



AN ACADEMIC APPROACH OF THE MILITARY DOCTRINE TRANSFORMATION IN THE CONTEXT OF ASYMMETRICAL CONFLICTS

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Transformation of military doctrines in the context of asymmetric conflicts is an imperative to maintain the relevance and effectiveness of the military response to contemporary threats. This transformation requires a holistic approach that integrates technological innovations, international cooperation, interoperability, reflecting the dynamics and complexity of the global security environment. Military doctrine requires a foundation based on a thorough analysis of the existing threats and potential risks, provided that the asymmetric conflict imposes the need for a quick and adaptable reaction. Asymmetric conflicts differ from classic conflicts by involving a number of actors, and the integration of these actors in the planning and execution of military strategies can support post-conflict stabilization and reconstruction efforts, thus strengthening the resilience of communities and states facing asymmetric threats.

Therefore, adapting military doctrines to the specifics of asymmetric conflicts is an ongoing process, which requires a flexible approach that allows military forces to respond effectively to a wide range of threats in a constantly changing security environment.

Keywords: *military doctrine; asymmetrical conflicts; adaptability; technologies; international cooperation; security environment.*

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Introduction

In the context of asymmetric conflicts, changes in the military doctrines constitute an essential field of research in security and defence studies, because they reflect the adaptation of strategies to combat non-frontal and multidimensional challenges such as terrorism, guerrilla warfare and proxy wars. The study elucidates how states reconfigure their doctrinal principles to counter asymmetric threats, which undermine the traditional balance of military forces. In accordance with NATO AAP-6 (2008), an asymmetric threat is defined as “a threat emanating from the potential use of dissimilar means or methods to circumvent or negate an opponent’s strengths while exploiting his weakness to obtain a disproportionate result.” (Ashe, et al 2012) M. Rubin considers that “the asymmetrical threat concept describes how the weak might battle the strong, discussions diverge when discussing asymmetrical threats from states versus those posed by non-state actors” (Rubin 2007). Others think that “asymmetric threat is defined as a set of diffuse threats coming from very weak and technically poorly equipped subjects.” (Vejnović and Obrenović 2018, 267) We consider that the asymmetric threat refers to the strategic deployment of unconventional methods and means by one party to exploit the vulnerabilities and circumvent the strengths of a more powerful opponent, achieving disproportionately significant impacts. This concept encompasses the actions of both state and non-state actors who, despite being relatively weak or technically under-resourced, utilize their unique capabilities in unpredictable ways to challenge stronger entities. Thus, an asymmetric threat challenges traditional concepts of warfare by leveraging disparity as a tactical advantage to offset power imbalances.

The research problem focuses on the evolving global security landscape, characterized by the increasing prevalence of asymmetric conflicts, such as terrorism and guerrilla warfare. This shift demands a transformation in military doctrines to effectively address the unique challenges posed by these non-conventional threats. This research aims to elucidate and present more points of view on how the military doctrines adapting to meet the unique demands of asymmetric warfare, focusing on the incorporation of technological innovations, international cooperation, and strategic flexibility.

In the current study, the research hypothesis posits that military doctrines which incorporate adaptability, technological advancements, and international collaborative efforts significantly bolster the operational capabilities of military forces to effectively confront asymmetric threats. This enhancement is anticipated to lead to a substantial improvement in global security dynamics. By integrating flexible strategies, cutting-edge technology, and global cooperation into military planning and operations, these doctrines are expected to provide a more robust and responsive framework. This framework not only addresses the immediate challenges



posed by non-conventional warfare but also adapts to the unpredictable nature of future security threats, ensuring a proactive rather than reactive defence posture.

The research objectives are to conduct a comprehensive analysis on:

- diverse perspectives from various scholars and experts, identifying key areas of consensus and debate regarding the need for military doctrines to adapt in response to the challenges posed by asymmetric threats;
- critical factors driving the evolution of military strategies to effectively counter non-traditional threats;
- historical evolution and current state of military doctrines in response to asymmetric conflicts;
- how technological advancements and international cooperation are integrated into military doctrines;
- the impact of these doctrinal transformations on the effectiveness of military responses to asymmetric conflicts.

The study adopts a comprehensive qualitative research methodology, designed to provide an in-depth understanding of the adaptation of military doctrines in response to asymmetric threats. The methodology includes several distinct components, incorporating an extensive review of literature including academic journals, military records, and expert analyses. This review aims to establish a theoretical framework and historical context for the transformations in military doctrine. Certain case studies of specific adaptations in military doctrines from countries like the USA or NATO members, were chosen based on their unique approach to addressing asymmetric warfare, providing a comparative analysis that highlights different strategies and outcomes. Critical examination of several official military and governmental documents provided additional insights into the strategic intent behind doctrine modifications and the anticipated versus actual outcomes of these changes. Additionally, the previous research of vary scholars, based on interviews with military strategists and defence analysts, provide deeper insights into the practical implications and effectiveness of these transformations.

Foremost, we will define the military doctrine from several perspectives to build a solid conceptual foundation for this study. The military doctrine is defined by H. Høiback as “authoritative documents military forces use to guide their actions containing fundamental principles that require judgment in application.” (Høiback 2013, 22) Another author defined the military doctrine in a more holistic manner “Military doctrine is an important part of the building material for military strategy. It represents central beliefs or principles for how to wage war in order to achieve the desired military ends. Doctrine thus provides ways to use military means against a given type of threat or scenario. [...] Doctrine has implications for force structure, training, and equipment. The ideal military doctrine would be truly joint – i.e. integrating land, air, maritime, and special operations in an efficient and effective



way to achieve military objectives – and flexible enough to deal with any kind of foreseen and unforeseen threats, as well as a range of political objectives.” (Barfoed 2015, 1)

Researcher J.S. Sauboorah, cited by G. Sloan, defines doctrine as a conceptual and operational framework that functions as a bridge between thought and action in the military context, interpreting ideas about war and their impact on the conduct and character of conflicts, combining strategic theories and operational plans along the lines functional directories for action. “Doctrine can be conceived as a bridge between thought and action. It interprets ideas about war, and how they affect its conduct and its character, by combining strategic theories and operational plans into functional guidelines for action. To put this another way: military doctrine articulates war.” (Sloan 2012, 244)

Researcher Lindgaard emphasizes the complex and essential role of a written military doctrine in managing the delicate balance between continuity and change within military organizations. A written doctrine functions as a bridge between the military structure and the operational environment, serving to blend past experience and future requirements into a coherent strategic framework. This aspect makes the development of a doctrine a central point in the planning and execution of military operations. “To help military organizations balance continuity and change, they should lean on written military doctrine, as it functions as a bridge between the military organization and the operational environment. This makes the doctrine development a nexus for military organizations. However, developing a good doctrine is difficult. Doctrine’s conceptual lens may be oriented towards the (near) future, but it can only be practiced in the present, which is firmly rooted in the past. Therefore, doctrine is continuously trapped in a limbo of both space and time” (Lindgaard 2023, 15).

We believe that it is indispensable to evaluate the paradigm of change in military doctrines, taking into account the transition from conventional approaches, based on direct and symmetrical confrontations, to flexible and adaptive strategies, oriented towards combating unconventional and elusive adversaries. This transformation entails a detailed analysis of operational, tactical and logistical strategies adjusted to deal with the elusiveness and tactics of asymmetric adversaries. M.-V. Păunescu elucidated the role of the doctrine in maintaining military relevance and efficiency, considering a military doctrine as the main tool in change and adaptation. The author mentioned the importance of understanding and applying military doctrine in the context of modern conflicts, emphasizing that the military doctrine must be continuously adapted to the nature of conflicts, including asymmetric ones, in order to remain relevant and effective. (Păunescu 2015, 125)

A central aspect of this analysis is the assessment of how a military doctrine has undergone transformations to account for the distinct characteristics of asymmetric conflicts. The approach also includes some mechanisms by which the military



doctrines have been modified to integrate advanced technologies, information and cyber warfare, as well as to develop resources in the fight against terrorism and counterinsurgency. The academic analysis of the transformation of military doctrines in the context of asymmetric conflicts provides an integrated perspective on the dynamics of military adaptation in the face of contemporary security challenges. Through a nuanced understanding of these transformations, strategic recommendations can be made to optimize military responses and strengthen regional and global security and stability. The analysis of how military doctrines have transformed in the context of asymmetric conflicts highlights the challenges and need for continuous adaptation to new forms of conflict.

In the current context, where the asymmetric conflict is becoming more and more present, the military studies and doctrine must respond to some specific strategic and operational needs. In the academic literature, we have identified several points relevant to this analysis, underlining the importance of a dynamic and responsive approach to military doctrines, necessary to ensure the complexity of contemporary security scenarios and to effectively respond to ever-changing global threats. (Rothstein and Arquilla 2012; Arquilla and Ronfeldt 2000, 2001) The most relevant ones refer to the development and adaptation of military doctrines, NATO transformation and the response to asymmetric conflicts, the innovative nature of a military doctrine in relation to asymmetric threats, the integration of technology and cybernetics, the continuous analysis of threats and risk assessment, international collaboration and interoperability.

1. Fundamentals of Adapting Military Doctrines to Asymmetric Conflicts

A key aspect represents NATO's transformation, which reflects the adaptation to the new requirements of international security, where asymmetric conflicts, such as terrorism and proxy wars, require new forms of military action. This transformation process is cyclical and requires a new mindset and culture, with a significant impact on member states' militaries. NATO's transformation is highly relevant in the context of the adaptation of military doctrines to asymmetric conflicts, reflecting the shift from traditional, state-centric warfare to addressing non-state actors and irregular combat scenarios, which are the hallmark of asymmetric conflicts. We marked some key points emphasizing the significance of NATO's transformation referring to focus on collective defence and rapid response, integration of cyber and information warfare, interoperability and multinational cooperation, adaptation to new security challenges, enhanced intelligence and surveillance.

NATO's transformation has led to the development of initiatives such as the Very High Readiness Joint Task Force (VJTF) and the enhancement of NATO Response Force (NRF), designed to quickly and effectively counter emergent, asymmetric threats



requiring rapid mobilization and flexible strategies. This strategic shift enhances NATO's cyber defence capabilities, vital in defending against unconventional threats like cyberattacks and information warfare. The transformation includes bolstering interoperability among member states, ensuring that multinational forces can operate cohesively in complex asymmetric warfare scenarios. NATO's Strategic Concept has evolved to address a wide spectrum of threats including terrorism, cyber threats, and weapons of mass destruction, advocating for an update in national military doctrines to effectively tackle these challenges. Additionally, NATO has prioritized enhancing intelligence-sharing and surveillance technologies, critical in asymmetric conflicts for preemptive actions and maintaining situational awareness. Upgrades in satellite communication and reconnaissance support the modern military's need to adapt to the complexities of asymmetric warfare, ensuring readiness and strategic alignment with evolving global threats.

Such perspectives emphasize the need for an integrated and dynamic approach in the development and adaptation of military doctrines in order to effectively respond to the complex challenges of contemporary asymmetric conflicts. Thus, it is essential that the military doctrine is in continuous evolution, reflecting changes in the global security environment and the specific needs of each context.

In academic literature, the issue of continuous adaptation of military doctrines in the context of asymmetric conflicts is presented by many researchers as a necessity imposed by the dynamics of global threats and the evolution of modern technologies. Beyond these ideas, we mention the general categories, according to some researchers, that are used in the content of military doctrine "The most general categories in military doctrine are: (1) thing (people, equipment, organizations), (2) attribute (capabilities, functions, roles, including relational attributes of command or support), and (3) process (for example, the joint planning process)." (Morosoff, et al 2015, 6) The necessity for continuous adaptation in military doctrines is profoundly linked to the dynamic interplay between the technological evolution and the complex nature of modern asymmetric conflicts. Ensuring that military doctrines can rapidly and effectively respond to these changes is not just a strategic advantage, but a fundamental requirement for maintaining global security and operational efficacy in contemporary military engagements. This adaptation ensures that military forces remain capable of responding to evolving threats in a timely and effective manner, thereby safeguarding national and international security interests.

In some recent studies, an author has elucidated the inadequacy of traditional methods in military training and leadership, proposing a deep review of how to respond to new types of conflicts. "Asymmetric warfare, unconventional warfare, new generation warfare – all refer to a combination of methods intended to facilitate the achievement of specific goals for the country using them. In today's volatile and extremely complex security environment, it is an impossible challenge to clearly



differentiate between military power and the power generated through asymmetric measures.” (Constantinescu 2021, 37) The author emphasizes the complexity of modern war and the difficulty of distinguishing between traditional military power and the one generated by asymmetric measures, indicating a need to reevaluate response strategies to contemporary threats. In addition, there are some pertinent arguments contextualizing this issue referring to blurring of conventional and asymmetric warfare, adaptation of training programs, leadership in asymmetric warfare, integration of technology and human intelligence, ethical and legal considerations. The traditional military training and leadership methods must undergo significant transformation to align with the demands of modern warfare. This transformation is not just about tactical changes, but also about a strategic shift in how military power is conceptualized and applied in an increasingly complex global security environment.

With reference to the British military doctrine, S. Roberts emphasizes the need for the continuous adaptation of the military doctrine in the conditions of rapid changes and the increased complexity of modern conflicts. The adaptation and evolution of the military doctrine is considered essential for maintaining the effectiveness of the army in responding to various contemporary challenges. The researcher emphasizes the importance of a flexible doctrine, able to adapt to varied and unpredictable situations. In the context where most authors support that adaptation should not only be reactive, but also proactive, S. Roberts insists on the need for an anticipatory approach, with an emphasis on preparation for war as the foundation of all military operations. “...This leads to another core tenet of British military doctrine: that focusing on war is absolutely essential to approaching all military operations. ... For this reason, it is a fundamental tenet of British military doctrine that the Army should be organized, trained and equipped first and foremost for war.” (Roberts 2021, 193). Thus, a military doctrine must be flexible enough to respond to ever-changing needs and to ensure that the military remains ready and able to adapt to different conflict scenarios, regardless of their complexity or nature. At the same time, the military doctrine transformation is necessary to reflect and integrate lessons learned from past experiences and to incorporate emerging new technologies and strategies. By focusing on preparation for war, a solid foundation is created for the successful conduct of other types of military operations, such as peace support operations. Thus, the military can more easily transition from combat readiness to peacekeeping operations, reflecting the adaptability and resilience required in a dynamic security landscape.

Referring to the flexibility in the decision-making process and decentralization of decisions, some authors recognize the need for increased flexibility in military structures and decentralization of decisions to allow quick and effective responses in unpredictable situations (Roberts 2021, 195). The relationship between the need



to transform military doctrine and decision-making involves how doctrine and decision-making must evolve to effectively respond to the dynamic challenges of the contemporary combat environment. The military doctrine must be adapted to incorporate the principles of mission command, which promote initiative, innovation and surprise, and doctrine adaptation is necessary to ensure that the armed forces remain relevant and effective in an ever-changing combat environment that requires a capability quick response and adaptability. This style of decentralized command allows for quick and informed decisions that are critical to overcoming an adversary's decision cycle. (Roberts 2021, 195) We believe that the adaptation of military doctrine and decision-making processes to incorporate principles of decentralized command is very important for sustaining operational effectiveness in contemporary military contexts. This approach enhances the operational capabilities of military forces and aligns with the dynamic nature of contemporary warfare, where flexibility, rapid response, and tactical innovation are key to achieving strategic objectives.

In this context, B.R. Posen emphasizes the duality of the existence of military organizations between peace and war, indicating how this duality contributes to uncertainty and the need for a doctrine which recognizes and integrates this complexity to prepare commanders. (Posen 2016, 163) The author explains how the characteristics of a special environment such as war, and how military organizations rely on the doctrine to navigate this challenging environment, which emphasizes the importance of doctrinal adaptability for operational effectiveness and autonomy in decision-making. "Friction, fog, and fear combine to make the special environment of war. Military organizations hope that doctrine will help them navigate into and through this treacherous environment." (Posen 2016, 164) S. Roberts and B.R. Posen express the same position that transforming the military doctrine and improving decision-making are vital in the context of the complexity of field operations, arguing that the doctrine must recognize and integrate this complexity, preparing commanders to delegate and to act autonomously to maximize operational efficiency.

The historical evolution of the states differs in several aspects, including the military doctrine. In this regard, some scholars discuss the impact of military history and past experience in the development and adaptation of military doctrines, arguing for a balanced approach that combines combat experience and proactive vision of future trends and adaptation to new forms of conflict. The historical approach is also capitalized by A. Jackson, which explores the origin and evolution of military doctrine, analyzing constancy and change in the practice of war. "Ultimately, however, understanding the epistemology of the military doctrine is important for far broader reasons. Doctrine, expressive of a military's institutional belief system, is a gauge for the way militaries view their role and therefore their institution, in relation to the states and societies that sustain them. The emergence of each new school of doctrinal ontology and more recently the inclusion of anti-positivist concepts within doctrine,



indicate changes in a military's institutional understanding of its relationship with state and society." The researcher highlights the importance of understanding the historical roots of a military doctrine for the development of effective strategies (Jackson 2013). In essence, the development and adaptation of military doctrines are not just about strategic choices and how these choices reflect and respond to historical legacies, current realities and future uncertainties. This comprehensive approach ensures that military strategies are both historically informed and forward-looking, capable of responding effectively to both conventional and emerging threats.

Experienced-scholars' standpoint in the military field express a cohesion on the need to adapt military doctrines from several perspectives. Thus, T. Frunzeti emphasizes the importance of learning from past experiences and flexible adjustment to the new realities of conflicts. The researcher articulates his position around the idea that flexibility and dynamism are essential to effectively respond to evolving threats, suggesting that adaptability must be embedded in the structure military doctrine. (Frunzeti 2010, 11). Specifically, this adaptive process is crucial for addressing the challenges posed by asymmetric warfare, where traditional battle strategies might be less effective. The development of doctrines that can effectively respond to these non-traditional threats is therefore a critical focus, ensuring that military actions remain relevant and effective in the face of the unique and changing conditions of modern battlefields.

Both T. Frunzeti and H. Høiback emphasize the importance of learning from past experiences and recent conflicts to improve the content of military doctrines (Frunzeti 2010, 9), the latter reviewing the four generations of military doctrine: "first-generation doctrines, or rather, doctrine-like documents, such as the Royal Navy's Fighting Instructions and Frederick the Great's Instructions for His Generals, were made for forces where the supreme commander fought along with his men, either in front of them or close behind. In the second generation of doctrines, the supreme commanders had left the battlefield. The third-generation doctrines followed the commanders and left the battlefield as well, and tried, instead, to orchestrate a three-dimensional space and the entire range of combat capability, including physical, moral, and mental domains. The fourth generation of doctrines is in danger of leaving even the war." (Høiback 2013, p, 178-179). Therefore, this approach calls to a constant reflection on the past to better anticipate the future. The evolution from direct combat roles to strategic command also reflects the adaptation to non-traditional warfare, such as cyberattacks and information warfare, which do not necessarily require physical presence on a traditional battlefield. Modern military doctrines must continue to evolve to address these types of asymmetric threats effectively. The historical evolution of military doctrines underscores the critical importance of drawing lessons from past experiences and emphasizes the need for military strategies to be dynamic and adaptable, enabling them to



effectively respond to the continuously evolving challenges of global warfare. This historical perspective enriches the strategic planning process and ensures that military operations are both reflective of past wisdom and adaptive to future challenges. Understanding the trajectory of past military strategies allows for better predictions and preparations for how conflicts might evolve, especially in terms of technology and the geopolitical landscape. This proactive approach is vital in a world where military threats can change rapidly and unpredictably. The transition to doctrines that consider the three-dimensional space of warfare (physical, moral, and mental) illustrates the increasing complexity of military operations. In this context, the modern doctrines must integrate these various domains to effectively manage contemporary conflicts that are fought on physical battlefields and in the realms of public opinion, cyber space, and psychological warfare.

Some studies elucidate the ways in which pressures from changing security environments require a constant review and improvement of military doctrines, proposing a perspective that values strategic adaptability and organizational optimization to face emerging challenges, placing particular emphasis on the importance of a solid theoretical foundation for adaptation. These perspectives underline a common view of the need for continuous adaptation, but also introduce the idea that adaptation must be proactive and anticipatory, not just reactive. “Asymmetrical warfare often challenges traditional military doctrines by presenting unconventional threats that require flexible and adaptive responses. By incorporating Lehmann’s theory, we could argue that militaries facing asymmetrical threats must reevaluate their organizational structures, levels of command delegation, and openness to experimentation, characteristics that are determinant for success in non-traditional warfare environments.” (Lehmann 2023, 331) R.T. Lehmann challenges the notion that military effectiveness is solely determined by specific strategies or favorable military cultures. In the context of this research, this insight can be expanded to critique the traditional views on military doctrine in asymmetrical conflicts, advocating instead for a more nuanced understanding that considers organizational flexibility and adaptive capacity as key drivers of effectiveness in irregular warfare. We note that through the reasoning from which the mentioned authors started, the lessons learned and the need for a proactive reaction to future threats, the need for balance between traditional knowledge and the adoption of innovations is validated, constituting a solid foundation for the effective adaptation of military doctrines.

The spatial and temporal complexity of multiple doctrines, addressed simultaneously, was explored by Lindgaard, promoting a holistic view of military doctrine as an amalgam of guidelines and practices in a network of human and non-human actors. The researcher explores the complexity of managing multiple doctrines within the same military organization, emphasizing the need to understand



how different approaches interact and influence each other. “Firstly, by doing so, literature implicitly gives the impression that it is viable, feasible and desirable to find a single optimal doctrine to harness the power of military doctrine (i.e. striving for that illusive silver bullet of the ideal military doctrine). Secondly (and most importantly), literature ignores the fact that Western military organizations do not just have one doctrine, but constantly write and/or practice multiple doctrines simultaneously to deal with various types of problems in various contexts. Thus, studying how military organizations practice multiple doctrines simultaneously will help to address a gap in the existing literature and provide new insights to understand the spatial and temporal complexity of doctrine.” (Lindgaard 2023, 61) In this context, the author supports an approach that leverages technology and innovation to sustain doctrinal practices, facilitating a more rapid and coherent adaptation to changes in theaters of operations. Lindgaard explored the complexity of technology use and innovation, while other authors chose to channel their research in narrower directions and did not focus on this dimension. Therefore, the researcher emphasizes the importance of an integrated vision that defines a military doctrine not only as a set of rules, but as a much more complex one because it encompasses both written guidelines and practical applications, involves multiple interrelated doctrines practiced by a single organization, extends beyond military structures to include various actors, and is influenced by enduring elements from the past that can limit current adaptability. We appreciate this perspective, but some critical points (practical challenges of implementation, risk of over-complexity, technological dependency, historical continuity vs. innovation) suggest that while Lindgaard’s proposals for a dynamic, integrated military doctrine are forward-thinking, they also require careful consideration of practicality, simplicity, technological reliance, and the balance between tradition and innovation to ensure they enhance rather than complicate military effectiveness.

It should be mentioned Lindgaard’s holistic vision on military doctrine, analyzing it from the perspective of a continuous process, generating several operational definitions starting from a metadefinition (Lindgaard 2023, 264-265), in contrast with the more traditional or specific approaches of other authors, such as M. Wheeler, who approaches the military doctrines as principles applicable to other areas, such as civil negotiations. M. Wheeler explores how the principles of military doctrine can enhance the effectiveness of civilian negotiations, demonstrating that adaptability, strategic planning and critical thinking are essential in military operations and can be transferred to other domains. (Wheeler 2013) “Modern theories of maneuver warfare could help fill this conceptual void, particularly in devising ways to effectively move forward and adapt in the face of uncertainty and risk. [...] As I explain later, the ideas underlying maneuver warfare are more subtle and supple than commonly thought.” (Wheeler 2013, 25-26) The author highlights



the way in which modern theories of maneuver warfare can improve adaptability and efficiency in responding to uncertain and risky situations, emphasizing the connections between military doctrine and negotiation techniques in complex contexts. Noteworthy is the explanation regarding the transversal utility of military skills in managing the asymmetric conflicts. M. Wheeler explains the philosophy of maneuver warfare as a method of breaking down enemy cohesion through rapid and unexpected actions, which is essential to effectively manage asymmetric threats and maintain strategic superiority in unpredictable conflict conditions. (Wheeler 2013, 31) This approach illustrates how the transformation of military doctrine, by adopting the principles of maneuver warfare, can facilitate a more effective and adaptive response to asymmetric conflicts, emphasizing the need for a flexible and proactive approach. M. Wheeler also argues that the principles of military doctrine can be extended to improve the civilian negotiations, emphasizing adaptability and strategic planning as essential elements in conflict response. The researcher believes that strategic military thinking can serve as a model for civilian crisis management, providing a robust framework for decisions made under pressure (Wheeler 2013, 25, 31). Based on previous analysis, we have found several critical points which may be considered to refer to scope of applicability, risk of oversimplification, balance between flexibility and structure, cultural and ethical considerations. These critical points prompt a thorough examination of the development and implementation of military doctrines, ensuring they are effective in their specific contexts while also being sufficiently adaptable to address the complexities of modern, asymmetric warfare and relevant civilian applications.

There are studies focusing on the analysis of cognitive work in the military context with an emphasis on better understanding from a cognitive perspective to improve the military doctrine in terms of adaptability and responsiveness, with researchers advocating a data-driven approach to supplement and “refine” the content doctrines and ensuring that they are responsive to the real needs of operators on the ground (Naikar, Treadwell and Brady 2014). The authors have focused more on cognitive aspects and research-based data for adapting the doctrine and “emphasized that military doctrine and strategy need to be inherently adaptable and responsive to geopolitical events and technological developments. This adaptability is very important, because it ensures that military forces can remain effective under rapidly changing conditions.” (Naikar, Treadwell and Brady 2014, 330). We consider that integrating cognitive perspectives and a data-driven approach into the development of military doctrines ensures that these doctrines are pertinent and scientifically grounded and enhances their adaptability to meet the rapidly evolving demands of modern warfare and technology. This holistic and empirically informed approach is essential for preparing military forces to face contemporary and future challenges effectively.



Other papers contain research on the balance between structural and human relation-based adaptation. Certain studies by these researchers illustrate the differences between traditional approaches and new strategies that integrate cognitive science and information technology to respond more effectively to asymmetric threats. B. R. Posen discusses two main approaches in adapting military doctrine: the structural and human relations, emphasizing the reduction of organizational uncertainties and the coordination of efforts on the battlefield to respond to asymmetric threats (Posen 2016, 162-163). The researcher mentions the importance of adapting organizational structures to effectively respond to asymmetric threats, promoting a dual approach that combines structural rigor with sensitivity to the human factor. The author also argues that flexibility in command and decentralization of decisions are vital to enable units to adapt quickly and effectively to unpredictable combat conditions. “Because the guidance is meant to be practiced and tested, it provides a source of cohesion when the fighting starts. It creates a fictive certainty about an inherently uncertain activity... Because doctrine is hard to hide, it also sends diplomatic messages – deterring (or coercing) adversaries and reassuring allies.” In this excerpt, B.R. Posen discusses how a military doctrine can serve as a stable and accepted framework essential for navigating the uncertainties and complexities of combat, also emphasizing the role of interpersonal relationships and internal cohesion to maintain morale and improve responsiveness in stressful and unpredictable situations. (Posen 2016, 163-164). This research reflects theoretical perspectives on the importance of flexible and adaptive structures in military doctrine, as well as the critical role of human relations in strengthening military efforts in the context of modern threats.

Considering the analysis of a pertinent framework for adapting military doctrine to address asymmetric threats through a blend of structural adjustments and human relational strategies, several critical points warrant a deeper examination. While B.R. Posen advocates for the decentralization of command to enhance flexibility and responsiveness, there is a critical need to balance this with the risk of fragmented command structures that might result in inconsistent application of military strategy across different units. Over-reliance on decentralization can potentially lead to a lack of cohesive strategic direction and unified command, which are very important during large-scale operations. It is essential to establish clear guidelines and strong communication channels to ensure that the decentralization enhances rather than complicates the command structure.

B.R. Posen emphasizes the importance of human relations and internal cohesion within military units, particularly in enhancing responsiveness and morale in unpredictable combat situations. However, the dynamics of human behavior under extreme stress and prolonged conflict are complex and can be unpredictable. The assumption that structured human relational strategies will consistently yield positive outcomes may not always hold true, especially under the unique pressures



of asymmetric warfare. Further empirical research is needed to explore how these strategies perform across diverse scenarios and troop compositions to ensure that doctrines are realistically tailored to human capacities and limitations.

The argument that adaptable and flexible military doctrines serve diplomatic purposes by deterring adversaries and reassuring allies also needs a nuanced examination. While flexibility in military response is undoubtedly valuable, it can also create perceptions of unpredictability and inconsistency, potentially undermining diplomatic relations. The balance between demonstrating capability and maintaining a predictable stance in international relations is delicate. The military doctrines must be crafted with taking into account the operational adaptability and the broader geopolitical implications of how military readiness and strategy are presented on the international stage. These critical points underscore the need for a nuanced approach to implementing B.R. Posen's recommendations, ensuring that military doctrines are not only adaptable and responsive but also strategically coherent and diplomatically prudent.

Also, in elucidating a sensitive aspect such as inconsistencies between strategy and doctrine, leading to inefficiencies and operational failures, some researchers have emphasized the need for continuous review and updating of both. (Barfoed 2015, 2). The study focuses on how the military strategy and doctrine can be optimized to respond to rapid changes in the global and technological security environment, suggesting new research directions in the study of alignment and differentiation between the military strategy and doctrine to improve the ability to respond and adapt to contemporary challenges. Based on the analysis which highlights the dynamic interplay between military strategy and doctrine in adapting to global and technological changes, the following three critical points merit a focused attention. The need for continuous synchronization between military strategy and doctrine is determinant due to their distinct yet interdependent roles. Strategy, often dynamic and responsive to immediate threats and opportunities, can occasionally diverge significantly from established military doctrines, which may be more rigid and slower to evolve. This misalignment can lead to operational inefficiencies and failures, as tactical decisions might not be supported by the doctrinal backbone necessary for their execution. It is essential to develop mechanisms that ensure doctrine evolves concurrently with strategic needs, allowing for a seamless operational flow that is both agile and doctrinally sound. One critical point that arises from the need for continuous review and updating of military strategy and doctrine is the institutional resistance to change. Military organizations, with their deeply rooted traditions and structured hierarchies, may exhibit inertia against rapid doctrinal changes, even when strategic necessities dictate otherwise. The academic discourse could benefit from exploring strategies to overcome this resistance, potentially drawing from change management theories to devise ways that facilitate smoother transitions and



acceptance of necessary doctrinal updates. The suggestion for new research directions on the alignment and differentiation between military strategy and doctrine opens up a methodological inquiry into the best practices for maintaining this balance. It is very important to develop and refine methodologies that can effectively measure and analyze the congruence between strategy and doctrine. This might involve the use of advanced simulation tools, real-time feedback mechanisms, and perhaps artificial intelligence to predict and manage the impacts of strategic decisions within the doctrinal framework. Research should focus on creating some models that would accommodate the current security environment and would be adaptable to unforeseen future scenarios. Each of these points underscores the complexity of adapting military strategy and doctrine in a rapidly evolving global context. Addressing these challenges through focused academic research and practical policy applications is essential for enhancing military responsiveness and effectiveness in facing contemporary security challenges.

In this context, adaptation must be holistic, incorporating lessons from history, technological advances and innovative tactics to effectively respond to asymmetric threats. This need for transformation not only affects the way in which the armed forces train and operate, but it also requires a continuous reassessment of strategies to ensure the relevance of doctrines in the face of rapid changes in the global security environment.

2. The Relevance of Military Doctrine Transformation on National Level

Certain pertinent examples highlight the diversity and complexity of adapting military doctrines in response to asymmetric threats, reflecting both regional security concerns and international cooperation imperatives. Each country's approach is tailored to its strategic context, underpinning the importance of national effort in global security frameworks.

Over the past two decades, the United States has undergone significant revisions in its military doctrine, primarily influenced by its operational experiences in Iraq and Afghanistan. These conflicts highlighted the complexities of engaging with non-state actors and insurgent groups that operate outside traditional warfare paradigms. As a result, the US has shifted its strategic focus towards flexibility and rapid adaptation, recognizing the critical need to understand and integrate local socio-political dynamics into military operations. The evolution of the US military strategy is stipulated in the *United States Strategy to Prevent Conflict and Promote Stability*, published in 2022. This document emphasizes a proactive approach to conflict prevention and stability enhancement, aiming to pre-emptively address the root causes of instability that fuel insurgent activities. By doing so, the US military seeks to not only respond more effectively to immediate threats but also to reduce the



likelihood of long-term engagements that can drain resources and lead to complex humanitarian crises. (United States Strategy to Prevent Conflict and Promote Stability 2022) This strategic shift reflects a broader understanding that modern conflicts often require more than just military might. They demand a comprehensive strategy that includes diplomatic efforts, economic support, and cultural competence to build resilience in volatile regions. The US military's adaptation to these realities involves training troops to be adaptable to diverse environments, enhancing intelligence capabilities to better predict and respond to emerging threats, and strengthening partnerships with local governments and international organizations to foster collective security and stability. Through these doctrinal changes, the US aims to achieve a more sustainable and effective approach to international security, one that not only counters immediate threats but also contributes to a stable and peaceful global landscape.

The UK has adopted a comprehensive approach to its military doctrine, emphasizing an integrated response to global threats. This is articulated in *The Integrated Review 2021*, which outlines the UK's vision for a "whole-of-government" approach. (The Integrated Review 2021) This strategy integrates military, economic, and informational tools to address asymmetric threats such as terrorism and cyber warfare. The doctrine has shifted towards preparing for a wider range of scenarios, ensuring that the UK can operate under different forms of warfare. This includes increasing spending on cyber defence and enhancing the ability to conduct remote operations.

France's military doctrine reflects its expansive role in global security, particularly in regions such as Africa and the Middle East, where it often engages in peacekeeping and counterterrorism operations. (Livre blanc sur la défense et la sécurité nationale, 2013.) The *French White Paper on Defence and National Security* outlines the necessity of rapid deployment forces that can engage effectively in asymmetric warfare environments, emphasizing the interoperability with allied forces under the framework of international cooperation, particularly within the EU and NATO, to enhance collective security measures.

In Post-Cold War context, Germany has been reevaluating its military doctrine to better participate in international security. The *White Paper on German Security Policy and the Future of the Bundeswehr 2016* illustrates Germany's pivot towards a more active role in global military engagements, focusing on crisis prevention, conflict management, and post-conflict rehabilitation. (White Paper on German Security Policy 2016) The doctrine emphasizes the importance of working within international frameworks, enhancing capabilities in cyber warfare, and ensuring a high level of readiness to respond to hybrid threats.

The Baltic States have focused their military doctrines on countering the hybrid warfare tactics that they perceive as threats from their Eastern neighbour, Russia. (Rain 2017; Kols 2022) This includes enhancing cyber capabilities and informational



warfare defences, as outlined in various national security documents. Each state emphasizes the importance of NATO's strategic umbrella, especially the enhanced Forward Presence (eFP) battalions stationed in their territories, as a deterrent against potential aggression.

Sweden and Finland, historically non-aligned, have recently taken significant steps to bolster their defence capabilities in light of increasing geopolitical tensions in the Baltic Sea region. Sweden's reinstatement of conscription (Dalsjö, and Jonsson, 2022) and Finland's focus on comprehensive national defence are both reflective of a doctrinal shift that emphasizes preparedness for asymmetric threats (Linnainmäki, Pesu, Pihlajamaa, Särkkä and Vanhanen, 2024). Both countries have enhanced their cyber defence capabilities and developed doctrines that allow for rapid response and resilience in face of unconventional warfare.

These doctrinal adaptations reflect a global trend towards preparing for and mitigating the risks of asymmetric warfare, demonstrating a convergence of traditional and modern military strategies tailored to each nation's specific circumstances and strategic interests.

3. Technology Integration and International Cooperation in Military Doctrines

Incorporating advanced technology and cyber into a military doctrine is becoming essential to the effective management of modern conflicts. The use of drones, facial recognition, and satellite surveillance is transforming the way we combat threats and is imposing a new paradigm in information warfare and psychological operations. Also, the importance of interoperability and international collaboration is accentuated by the need to develop common standards and facilitate a coordinated response to transnational threats. This entails continuous adaptation of the armed forces to integrate new technological capabilities and maintain adequate readiness in the face of asymmetric challenges.

S. Roberts argues for a constant revision of the military doctrine to integrate technological innovations, insisting on the flexibility of doctrines to allow adaptation to varied and unpredictable situations. The researcher also emphasizes the role of modern technologies and international cooperation in formulating effective responses to asymmetric threats, arguing for the continued integration of technology into military doctrines (Roberts 2021). By advocating for the persistent incorporation of new technologies into military doctrines, we consider that this will lead to more robust and adaptable military operations, positioning armed forces to better tackle the complexities of contemporary warfare environments.

Maria Constantinescu elucidates the concept of military power and the impact of geopolitical factors in the adaptation of doctrines to asymmetric scenarios,



highlighting the importance of the relative assessment of power in the context of international cooperation and advanced technological integration. “The novelty in the modern world resides in the use of the advances in technology, psychology and the changes in society (such as the rising popularity of social media) to achieve military objectives. Asymmetric warfare, unconventional warfare, new generation warfare – all refer to a combination of methods intended to facilitate the achievement of specific goals for the country using them.” Here, the author mentions how advances in technology are utilized in modern warfare, “specifically in the context of asymmetric warfare, where technology plays a key role in achieving military objectives.” (Constantinescu 2021, 36) The author also demonstrates the impact of modern technologies on military power, emphasizing the need for a continuous assessment of relative power in the context of international technological cooperation and integration. This approach refers to the technological advancements within the context of capabilities-based planning, criticizing the generic nature of such planning which may assume an adversary is technologically sophisticated without considering other factors. (Constantinescu 2021, 33) Therefore, we conclude that the assessment of relative power in the context of international cooperation and advanced technological integration can influence the development and implementation of the military doctrine provisions. Thus, the ideas launched by S. Roberts and M. Constantinescu suggest a valuable debate about how technological innovations should align with geopolitical strategies and international cooperation, exploring how technology can facilitate or complicate strategic alliances and doctrinal adaptation.

N. Naikar, A. Treadwell and A. Brady explore the use of advanced technology in intelligence gathering, arguing for a deeper integration of technology into the doctrine development. “CWA provides a strong theoretical lens with which to view and comprehend the distinctions between such concepts as a force’s purposes, goals, values, principles, laws, functions, missions, roles, and characteristics... Based on these distinctions, the concept of functions in a military context may be viewed as representing the utility of objects or devices independent of actions. In contrast, missions may be considered an activity-based concept, involving sequences of actions for achieving specific goals with particular objects.” (N. Naikar, A. Treadwell and A. Brady 2014, 331) The authors emphasize the importance of data analytics and artificial intelligence in anticipating and responding to threats, highlighting how technology can transform intelligence gathering and strategic analysis (Naikar, Treadwell and Brady 2014). The research of these authors elucidates the way in which technology is redefining the traditional paradigms of modern conflicts and the need for its effective integration into military strategies to maintain national and international security.

Other approaches explore the impact of multinational military exercises on the development of doctrine and the strengthening of international cooperation.



The researchers highlight the importance of these exercises, which can serve as platforms for sharing best practices and joint adaptation to new technologies and tactics. “Multinational Military Exercises (MMEs) are often viewed by states as opportunities to increase interoperability, improve cooperation, and solve common security problems. We argue that in addition to this, MMEs work as tools to shape the shared beliefs of coalition partners surrounding threat. Specifically, MMEs allow multinational forces to identify best practices, consolidate beliefs, and codify behavior through doctrine, typically by means of some institutional process.” (Frazier and Hutto 2017, 1). Consequently, the significance of these exercises in the formation of strategic consensus and the adaptation of doctrines is decisive in strengthening international cooperation in the effective response to transnational threats and contributes to the synchronization of doctrines between allies.

Thus, researchers D.V. Frazier and W.J. Hutto appreciate the complexity and benefits of international cooperation in an evolving technological landscape, highlighting how alliances and partnerships can facilitate more effective and coordinated adaptation of military doctrine. “The use of MMEs makes sense in a world of transnational and diverse threats. As internationalization increasingly creates new global partnerships, MMEs will become important ways in which state militaries evolve, communicate, and cooperate. The development of common doctrine is a key process by which states might internalize elements of shared interest by means of socialization and identity transformation.” (Frazier and Hutto 2017, 15). We note that the emphasis on socialization and identity transformation through shared doctrinal practices underlines the transformative potential of MMEs in aligning military strategies and operations among nations facing common threats.

We consider that a military doctrine requires an alignment with technological evolution and must facilitate strategic cooperation between different states and branches of the armed forces, being adapted to technological and geopolitical changes, to enhance the responsiveness and operational effectiveness of the armed forces. In this sense, we can look at technology as a catalyst for international cooperation, facilitating the exchange of information and coordination between allies. Thus, a doctrine must be proactive and not reactive, thus making it possible to anticipate technological developments, with their integration into strategic planning.

There are studies that elucidate the importance of integrating technological advances and innovations into military tactics, highlighting the need to adapt to new realities such as advanced technology. (Gallo 2018) At the same time, A. Gallo examines the way in which doctrines evolve in peacetime, preparing armies for future conflicts. Within military organizations, this competition manifests itself not only at the level of resources, but also in the development of combat technologies and doctrines. This competition also extends to the international level, where military organizations from different states compete for technological and doctrinal



superiority, an aspect that influences state power, decisions regarding war and peace, and international relations in general. (Gallo 2018, 6)

Therefore, the military doctrine is a reflector of the power arrangement within a military organization, but also a compromise between the relevant actors. This means that the military doctrine is not only a set of principles or battle strategies, but also an expression of domestic and international politics, resulting from negotiations and compromises between various stakeholders, whether domestic (different branches of the military) or international (in the case of military alliances or strategic competitions). In this light, the military doctrine serves as an essential tool for navigating the complexities of power dynamics both nationally and internationally.

There are studies that take a balanced approach to the role of technology in reinforcing the doctrinal changes, which combines the combat experience with technological innovation, providing a comprehensive perspective on how technological innovation must facilitate the continuous adaptation of military doctrines to meet the complex challenges of an environment of changing global security. (Przybyło 2019, 138) Ł. Przybyło's argument, emphasizing the synergy between combat experience and technological innovation for doctrinal adaptation, presents a crucial perspective for modern military strategies. However, several critical aspects warrant further examination to fully appreciate the complexities and potential limitations inherent in this approach. While the integration of advanced technology into military doctrines is undeniably beneficial, there is a risk of becoming overly dependent on technological solutions. This over-reliance could potentially lead to vulnerabilities, especially if adversaries develop countermeasures or if technology fails during critical operations. The assumption that technology can solve all tactical and strategic challenges may overshadow the need for robust, basic military skills and adaptability in environments where technology may be compromised or unavailable. The rate at which technology evolves and the speed with which military doctrines can realistically adapt are often out of sync. Technological innovations occur at a rapid pace, whereas doctrinal changes, which involve comprehensive training and restructuring, can be slow. There is a risk that by the time a doctrine integrates certain technologies, those technologies could be outdated, or new challenges could have emerged that require different solutions. This lag can create gaps in military effectiveness and responsiveness. The focus on integrating cutting-edge technologies into military doctrines entails significant financial and resource investment. The costs associated with developing, acquiring, maintaining, and updating technological tools can be substantial. This investment must be balanced against other critical needs within a defence budget, such as personnel and traditional capabilities, ensuring that the pursuit of technological superiority does not undermine the overall balance and capabilities of the military. By critically analyzing these aspects, we can appreciate the nuances of integrating



technology into military doctrines. While Ł. Przybyło's perspective is forward-thinking and strategically vital, it also necessitates a cautious approach to ensure that the benefits of technological advancements are realized without compromising operational integrity, some ethical standards, or strategic flexibility.

The role of technology in transforming the way in which the doctrines are practiced and applied was elucidated by P.J. Lindgaard, emphasizing the interaction between human and non-human factors in military operations. The author brings up the “actor/network” theory, which contributes to understanding the interconnected roles of different actors inside and outside the military organization, highlighting the importance of integrating non-human actors in the operational effectiveness of military strategies. The researcher promotes the systemic integration of new technologies within existing doctrines to ensure a fluid and efficient adaptation (Lindgaard 2023, 86). In this context, it is worth mentioning the importance of creating the international cooperation networks that facilitate the exchange of knowledge and experiences in the implementation of advanced technologies. This approach reflects the importance of international cooperation in developing and synchronizing military doctrines within alliances such as NATO, highlighting the need for compatibility and integration across different national military strategies.

This multi-stakeholder perspective provides a more complete picture of how a military doctrine must adapt to contemporary challenges and integrate emerging technologies, while promoting international cooperation and addressing global strategic imperatives. This synthesis demonstrates the correlation between theory and practice, which interweave to formulate a cohesive response to the dynamics of modern security. Therefore, we conclude that a complex approach is necessary for the effective adaptation of military doctrines in a constantly changing global landscape, because in the digital era the essential role of technology and international cooperation in the formulation of security strategies is undeniable.

4. Views on the Reform of Military Doctrines in a Global Context

The military doctrine must reflect changes in the international security landscape, which implies a thorough analysis of existing threats and potential risks. The adaptation of military doctrines in different countries illustrates varied approaches, influenced by the geopolitical context, conflict history and international alliances.

S.N. Romaniuk has investigated the importance of adapting the military doctrine to asymmetric threats, elucidating the impact of adjusting the doctrine in the context of asymmetric conflicts, with a focus on the US military experience in Vietnam. In this context, the US has modified the military doctrine to respond to asymmetric threats, such as those encountered in Vietnam. “The pace of doctrinal debate in the context of the US army and joint contexts has continued to increase,



particularly with the seeming resurgence of asymmetric threats towards the turn of the millennium (9/11) but this increasing momentum is also driven by conscientious analysts of US military history and the contrast between US military victory and defeat.” (Romaniuk, 2015, 2) Referring to the adaptation of the military doctrine in the context of asymmetric conflicts, the researcher writes “Strategic, tactical, and operational considerations were previously considered by the US government (USG), and in close cooperation a US military services, to such an extent that a string of military operations registered as remarkable victories beyond the tactical and operational spheres.” (Romaniuk 2015, 3) These passages emphasize the evolving nature of military doctrine in response to the complexities introduced by asymmetric warfare, showing how adaptations in strategy, tactics, and operational art are determinant for addressing the unique challenges posed by such threats. They also highlight the importance of continuous evaluation and adaptation of military doctrine to ensure effectiveness in dynamic conflict environments. For example, the United States and Israel developed some specific doctrines to respond quickly and effectively to asymmetric threats, while NATO countries focused on stability operations and post-conflict reconstruction. These adaptations underscore the need for a flexible and dynamic approach that enables the armed forces to respond effectively to a wide range of threats in an ever-changing security environment.

Some authors address the need to develop a common ontology for military doctrine, to improve the interoperability of the armed forces information systems. (Morosoff, Rudnicki, Bryant, Farrell and Smith 2015, 6) This perspective is important for the operational efficiency in interconnected environments and emphasizes the importance of common standards in the context of the globalization of security threats. Such studies highlight that unified framework that can support multinational operations, creating a basis for cooperation and operational efficiency.

The interaction between military strategy and military doctrine was addressed by J.R. Barfoed, highlighting the need for close alignment to ensure the coherence and effectiveness of military actions. This approach underscores the importance of continuous review and updating of military doctrine to adequately respond to rapid changes in the global security and technological environment. With reference to the need of adapting the military doctrine to strategic contexts, the author claims referring to the necessity for doctrine to adapt to strategic contexts that “Military doctrine is an important part of the building material for military strategy. It represents central beliefs or principles for how to wage war in order to achieve the desired military ends. Doctrine thus provides ways to use military means against a given type of threat or scenario... However, the reality is that in addition to unforeseen scenarios, political, economic, or social considerations invariably constrain operations and strategies; therefore, doctrine will always have to be adapted to the specific strategic context of a crisis or war.” (Barfoed 2015, 2) This approach suggests a need for



continuous review and updating of both to respond to rapid changes in the global and technological security environment. In the same vein, researcher A.A. Gallo expressed a similar vision, arguing “Strategy is the bridge between the tactics and operations employed by the military and the state’s policies. Military doctrine can be a tool used to execute a strategy, but it is rarely intended to be the strategy itself.” (Gallo 2018, 11) Overall, while the scholars provide valuable insights into the necessity of adapting military doctrine to changing strategic contexts, it also opens up areas for deeper analysis regarding the practical challenges and implications of such adaptations.

Some debates on the importance of adapting the military doctrine generate assertions on how standardization and strategic integration can improve not only interoperability, but also the ability to adapt the military doctrines to a global and rapidly changing security environment. Such analyzes emphasize the need for adaptation, technological integration and reform of military doctrines in the context of the complex challenges of contemporary security, illustrating the need for a multifaceted and collaborative approach.

Lindgaard emphasizes the need for the military doctrines that are not only theoretically valid, but also practically applicable and adaptable in the long term, addressing the challenges of managing multiple doctrines within a single organization and reflecting on current needs and future uncertainties (Lindgaard 2023, 80). The author’s analysis reflects how each scholar contributes to the debate on adaptation, technological integration, and reform of military doctrines in the face of complex and asymmetric challenges of contemporary security.

Thus, by juxtaposing and integrating these authors’ ideas, the diversity of approaches and the need for an integrated vision for effective adaptation of military doctrines in the context of asymmetric conflicts, technological integration and international cooperation are highlighted. This analysis reflects the complexity and dynamics of contemporary debates on military doctrines and emphasizes the importance of a multifaceted and progressive approach. Considering the complexity and breadth of the subject, it is clear that the transformation of military doctrines in the context of asymmetric conflicts is a multidimensional process, influenced by internal factors (such as organizational culture and military history) and external factors (such as the evolution of asymmetric threats and international relations).

5. Limitations of the Study

The study, while comprehensive, encounters a few notable limitations that could impact the robustness and applicability of its findings. The first significant limitation is the restricted availability and accessibility of classified military documents and strategic information. Such constraints can substantially limit the depth and accuracy of the analysis concerning specific doctrinal changes. This



limitation is particularly acute in military studies, where much of the critical data pertaining to strategic decisions, capabilities, and operational outcomes remains classified for national security reasons. As a result, the study may rely on open-source materials and declassified documents, which may not provide a complete picture of the strategic landscape or the nuanced details of military doctrine evolution. The second limitation is the potential for biases in interpreting qualitative data derived from various sources. While qualitative approaches provide valuable insights into the perceptions and experiences of military personnel and strategists, they are inherently subjective. Different researchers might interpret responses in varied ways, influenced by their own backgrounds, expectations, and theoretical inclinations. The third limitation refers to the rapid evolution of technology and the dynamic nature of asymmetric threats, which pose a substantial challenge to the study's relevance over time. Technological advancements and shifts in asymmetric warfare tactics can quickly outdate the findings, especially in a field as fluid and rapidly evolving as military strategy. By the time the study is published, some of the technologies or tactics analyzed may have been superseded by more advanced or altered approaches. This “lag effect” makes it challenging to provide up-to-date recommendations and may require continual updates to the research to maintain its relevance. These limitations underscore the need for ongoing research efforts that adapt to the changing security environment, employ rigorous methods to mitigate bias, and ensure access to the most current data possible to keep pace with the ever-evolving landscape of military conflict and technology.

Conclusions

The research hypothesis posits that the military doctrines incorporating adaptability, technological advancements, and international collaboration significantly enhance the operational capabilities of military forces, thereby improving global security dynamics. The research objectives aim to thoroughly analyze how military doctrines have adapted to asymmetric conflicts by focusing on several key areas: diversity of perspectives, critical factors, historical evolution, integration of technologies and cooperation, impact on military effectiveness.

The study compiles and analyzes opinions from various scholars and experts, identifying consensus and debates on the necessity for military doctrines to evolve. This broad perspective helps to establish a comprehensive understanding of the current state and needs of military strategy adaptation. There were identified critical factors that drive the evolution of military strategies, such as technological integration and the need for international cooperation. These factors are determinant for developing doctrines that can effectively respond to modern threats. The research traces the historical development of military doctrines extracting from various papers, noting most significant changes and continuities. This historical approach provides



insights into how past experiences and future anticipations influence current military strategies. The study has assessed how technological advancements and international cooperation are being integrated into military doctrines. This analysis is vital for understanding how doctrines can leverage new technologies and global partnerships to enhance military effectiveness. Finally, the research evaluates the impact of these doctrinal transformations on the effectiveness of military responses to asymmetric conflicts, providing evidence of improvements in operational capabilities and strategic outcomes.

The study has validated the hypothesis, demonstrating that modern military doctrines, which are adaptable and integrate both technological innovations and international cooperation, are more effective in responding to the dynamic challenges of asymmetric conflicts. This transformation not only addresses immediate threats, but also builds a proactive defence posture capable of anticipating future security challenges.

In summary, the research comprehensively achieved its objectives, illustrating the necessity of continual adaptation and innovation in military doctrines to maintain relevance and effectiveness in a rapidly changing global security environment. This transformation is decisive for enhancing military capabilities and for ensuring that military strategies are in alignment with contemporary and future geopolitical realities.

The analysis elucidates the challenges and needs of adapting the military doctrine in a dynamic global security environment, emphasizing the importance of a holistic approach that integrates technology, international cooperation and continuous learning. The approach reveals the way in which some theoretical and practical aspects intertwine to formulate a cohesive and effective response to the dynamics of modern security. Consequently, a constant revision of a military doctrine is crucial to respond to asymmetric threats and adapt strategies, tactics and technologies to the unconventional enemy. Integrating technology into military doctrines is critical to adapting to asymmetric conflict, marked by advanced technology and cyber operations.

Thus, to maintain the relevance and effectiveness of the military response, the military doctrine transformation must be holistic, integrating technological innovation and international collaboration. This process involves threat analysis, development of response capabilities, and involvement of civil society and non-military actors. Therefore, the military doctrine must promote international collaboration, develop common standards for multinational operations, and integrate non-human actors in ensuring operational effectiveness. In addition, a proactive and innovative approach is required that includes changing strategies and a paradigm shift within the armed forces, promoting a mindset open to innovation and continuous adaptation.

In conclusion, the transformation of military doctrine is essential to maintain the relevance and effectiveness of the armed forces in the face of constant global change and to ensure that they are optimally equipped, organized and prepared to meet current and future challenges.



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