge is the climate crisis. 2023 was the hottest year in recorded history, and communities across the country are confronting the devastating effects of extreme heat, intensifying wildfires, stronger hurricanes, and rising sea levels. Former President Trump, you’ve vowed to end your opponent’s climate initiatives. But, will you take any action as President to slow the climate crisis?

Speaker		Answers
D. J. Trump	1	Well, let me just go back to what he said about the police, how close the police are to him. Almost every police group in the nation from every state is supporting Donald J. Trump, almost every police group. And what he has done to the black population is horrible, including the fact that for 10 years he called them super predators. We can't, in the 1990s (ph), we can't forget that. Super predators was his name. And he called it to them for 10, and they've taken great offense at it, and now they see it happening. But, when they see what I did for criminal justice reform and for the historically black colleges and universities, where I funded them and got them all funded, and the opportunity zones with Tim. As you know, Tim Scott was - incredible, he did a great job, a great Senator from South Carolina. He came to me with the idea and it was a great idea. It's one of the most successful economic development acts ever in the country, opportunity zones. And the biggest beneficiary are blacks. And that's why we have the best numbers with them in maybe ever, they're saying ever, I read this morning, wherever, the best numbers, he has lost much of the black population because he has done a horrible job for black people. He has also done a horrible job for Hispanics. But, why do you see these millions of people pouring into our country and they're going to take the jobs? And it's already started. And you haven't seen anything yet. It's a disaster.
	2	So, I want absolutely immaculate clean water and I want absolutely clean air, and we had it. We had H2O. We had the best numbers ever. And we did – we were using all forms of energy, all forms, everything. And yet, during my four years, I had the best environmental numbers ever. And my top environmental people gave me that statistic just before I walked on the stage, actually.
	3	The Paris Accord was going to cost us a trillion dollars, and China nothing, and Russia nothing, and India nothing. It was a ripoff of the United States. And I ended it because I didn't want to waste that money because they treat us horribly. We were the only ones – it was costing us money. Nobody else was paying into it. And it was a disaster. But, everything that he said just now, I'll give you an example. I heard him say before insulin, I'm the one that got the insulin down for the seniors. I took care of the seniors. What he is doing is destroying all of our medical programs because the migrants coming in. They want everybody. And look, I have the biggest heart on the stage. I guarantee you that. And I want to take care of people. But, we're destroying our country. They're taking over our schools, our hospitals, and they're going to be taking over Social Security. He is destroying Social Security, Medicare and Medicaid.
J. Biden	1	I don't know where the hell he has been. The idea that, Dana, he said is true. I've passed the most extensive, it was the most extensive climate change legislation in history, in history. We find ourselves – and by the way, black colleges, I came up with \$50 billion for HBCUs, historic black universities and colleges, because they don't have the kind of contributors that they have to build these laboratories and the like. Any black student is capable in college in doing what any white student can do. They just have the money. But now, they'll be able to get those jobs in high tech. We're in a situation where the idea that he kind of is claiming to have done something that had the cleanest water, the cleanest water? He had not done a damn thing with the environment. He – out of the Paris Peace Accord – Climate Accord, I immediately joined it, because if we reach for 1.5 degrees Celsius at any one point, well, there is no way back. The only existential threat to humanity is climate change. And he didn't do a damn thing about it. He wants to undo all that I've done.
	2	Where does that come from? The idea is that we, in fact – we were the only ones of consequence or not who are not members of the Paris Accord. How can we do anything when (ph) we're not able to – the United States can't get it's pollution under control? One of the largest polluters in the world, number one. We're making significant progress. By 2035, we will have cut pollution in half. We have – we have made significant progress. And we're continuing to make progress. We set up a Climate Corps for thousands of young people will learn how to deal with climate, just like the Peace Corps. And we're going to – we're moving in directions that are going to significantly change the elements of the cause of pollution. But the idea that he claims that he has the biggest heart up here and he's really concerned about – about pollution and about climate, I've not seen any indication of that. And, by the way, with regard to prescription drugs, one company agreed that they would reduce the price to \$35, which I was calling for – one, voluntarily. I made sure every company in the world, every pharmaceutical company, cannot have to pay.

References:

- ABC News (2000, October 26). *Gore Knocks Bush on Environment*. Retrieved from: <https://abcnews.go.com/Politics/story?id=122640&page=1>
- Broder, J. M. (2008, Nover 18). Obama Affirms Climate Change Goals. Retrieved from: <https://www.nytimes.com/2008/11/19/us/politics/19climate.html>
- Budryk, Z. (2024, June 27). *Trump posts climate talking points online before debate with Biden*. Retrieved from: <https://thehill.com/policy/energy-environment/4743954-trump-biden-cnn-debate-climate-change/>
- Couto, H. H. (2014). Ecological approaches in linguistics: A historical overview. *Language Sciences*, 41, 122-128. DOI : <https://doi.org/10.1016/j.langsci.2013.08.001>.
- CNN staff (2014, June 28). *READ: Biden-Trump debate transcript*. Retrieved from: <https://edition.cnn.com/2024/06/27/politics/read-biden-trump-debate-rush-transcript/index.html>
- CNN. (2024, June 28). *CNN Presidential Debate: President Joe Biden and former President Donald Trump*. Retrieved from: <https://www.youtube.com/watch?v=-v-8wJkmwBY>
- Dabbs, B., & Bravender, R. (2024, June 28). *Trump, Biden get heated in climate fight*. Retrieved from: <https://www.eenews.net/articles/trump-biden-get-heated-in-climate-fight/>
- Los Angeles Times (2021, Nov. 1). *Letters to the Editor: Imagine Al Gore won in 2000. Where would we be on climate change?* Retrieved from: <https://www.latimes.com/opinion/story/2021-11-01/imagine-al-gore-won-in-2000-climate-change>
- Eilperin, J. (2016, August 16). *Obama will have pushed through one of the most ambitious environmental agendas in U.S. history. Is it helping?* Retrieved from <https://www.washingtonpost.com/graphics/national/obama-legacy/environmental-climate-change-policies>
- Fill, A. (1998). Ecolinguistics: State of the art 1998. *AAA: Arbeiten aus Anglistik und Amerikanistik*, 3-16.
- Gross, S. (2019, September 13). *Campaign 2020: What candidates are saying on climate change*. Retrieved from: <https://www.brookings.edu/articles/campaign-2020-what-candidates-are-saying-on-climate-change/>
- Halliday, M. A. K. (2001). New ways of meaning: The challenge to applied linguistics. In: Fill, A., & Mühlhäusler, P. (eds.), *The Ecolinguistics Reader: Language, Ecology and Environment*. London: Continuum, pp. 175–202 (Reprint of Halliday, 1990)
- Harvey, F. (2024, March 31). *Election of Donald Trump ,could put world’s climate goals at risk?*. Retrieved from: <https://www.theguardian.com/environment/2024/mar/31/election-donald-trump-world-climate-goals-at-risk-un-chief>
- Haugen, E. (1972). The ecology of language. In: D. Anwar (ed.), *The Ecology of Language: Essays by Einar Haugen* (pp: 325–339). Stanford: Stanford University Press.
- Kennedy, B., Funk, C., & Tyson, E. (2023, June 28). *How Americans see Biden’s climate policies*. Retrieved from: <https://www.pewresearch.org/science/2023/06/28/2-how-americans-see-bidens-climate-policies/>
- Kurtzleben, D., Schapitl, L., & Hurt, A. (2019, September 11). *Climate Issues: Where 2020 Democrats Stand on The Green New Deal and More*. Retrieved from: <https://www.npr.org/2019/09/11/758173003/climate-issues-where-2020-democrats-stand-on-the-green-new-deal-and-more>
- Lashof, D. (2024, January 29). *Tracking Progress: Climate Action Under the Biden Administration*. Retrieved from: <https://www.wri.org/insights/biden-administration-tracking-climate-action-progress>
- Mastroianni, B. (2016, October 20). *Where Trump and Clinton stand on climate change*. Retrieved from: <https://www.cbsnews.com/news/2016-election-donald-trump-hillary-clinton-climate-change/>
- Mliless, M., & Larouz, M. (2022). Reporting International Conflicts through the Environmental Discourse: The Moroccan Sahara Conflict as a Case Study. In M. Behnassi et al. (Eds), *The Climate-Conflict-Displacement Nexus from a Human Security Perspective* (pp: 373- 404). SPRINGER. DOI: 10.1007/978-3-030-94144-4_16
- Mueller, C. (2024, January 18). *Video of Hillary Clinton blaming climate change for election loss is altered - Fact checks*. Retrieved from: <https://www.usatoday.com/story/news/factcheck/2024/01/18/false-claim-clinton-blamed-2016-loss-on-climate-change-fact-check/72258510007/>
- Mühlhäusler, P. (2000a). Humboldt, Whorf and the roots of ecolinguistics. In: M. Pütz & M. Verspoor

- (eds.), *Explorations in Linguistic Relativity*. Amsterdam: John Benjamins, pp. 89–99.
- Mühlhäusler, P. (2000b). Language planning and language ecology. *Current Issues in Language Planning*, 1 (3), 306-367.
 - Mühlhäusler, P. (2002). Ecology of languages. In: R.B. Kaplan (ed.), *The Oxford Handbook of Applied Linguistics*, (pp. 374–387). Oxford: Oxford University Press.
 - Mühlhäusler, P. (2003). *Language of Environment – Environment of Language: A Course in Ecolinguistics*. London: Battlebridge.
 - Mühlhäusler, P., & Fill, A. (2001). *The Ecolinguistics Reader: Language, Ecology and Environment*. London and New York: Continuum.
 - Mühlhäusler, P., & Peace, A. (2006). Environmental discourses. *Annual Review of Anthropology*, 35(1), 457-479. DOI: 10.1146/annurev.anthro.35.081705.123203.
 - Nash, J. (2011). Norfolk Island, South Pacific: An empirical ecolinguistic case study. *Journal of the Australasian Universities Language and Literature Association*, 2011(116), 83-97. DOI: 10.1179/000127911804775233.
 - Nash, J. (2015). Placenames and ecolinguistics: Some considerations for toponymists. *AAA: Arbeiten aus Anglistik und Amerikanistik*, 40(1-2), 99-103
 - Nash, J. (2016). Toponymy, drawing, and representing place: A comment on James Cantrill's „On Seeing „Places””. *Environmental Communication*, 10(5), 671-676. DOI: 10.1080/17524032.2016.1183504.
 - Nash, J., & Mühlhäusler, P. (2014). Linking language and the environment: The case of Norfolk and Norfolk Island. *Language Sciences*, 41(Part A), 26-33. DOI: <https://doi.org/10.1016/j.langsci.2013.08.004>.
 - Nettle, D. (1996). Language diversity in West Africa: An ecological approach. *Journal of Anthropological Archaeology*, 15(4), 403-438.
 - Sanina, K. N., Indra, P. (2023). *An ecolinguistic analysis of climate change news in Indonesia: The case of Mongabay*, E3S Web of Conferences. DOI: 10.1051/e3sconf/202342602119, 426
 - Sarnoff, L. (2024, June 27). *Biden vs. Trump on climate: Will environmental policy be addressed in debate?* Retrieved from: <https://abcnews.go.com/Politics/biden-trump-climate-environmental-policy-addressed-debate/story?id=111416347>
 - Stibbe, A. (2015). *Ecolinguistics: Language, Ecology and the Stories We Live By*. London and New York: Routledge.
 - The White House (2023, April 20). *Fact Sheet: President Biden to Catalyze Global Climate Action through the Major Economies Forum on Energy and Climate*. Retrieved from: <https://www.whitehouse.gov/briefing-room/statements-releases/2023/04/20/fact-sheet-president-biden-to-catalyze-global-climate-action-through-the-major-economies-forum-on-energy-and-climate/>
 - The White House. (2021, January 27). *President Biden's Historic Climate Agenda*. Retrieved from: <https://www.whitehouse.gov/climate>
 - Winters, J. (2024, June 28). *Presidential Debate Contrasts Biden's Energy Policy with Trump's Climate Denial*. Retrieved from: <https://www.scientificamerican.com/article/presidential-debates-climate-change-question-contrasts-biden-record-with/>
 - Zhou, W. (2021). Ecolinguistics: A half-century overview. *Journal of World Languages*, 7, 461-486. DOI: <https://doi.org/10.1515/jwl-2021-0022>

6. BURMA



Ideology and Geopolitics of the U Nu During the Cold War in Burma

John Smith Thang (South Korea)

Introduction

This paper will discuss the ideology and geopolitics of a Burmese leader, U Nu, his role in the beginning of the country's independence and during the Cold War. Indeed, U Nu was the first prime minister after independence in 1948. It was the most important time for the foundation of nation-building in Burma.

At the time, the Burmese majority of Buddhists from the central part of the country were strongly influenced by a left-wing ideology. U Nu is one of those left-wing group leaders, basically socialism rather than communism. Suddenly, in 1949, neighbouring China was under communist control. Chinese communist power was implicated in Burma too. In fact, the Chinese Communist Party was willingly engaged with a rebel Burmese communist party. But the U-Nu government was strongly against the Burmese communist party as a rebellion. Because of that, the government-to-government relationship between Burma and China was never on a political party line.

On the other hand, right-wing politics was more influential in Burma during a British colony. The right-wing groups were basically in line with the British and alliance ideologies of the liberal democratic system. After the British left Burma, the survival of the right-wing group was critical as a minority group. Gradually, the right-wing group in Burma weakened post-independence. Only a handful of ethnic Christian states remained as a traditional right-wing group there.

In this atmosphere, the U Nu leadership was critical to paving the country's direction in the Cold War period. He could have made the country into the right-wing political system of a liberal democracy, but U Nu failed. We will see the ideology and geopolitics of U Nu and how he has complicated them in relation to international society. Burma, with its own struggling political ideology, is trying to build a nation.



Source: <https://www.countryreports.org/country/>

U Nu's Personality

U Nu became a charismatic leader, due to his association with Aung San during the student movement and independence struggles. A different character from Aung San, U Nu was rather a weak political leader. U Nu was just a substitute person after the sudden assassination of Aung San.

Thomson and Than described U Nu as a man of ideals and lacking in political ambition. His leadership style is conciliatory as a democratic leader (Hermann 1980, pp. 8, 22). U Nu was without military experience in the midst of wars. And the human resources were not able to be used wisely for the country's development under his leadership.

According to Richard Butwell, U Nu was a party to every decision, irrespective of the number of other people involved. For example, in chairing the E.C., he maneuvered the party as he did the Cabinet—not quite in a rubber stamp sense but not too far from it (Lov'ell 1970, p. 213).

Moreover, U Nu was less patient in administration and self-controllable. And there were few or no mediating structures in the middle ground between the communal groups and state structures (Than 2007, p. 313). After independence, Burma was without a strong, wise leader who had skilfully negotiated the terms of independence with Britain and forged agreements with sceptical minority ethnic groups (Clapp 2014, p. 8). U Nu's characteristic was vague political leadership.

In fact, U Nu was a deeply religious Buddhist. His expression is more like that of a religious leader. The Swiss theologian Emil Brunner has called U Nu the unique combination of statesman and Buddhist saint to which the Burmese have added "astute politician" (Thomson 1957, p. 265). He was perhaps convinced that only words were rooted in Buddhism.

Left-wing Government

Ideologically, U Nu was a left-winger, and he was more interested in socialism. U Nu declared: "It [the Constitution] will be leftist. And a Leftist country". And President Sao Shwe Thaik affirmed the commitment to state socialism (Than 2007, p. 34).

Indeed, a Leftist Unity Council (LUC) was formed on July 16, 1948. Army Major Ne Win held a leading position in the Council (Win 2008, p. 251). There were already differences of interest, even among left-wing groups in Burma. U Nu had badly faced off with a communist group among left-wing politicians. The communists were the first challenger group to U Nu's government too.

In the mid-1950s, elites among U Nu's government were crack (Than 2007, p. 309). Actually, among socialist leftists, the ruling party, the AFPFL, was split. It was more about the politics of personalities and positions (Lucian, p. 115). Also, there was increasing division between socialist and communist groups among the left-wing. The split in the AFPFL was announced openly on April 28, 1958 (Lucian, p. 116). To ensure fair leadership in the current government, U Nu announced that he will not join leftist political parties as a neutral person.

In any case, the U Nu government was a successor of the British colonial government, and the British had a role in Burma through agreements. the Freeman-Let Ya Annex to the Nu-Attlee Agreement of 1947, which set up a British military mission in Burma and gave the United Kingdom the exclusive right to equip the Burmese armed forces (Thomson 1957, p. 277). But the Burmese left-wing government bluntly ignored those agreements later on. Burmese politicians have been seeded with deception and dishonesty in domestic politics since then. And Burmese politicians were kept blaming the British for their past colonial deeds in Burma. Such things Burmese left-wing politicians created distrust among the British and allies.

Meanwhile, the left-wing group sprouts military dictatorship, especially from a socialist background. Then the Nu government started removing military personnel from right-wing backgrounds, such as General Smith Dun. That was the worst thing in Burmese modern political history. Successors of the military government in Burma were basically from the left-wing group or indirectly left-wing-influenced persons to date. The vulnerability of immediate independent Burma was aggressively occupied by left-wing political leaders and military officers (Win 2008, p. 251).

The left-wing government in Burma exercised awkward political leadership in the country and in regional geopolitics. Later on, Burma was unmatched by any international political system. And Burma became a close-door system toward international society.

Even compared to North Korea and Vietnam, they are at least intact with the communist system around the world as a left-wing political system. But Burma's politics weren't intact with any side of the international political system. And nothing good was brought to anyone.

Civil War Immediately after Independence

Starting by, the conflict was between the socialist (PVO) and the Communist groups. There was the first civil war in Burma between the left-wing ideologies of the socialist and communist groups. On March 1948, two months after Myanmar's independence, the Communist Party of Burma (CPB) rebelled against U Nu's government (Win 2008, p. 212). In the same month, the Communist groups attacked U Nu's government (Wichmann, p. 325). The first civil war was within left-wing parties.

Generally, all left-wing groups in Burma were opposed to the western bloc, in line with the Cold War divisions. Either group of socialists or communists were interested only in securing state power, which was not necessary to build a better nation. Otherwise, they could have considered the regional ideology and geopolitics for the country's benefit and would have tried to match Burma's domestic politics.

In the case of Aung San, he had the capacity to bring all left-wing parties together. And he also made important requirement agreements with ethnic groups. U Nu could not match Aung San's strong leadership. Inept decisions taken by the U Nu government to restrict ethnic autonomy intensified grievances, and soon most of the ethnic areas had joined in armed rebellion (Clapp 2014, p. 9).

Traditionally, ethnic Christian states have a right-wing liberal ideology. The U Nu government put the right-wing liberal ideology group out of the game in Burmese politics during the Cold War period. Of course, the right-wing group, the Karen Levy forces, joined the multicoloured insurrections against the government in January 1949 (Liang 1990, p. 170).

And tensions with ethnic groups worsened after U Nu's introduced Buddhism as a state religion, which led to the birth of the Kachin Independence Organization against the central government. If he likes democracy, U Nu should work well with ethnic groups, but he didn't either. Ghoshal pointed out that Burma was the result of a long history of failed state building and a lack of a long-term vision in terms of the nature of the future state.

Burmese politicians couldn't have properly any political alliance with international society, neither democracy nor communist alliance. Burma was struggling partly with its own initiated problem with multiple rebels.

Democracy under U Nu

The positive thing was that U Nu believed in a democracy. U Nu strongly accepts a democratic system. Democracy is "man's inherent right," Nu declared in 1959 (Butwell, p. 8). And U Nu declared that a democracy was something they liked and freely chose in preference to all other systems (Badgley 1971, p. 152).

In the regional Asian Socialist Conference of January–February 1953, even they condemned and rejected communism (Trager 1956, p. 94). They still preferred a democratic system. Never the less, U Nu's democracy was only at the voting election level. And his democracy had a left-wing-only, influential background; it had not improved to a liberal democracy.

In the election in Burma, the Burmese people voted from 'their hearts and not from brains'. They looked short-term only and rarely long-term, which continues to affect Burmese politics (Win 2008, p. 120). Robert H. Taylor also pointed out the 1960 election, which he asserts was based on a charismatic political elite rather than party policies. In order to win the 1960 elections, U Nu's government made Buddhism the country's official religion (Lucian, p. 115). This is betrayal to ethnic Chin and Kachin states by legitimization of the state religion as Buddhism (Butwell, p. 6). That was a big win for U Nu in the only voting-focused democracy.

Namely, the Nu government was a democracy. But the reality was "one-party rule and authoritarian practices" (Lucian, p. 108). U Nu didn't follow many things in democratic institutions. He was easily misleading in terms of his personal interests. He didn't clearly draw the line between the personal arena and the country's policy arena. He wasn't aware and forgot that his country's democracy was not yet mature and far from liberal democracy. His heart was easily prone to power abuse (Butwell, p. 8).

And U Nu lacked the leadership to implement and enforce a democratic system. In fact, the weakness was not in the machinery of democracy; it was in leadership, which felt itself powerless to act (Lucian, p. 250). In the experiment of democracy in Burma, U Nu failed to build a nation. And followed by the country's economic failure.

As Frank N. Trager argued, the charismatic leadership of U Nu is not necessary good for Burmese politics. The Burmese way, or self-help, was unsuccessful in Burmese politics. And there were no practical steps on how to process it.

There are several reasons for the breakdown of democracy in Burma. It was a struggle for power and selfish politicians, a lack of firm and viable political and economic goals, not so strong political leadership, the near absence of articulate public opinion, and so on (Reddi 1969, p. 283). And U Nu didn't have a good think tank group around him.

Burmese politics is usually based on charismatic leadership and individual loyalty to one person. Surely, democracy consolidation failed in Burma. Burma didn't have link or tie with international democracy countries. A strong network among democratic countries is necessary for strengthening and developing democratic institutions, especially in the risky country of Burma.

Therefore, the political generation of the 1920s was not willing to request full independence for Burma and was satisfied with participation in the legislative administration (Win 2008, p. xv). They felt Burma should learn more democracy from the British and adapt to international society.

Military Interference

At the beginning, in 1948, Burma still had professional army officers inherited from the British. And the military was led by people with a right-wing liberal ideological background, such as General Smith Dun. But many of the new soldiers were from left-wing ideological groups, and they were unmatched with the professional army. Those left-wing groups led by General Ne Win threw those professional officers of the right-wing liberal group out, and later they completely controlled the military and destroyed the country with a dictatorship system.

Although the pro-left-wing army was initiated by the U Nu government itself, the military elite group did not like U Nu from the time he replaced the position of U Aung San. And U Nu could not make any replacements for the army chief during his leadership tenure. The other way around, the military didn't want that the prime minister, U Nu, kept changing the positions of the army officers. In fact, it was the prime minister's responsibility to change them according to the law. U Nu didn't follow the Constitution strictly in order to control the military because the chief of the army, Ne Win, is his friend.

Brigadier Maung Maung, explaining the Army's deep involvement in the politics and administration of the country from the very early years after independence. The Burmese army was also connected with Burmese nationalism and socialism (Win 2008, p. 24).

From the early 1950s, the army was already stepping into a huge institutional vacuum, left behind by the collapse of old royal structures, incomplete or ineffective colonial state building, years of war, and then a sudden colonial withdrawal (Ghoshal 2008, p. 120). In the 1950s, cabinet members were almost all civilians, but important aides were often military men (Lov'ell 1970, p. 210).

In the weakness of the U Nu leadership, the military was not afraid to interfere in government administration. Even the military attempted a coup in 1948; actually, the military did so in 1958. Brigadier Maung Maung was one of the chief figures in the September 1958 coup d'état (Butwell, p. 4). This coup was also indirectly allowed by U Nu himself.

In this political environment, it was a very vulnerable situation for the country. Since Burma stopped military cooperation with the British, in the absence of a British alliance, Burmese politics were easily interfered with by a military coup. Eventually, it was a permanent coup in 1962, during U Nu's last government.

U Nu's Foreign Policy

U Nu actively advocated non-aligned movements as his main foreign policy. The U Nu government was so-called positive neutralism and balancing. In fact, neutral foreign policy was just done based on partly U Nu's own personality style without any significant benefit for the country's development or being really helpful for the nation-building.

Of course, political independence was the goal of the Aung San revolution (Taylor 2015, p. 506). Meanwhile, Aung San engaged in alliances and fulfilled important agreements with ethnic groups. According to U Nu, there are critical challenges in foreign policy. First, China interfered by supporting the Burmese Communist Party through financial and psychological means (Liang 1990, p. 75, 79). And the Chinese invasions of the 1950s (Ghoshal 2008, p. 119). So U Nu had visited China six times between 1954 and 1960 (Liang 1990, p. 221).

Among the left-wing groups, socialists and communists were also split on the foreign policy related to supporting the Korean War. The Thakin Lwin faction was pro-North Korean (Trager 1956, p. 92). Here, Burmese foreign policy was based on leadership utopianism without any development for the country.

Again, U Nu didn't work well with foreign policy in other democratic countries. In late February 1949, when the Commonwealth representatives met in New Delhi, U Nu refused the Commonwealth mediation for the Burma crisis (Liang 1990, p. 170). This was U Nu's way of geopolitics, based on left-wing ideology, without any cooperation with international society and without benefiting the country.

In practice, U Nu was looking for military and financial assistance from the alliance, Great Britain, and the United States to bolster national security, consolidate political unity, and promote economic rehabilitation. A limbo U Nu's foreign policy toward the Commonwealth countries, but their financial and arms assistance kept the U Nu government in power in the 1950s (Liang 1990, p. 128). In reality, whenever the Nu government needed emergency help, he did seek assistance from right-wing countries, such as liberal democratic countries.

Paradoxically, U Nu's government was daring to use Commonwealth countries' financial and military assistance to suppress those professional right-wing soldiers. So the Commonwealth countries' financial and military assistance went to benefit only left-wing soldiers. Such behaviour by U Nu failed to gain trust from Commonwealth countries and unmatched political ideologies with those of liberal democratic countries.

As a democratic country, at least Burma should be able to join hands with fellow democratic countries in the region. However, Burma was not and even refused membership in the Commonwealth countries. So it was expected that the future of Burmese nation-building would become uncertain.

As a result of complicated Burmese foreign policy, a neighbouring democratic India has so-called Hindu right-wing politics; they could never reach out a helping hand toward the democratic Burmese right-wing liberal group. So Burma's foreign policy was unsuccessful in cooperation with a democratic India and regional countries. Unlike other example countries in the region, Malaysia, Taiwan, and South Korea could maintain alliances, and they could also continue a democracy under ideological dichotomies in the region and amid security risks.

As expected, U Nu didn't get such things as financial assistance and other development from left-wing countries. In the case of Burma, the overall Burmese population will not be able to survive under the authoritarian system of left-wing geopolitics if they fully collaborate.

Again, Burma was not a member of the commonwealth and was not able to cooperate very well with regional democratic countries. Indeed, it caused far-away Burma to become involved in liberal democratic right-wing politics in international society. In the region or international arena, Burmese political ideology was unmatched by any other country. Since state-to-state cooperation fails for democracy, it should find a way to at least increase the cooperation of democracy with non-government organizations (NGO) in international society.

Conclusion

U Nu was a political actor after Aung San's death. U Nu's role is very important in post independence nation-building. Burma's political pattern was based on charismatic leaders. So those charismatic leaders were crucial for leadership in Burmese politics. In fact, it is not easy to find charismatic leadership in Burma. And those charismatic leaders always, not necessarily, have good experience in the democratic system, in government administration skills, and in dealing with multi-ethnicity. And not always expectation; such charismatic leadership as U Nu would be successful in nation-building.

The majority of the Burmese population had low education and not enough knowledge of democracy. They are not mature enough in terms of democracy and federalism. And they just like very much only charismatic leaders. In this circumstance, the leader's role was key to nation building and approaching ideology and geopolitics for the country.

U Nu became more and more powerless near the end of his rule in the 1960s. It is expected, as he has chosen this kind of left-wing political direction. At last, U Nu lost control of the country's political system. We found that the ideology and geopolitics of U Nu were unmatched by international society. He failed to build a successful nation.

7. NIGERIA



Nigeria's Billionaire Security Agents and Threat to National Security

John UWAYA (Nigeria)

Nobody expects Nigerian security agents to be paupers as a proof they are not corrupt. Neither could anybody have imagined a serving police officer owning a N20 billion business. Hence the disclosure of tens of billion Naira investment by Mr. Aderemi Adeoye, the immediate past Commissioner of Police of Anambra State, dropped jaws, left mouths agape and tongues wagging. Much as the erstwhile public servant tried to shake off an indictment of conflict of interest, his attempt was forforn owing to fears about actual sources of his humongous wealth.

Even if we were to overlook debilitating conflict of interest, only the gullible would believe serving security agents can simultaneously run profitable businesses in the volatile Nigerian economy when even shrewd investors are divesting. However, what are the sources of capital and types of businesses fetching Nigerian security agents billions of Naira? We might not know but past indictments of security agents could supply invaluable clues.

On assumption of duty in 2021, the late Chief of Army Staff, Lt. Gen. Ibrahim Attahiru debunked a claim of \$1 billion arms procurement for the army. Earlier, in 2015, there was arraignment of defense chiefs including the Late Air Marshal Alex Badeh, retired Col. Ibrahim Dasuki, et al on allegation of misappropriation of defense funds. And ironically, Nigeria's one and ever super cop ACP Abba Kyari is our next case study on probable sources of capital and business types by Nigerian security agents.

Much as Mr. Kyari was celebrated as the nemesis of criminals, his stupendous wealth was traced to crime by the FBI and the Nigerian Drug Law Enforcement Agency (NDLEA) respectively. Those two



Source: <https://www.premiumtimesng.com/opinion/649683-lets-talk-about-national-security-by-adeyinka-famadewa.html?tztc=1>

indictments blew the lid off his extra-judicial activities and so, gave voice to numerous victims who narrated damning cases of mindless extortions mostly on trump up charges. That is largely characteristic of the average Nigerian security agent. Hence it is not surprising that the FBI indictment was stylishly ignored by Mr. Kyari's colleagues in the police while they blackmailed the NDLEA as a hypocrite waging an inter-agency war to ward off seeming work area encroachment.

However, branches of the same national security architecture should be seen as integral and not as disparte fiefdoms to be defended against perceived territorial encroachment. But strangely, that has been the case in Nigeria since 2015 when incoming presidents replace over 100 of their predecessor's security chiefs with those largely of their own ethnicity. Thus, placing the emphasis on spoils of office and not on competence and work performance. That is the avenue for corrupt enrichment fueling inter-agency rivalry and hindering synergy among Nigeria's security agencies.

Otherwise, personnel of the country's correctional service and staffers of the Economic and Financial Crimes Commission (EFCC) would not have fought publicly over custody of wealthy erstwhile Central Bank governor. Again, the EFCC would meet a stiff resistance from the police who ultimately stalled arrest of a high profile suspect - an ex-state governor. No sooner, the police themselves were at the receiving end of inter-agency rivalry - forced to appear in court without crude oil bunkering suspects whom the army was accused of dragging away from police custody. Earlier, the two security agencies faced off in Adamawa State with a casualty apiece over a right to conduct stop and search on highways.

The duo - conflict of interest and inter-agency rivalry naturally inhibits official work performance. Also, security agents reveling in billionaire pleasures can never stake their lives as sworn, in defense of their country. Besides, involvement in crime by security agents themselves is the huge motivation that is swelling the ranks of criminals.

Worse, you can neither predict nor dictate how and where billionaire security agents invest their cash. Should they choose to invest on arsenals of arms for control of swaths of the country's natural resources or overthrow a government, it could be armageddon like in Northern Sudan. By the way when would Nigeria unravel employers of illegal miners including Chinese nationals? Or are the Chinese straying innocent migrants even with no common borders (international or continental) between China and Nigeria?

Therefore, security agents could be part of the problem and not solution to insecurity in Nigeria. And talk of national security in Nigeria would remain a huge joke until restructuring to true federalism to break the bureaucracy serving as cover for large scale official crime by supposed public servants including law enforcement agents.

Biographies of the authors



PhD. Mohamed MLILESS (Morocco)

Independent Researcher in Ecolinguistics and Environmental Discourse Analysis
 Dr. Mohamed Mliless holds a Ph.D. in Applied Linguistics. His scholarly endeavors are centred on environmental discourse and ecolinguistics. His profound insights and innovative research in this field have led to the publication of several influential books, articles, and book chapters. Moreover, he has been a pivotal presence in various high-profile conferences, where he shares his expertise and collaborates with fellow researchers to advance the discourse in environmental linguistics.



Lieutenant Colonel (Ret.) PhD. Georgios KOUKAKIS (Greece)



Georgios KOUKAKIS is a graduate of the Hellenic Military Academy (2002), the Hellenic Army War College (2020) and the Hellenic Supreme Joint War College (2023), with a strong professional and academic background in the field of security & defence, international relations, and adult training. He holds a Master of Arts in International Relations in „Governance, Development and Security in the Mediterranean” from the Department of Mediterranean Studies of the University of the Aegean (Rhodes, Greece) and is a Senior Researcher in the „Center for International Strategic Analyses” (KEDISA), a member of the „Hellenic Institute of Strategic Studies” (HEL.I.S.S.), a Research Associate of „HERMES Institution of International Affairs, Security & Geoeconomy”, a member of „ALLILON” (the Global Network of Greeks and Friends of Greece for Solidarity in the Professional Field) and a member of the „Mercury Negotiation Academy” (MNA). He has participated as a speaker in several seminars/conferences regarding international relations in the fields of foreign policy, security and defense, while several of his articles and research papers have been published in many scientific journals, the official „Military Review” journal of the Hellenic Army General Staff, the „Foreign Affairs The Hellenic Edition” magazine, the „Policy Journal”, „HuffPost Greece”, „Geopolitics & Daily News”, „Liberal”, as well as other international relations, security and defence websites. His research interests include National Security, Grand Strategy, EU Affairs, Greek Foreign Policy, Military Diplomacy, Law of the Sea (UNCLOS), Cultural Diplomacy, and International & Regional Organizations (NATO, UN, EU, OIC, EfM, etc.). He is the co-author of the book „National Security: Myths and Reality” (in Greek) that was published in April 2023 and the Academic Head of the Educational Programme „Security Studies in the Mediterranean” of the Continuing Education-Lifelong Learning Center (CE-LLC) of the University of the Aegean. His research interests include National Security, Grand Strategy, EU Affairs, Greek Foreign Policy, Military Diplomacy, Law of the Sea (UNCLOS), Cultural Diplomacy, and International & Regional Organizations (NATO, UN, EU, OIC, EfM, etc.). He is the co-author of the book “National Security: Myths and Reality” (in Greek) that was published in April 2023.



Stella BOURBOUTELI (Greece)



She is a Turkish language trainer. She is a graduate of the Department of Mediterranean Studies, majoring in International Relations and Organizations at the Aegean University in Rhodes, Greece. She holds a Master’s degree in "Governance, Development and Security in the Mediterranean", with special emphasis on European energy security issues, from the Department of Mediterranean Studies, University of the Aegean, Rhodes, Greece. She has published a paper in the journal "Greece, Europe and the World" entitled "Climate change through the perspectives of green growth". In addition, she has also published a paper on the "International and European Affairs Group" website, odeth.eu, entitled "How hydrogen technology can influence Europe’s energy future".



PhD. Hassan TAJEDDINE (Lebanon)



He is president of Lebanese Economic Union, from 2014 until now. His research interests are: Performance Measurement and Management, Knowledge Management, Operational Research in Management, Quality Management, E-Government, Strategic Planning, Managerial Leadership and Pareto's Principle, 80-20 Rule. In Present is at Imam Ouzai University in Beirut, Lebanon.

Ph.D. in Islamic Faculty of Business Administration.



Andreea-Cristina STANCA



She has a degree in international relations and European studies at the National School of Political and Administrative Studies, Bucharest with a diploma thesis "The specificity of the Israeli army: particularities and influence in politics". She attended a Master's Program in Diplomacy and Negotiations at the National School of Political and Administrative Studies. She participated in the YOUTHPASS The Youth Creative Academy project, in Cabris, France, which aimed to identify and apply creative methods of learning and expression that contribute to the development of young people's skills in times when digitization and globalization are becoming increasingly the most present. She attended the Summer School and modular courses at the „Theodor Herzl” Center for Israeli Studies.



Amalia-Irina PUFULESCU



She is currently a Diplomat (Secretary II) at the Permanent Mission of Romania to the UN - New York, vice-president of the Budgetary-Administrative Committee of the General Assembly in the UNGA78 session and an expert in the candidacy file in the UN system.

During 2017-2020, he was a diplomat (Diplomatic Attaché) at the Consular Department - Ministry of Foreign Affairs, Diplomat (Consul) at the Romanian Embassy in London - Consular Section and Diplomat (Secretary III), at the European Union Department - Ministry of Foreign Affairs.



PhD. Fouad AKKI (Morocco)



He is an Assistant Professor of Applied Linguistics at Moulay Ismail University in Meknes, Morocco. He holds a PhD in Applied Linguistics and his research interests include language skills, curriculum development, discourse analysis, ecolinguistics, bilingualism and multilingualism. F. Akki has authored and co-authored articles on teaching speaking and writing skills, English for Specific Purposes, Ecolinguistics, and Arabic-English-Arabic Translation. He has reviewed articles for many international journals.



PhD. Eng. Constantin REBEDEA

He holds a master's degree in "Military Sciences and Information" at the National Academy of Information "Mihai Viteazul", in Bucharest, a master's degree in "Political Sciences" at the National School of Political and Administrative Studies, is a graduate of the National Defense College, the National College of Intelligence and of the European Security and Defense College. He holds the scientific title of Doctor in the field of "Management" and obtained the title of "Diplomat Engineer" at the National University of Science and Technology POLITEHNICA Bucharest, later becoming an associate teaching staff. He is an ARACIS expert, a professional verifier for occupational standards and the author of the work: "The institutional system of environmental protection" and of several scientific articles, published in magazines and in the volumes of indexed scientific events, relevant to his own professional achievements. As an honorary distinction, the President of Romania awarded him the "Order of Merit for Education at the rank of Officer".



PhD. Jean MARSIA (Belgium) Colonel (retd) Jean J. Marsia



He is President of the European Defense Society INPA (S&ED). He graduated in 1975 from the Royal Military School in Brussels, obtaining a master's degree in Social and Military Sciences. After several posts in the logistics corps of the land forces, he obtained an additional master's degree in Administrative Science. He was then selected for the School of Military Administration. He served in the General Staff of Defense in several positions related to the management of financial resources and procurement. In 1999, he became an advisor to the Minister of Defense, primarily responsible for military procurement, scientific research and education. In 2003, he was appointed director of the Royal Military School, where he served until his retirement in 2009. He then became a PhD student at the Free University of Brussels. From January 2013 to October 2014, he was Defense Adviser to the Belgian Prime Minister. In 2015, he became a Doctor of Political Science at the Free

University of Brussels and a Doctor of Social and Military Sciences at the Royal Military School. Since late 2015, he has served as founding president of the European Defense Society, an international non-profit association working to reinvigorate Europe's political union and achieve an effective European defense better suited to burdensharing and the international risk inherent in NATO. He is fluent in French, Dutch, German and English.



John Smith Thang (South Korea)



The author, John S Thang, is a Burmese Political Scientist at the Global Digest (Independent Think Tank Group). You can watch a series of his podcasts at Global Digest MEDIA – YouTube



John UWAYA (Nigeria)

Chief Security Advisor at John Uwaya & Associates

University of Lagos, Postgraduate Diploma Management, 2008 - 2009

He leads a consultancy of experienced physical and cyber security professionals to raise awareness among governments, corporate bodies and individuals about their complementary roles in private and national security.

Based in Lagos, Nigeria, his consultancy is a rare mix of subject matter experts. However, they network with their peers globally to provide their clients with threat mitigation measures that are always effective in time and space.

Specifically, it facilitates the security of assets - human and material in Nigeria and the West African corridor. This is achieved through advisory services as well

as collaboration with reputable product and service providers. He also does security training and therefore goes the extra mile for those who prefer lighting at their own pace and place. This category of knowledge seekers gets a good knowledge base from their books about the nature of security threats for increased vigilance and proactive threat mitigation.



Marian Ovidiu RAUTOIU

Global Risk Management Advisor

He is a nice din and friendly person. He has good listening and communication skills. He has a creative mind and he is always up for new challenges.

Education: "Dimitrie Cantemir" Christian University, Bucharest.



Dr.Eng. Stelian TEODORESCU

He is an aviation engineer and during his doctoral studies he was admitted to the SmartSPODAS Project - "Transnational network for the integrated management of smart doctoral and postdoctoral research in the fields of "Military Sciences", "Security and Information" and "Public Order and National Security" - Continuous training program for elite researchers - "SmartSPODAS", in this context participating in various research activities, among them being those organized by CRISMART in Sweden. During the first part of his career, he performed various executive within the Air Force Staff, and in the second part of his career, he was an executive and leadership positions within the Ministry of National Defence. He participated in various cooperation activities at the national and international level, gaining professional experience in the field of international relations and geopolitics. He carried out teaching activities in the academic environment (undergraduate and postgraduate studies).

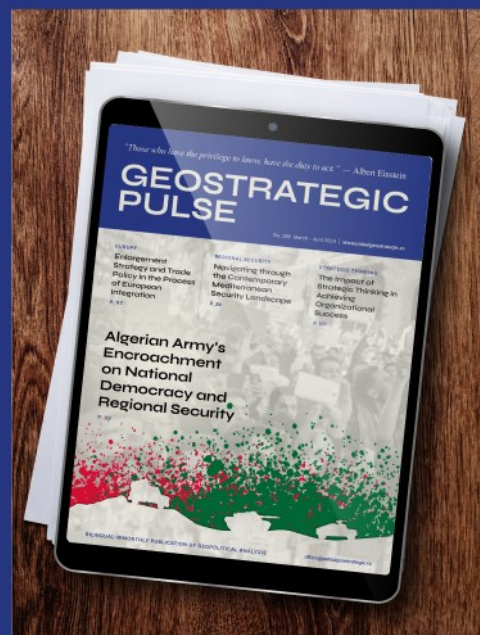




GEOSTRATEGIC PULSE

EDITORS

Pompilia VLĂDESCU
Stelian TEODORESCU



Starting from December 2010, GEOSTRATEGIC PULSE is registered in the international catalogue INDEX COPERNICUS JOURNAL MASTERS LIST. This bulletin cannot be multiplied and reproduced without consent. It is allowed to use some materials or quotations with the preservation of accuracy and the original title, as well as with the express mention of the source. The opinions and ideas expressed in the content of the articles represent the point of view of the authors.



SCAN IN ORDER TO ACCESS:

pulsulgeostrategic.ro



RIEAS Research Institute for European and American Studies



STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

