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CONTRIBUTION OF THE STRATEGIC RESEARCH INSTITUTE TO THE DEVELOPMENT OF MILITARY SCIENCES

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Abstract

Following several decades of extensive deliberation concerning the existence, position, and role of military sciences, these disciplines were formally integrated into the scientific framework of the Republic of Serbia and officially classified within the social sciences. At present, military sciences constitute a vital area of research within numerous educational and scientific institutions, particularly those affiliated with the armed forces. Among these, the Strategic Research Institute (SRI) of the University of Defense, alongside the Military Academy, occupies a leading position in the advancement and development of military sciences. The Institute provides rigorous research, analytical, and educational support, thereby contributing to both the theoretical foundations and the practical applications of military sciences. Its scholarly endeavors include comprehensive investigations into emerging technologies, such as artificial intelligence, autonomous systems, unmanned aerial vehicles, and cyber technologies and their transformative impact on contemporary warfare and military effectiveness. The Institute's influence is evidenced through a diverse range of activities, encompassing the execution of scientific projects, the organization of academic conferences and round-table discussions, the publication of peer-reviewed scholarly works, and extensive cooperation with domestic and international academic and research institutions. Since its establishment, the Institute's members have been actively engaged in the educational process at all levels – undergraduate, Master's, and doctoral – at the Military Academy, as well as in specialized programs such as Command and Staff, General Staff training, and Advanced Security Studies, where they fulfill roles as mentors and serve on committees for the assessment and defense of final theses.

Keywords: military sciences, institute, research, education.

Introduction

Since the earliest manifestations of conflict among human communities, the imperative to comprehend and enhance military activity has given rise to the discipline presently recognized as military science. Military science constitutes an interdisciplinary field that examines both the theoretical and practical dimensions of military operations, the structure and organization of armed forces, as well as the phenomenon of warfare across historical and contemporary security contexts.

Fundamentally, military science centers on the study of armed struggle, which represents its core subject matter (Šešić, 1971, p. 84). It encompasses a system of interconnected scientific disciplines, each addressing specific facets and dimensions of armed conflict from distinct analytical perspectives (Pejinović, 1971, p. 139). In a more restrictive sense, military science pertains to the “pure” military disciplines, including strategy, operations, and tactics. More expansively, it incorporates scientific disciplines derived from other fields, such as military history and psychology, when these are applied towards military objectives. For example, military history may be classified either as a historical science or as a military science, contingent upon the criteria employed. When evaluated with regard to subject matter and intent, it is considered a military science due to its focus on a particular and specialized area within history. Nonetheless, this classification does not preclude its simultaneous inclusion within the broader domain of historical sciences (Ilić, 1971, pp. 190–191). Moreover, military science involves the systematic study of military processes, including decision-making mechanisms, military institutions such as units, armies, and training organizations, as well as the behavioral dimensions of military personnel both at the individual and collective levels, during times of war and peace. It further encompasses the comprehensive analysis of war and warfare, alongside the theoretical underpinnings and practical applications of organized coercive force (Jordan, 2013, pp. 823–824).

Within the scientific community, a consensus has yet to be reached regarding the precise subject matter and scope of military science. Blagojević et al. argue that the subject of military science should be confined to a distinct set of material and spiritual phenomena directly associated with armed struggle, studied with the objective of comprehending the unique nature of war, ultimately serving the defense and security functions of the state as fundamental national and political priorities. Under this conceptualization, the subject matter pertains to the core military scientific disciplines, including tactics, operations, strategy, leadership and command, military logistics, and the methodology of military sciences. Concerning the classification of military sciences, the same authors propose a division based on the criterion of generality, distinguishing between general and specialized military sciences. Furthermore, with regard to their relationship to the subject matter, these sciences may be categorized into basic (or original) disciplines, such as strategy, operations, tactics, leadership and command, military logistics, and the methodology – and auxiliary (or applied) disciplines that originate from other scientific fields, for example, military psychology and military history. While these auxiliary disciplines are oriented toward achieving defense-related objectives, they are not regarded as core scientific fields within the military science system (Blagojević et al., 2019, pp. 83–187).

By its fundamental characteristics, military science is classified among the social sciences. The phenomenon of armed struggle is also studied by various other disciplines, such as sociology, history, law, economics, and psychology, each within its own specific subject matter and methodological framework. Nonetheless, military science maintains a unique focus on armed combat from the perspective of warfighting skills, as no other scientific discipline specifically addresses this phenomenon in such a dedicated manner (Gažević, 1976, pp. 560–561).

Military sciences are intrinsically linked to a range of other disciplines, including natural and mathematical sciences, technical sciences, medical sciences, and the broader social sciences. These interconnections are so pronounced that delineating clear boundaries between individual scientific

fields often proves challenging. Nevertheless, military sciences have developed all the fundamental elements characteristic of a scientific discipline and are therefore rightfully recognized as distinct scientific fields within the academic community (Sakan, 2023, p. 31). After more than half a century of deliberations, debates, and controversies concerning their scientific status, including aspects such as warfighting skills, polemology, and defense studies, the initiative to formally acknowledge military sciences as an integral part of the scientific domain was successfully realized in 2020. This milestone was achieved based on fifty years of accumulated experience in the field's development, officially situating military sciences within the category of the social sciences. Consequently, the academic programs of the Military Academy have been accredited within the corresponding scientific discipline (Marček & Pešić, 2024, p. 63).

Armies around the world engage in the development of military science through research, innovation in technologies, the formulation of tactics and strategies, and the systematic education and training of military officers. In the global advancement of military science, numerous institutions from leading world powers play a prominent role. These include the U.S. Army War College, the U.S. Naval War College, the Strategic Studies Institute (SSI), the Russian Military-Scientific Committee, the Institute for Military Science of the Russian Ministry of Defense, the Academy of the General Staff of the Armed Forces of Russia, and the Chinese Academy of Military Science. Military science is also given considerable attention within the North Atlantic Treaty Organization (NATO). As stated in NATO's Allied Joint Publication AJP-01, scientific advancement provides strategic advantages for a given country, compelling others to respond by adapting and advancing their own capabilities (NATO Standardization Office, 2022, p. 8).

The Role (Importance) of SRI in the Development of Military Sciences

The Strategic Research Institute (SRI) plays a crucial role in the advancement of military science by delivering comprehensive research, analytical, and educational support that strengthens various disciplines within the field, with particular emphasis on military strategy. Military sciences hold significant importance for the SRI, as they provide the foundational knowledge necessary for the understanding, formulation, and implementation of military strategies and doctrines, which are indispensable for ensuring the security and defense of the state.

The Institute's contributions are manifested through a wide range of activities and projects focused on strategic development, enhancement of defense systems, and addressing contemporary challenges within the global security environment. For the SRI, scientific research constitutes a fundamental function, enabling the formulation of effective strategies and tools for managing emerging threats in the modern context. As a scientific research institution, the SRI **leverages** expertise from military sciences to conduct comprehensive analyses, support evidence-based decision-making, and **bolster** preparedness for potential conflicts and crisis situations.

Without a comprehensive understanding of military science, the formulation of long-term strategies capable of addressing complex challenges, such as nuclear threats, hybrid warfare, cyber operations, and other contemporary forms of conflict would be severely hindered. The SRI promotes the advancement of military sciences through a multidisciplinary approach that encompasses research on strategic, technological, political, and security-related issues. These endeavors facilitate the development of modern military strategies tailored to complex threats and evolving global realities,

thereby enhancing the readiness and operational effectiveness of military forces in contemporary warfare.

The SRI conducts comprehensive examinations of military strategies by considering emerging technological and political developments, alongside region-specific and global security challenges. A fundamental component of its work involves analyzing the nature and characteristics of modern armed conflicts, understanding evolving geopolitical dynamics, and interpreting asymmetric threats such as cyber and hybrid warfare. Such analyses are essential for the formulation of military doctrines that are appropriately adapted to contemporary operational environments.

The Institute also explores how emerging technologies, such as artificial intelligence, autonomous systems, drones, and cyber capabilities, are transforming the conduct of warfare. It investigates how these technologies can be employed to improve military effectiveness.

Through comprehensive strategic analyses and policy reports, the Strategic Research Institute (SRI) supports decision-makers in developing optimal solutions to military and defense-related challenges. By providing accurate and timely information, the Institute contributes significantly to the formulation of national defense policies and the establishment of strategic objectives. Furthermore, by examining military and political alliances such as NATO and the Collective Security Treaty Organization (CSTO), the SRI provides valuable insights into their roles within international relations and their influence on the dynamics of contemporary armed conflicts.

The SRI Contribution to the Development of Military Sciences

In its scientific research activities, the Strategic Research Institute (SRI) employs scientific methods to investigate both theoretical and practical issues related to security and defense. Additionally, the Institute examines processes and factors within international relations that affect the security and international standing of the Republic of Serbia. It conducts analyses of experiences from ongoing crisis hotspots that are pertinent to the security and defense of Serbia, explores contemporary forms of threats to national security, and reviews strategic and doctrinal documents of Serbia, relevant foreign states, and international organizations of significance to the defense system. Furthermore, the SRI researches the organization and fundamental principles underlying the modeling and structuring of military and defense systems, while also addressing economic, sociological, psychological, and other dimensions relevant to the operation of the defense system and military organizations. As part of its scientific activities, the Institute participates in and collaborates on research projects with other scientific institutions both domestically and internationally. In partnership with these institutions, it organizes scientific conferences focusing on security, defense, and military history. Through its publishing activities, the Institute prepares and disseminates research findings via periodic and other scholarly publications. Given the competencies of its research staff, the SRI makes a significant contribution at various levels of education and professional development at the University of Defense in Belgrade (Vlada Republike Srbije, 2000).

Since its establishment, the Strategic Research Institute (SRI) has functioned as a scientific research institution primarily dedicated to the field of military sciences, with a particular emphasis on military strategy. Its work has focused on the study of the factors of war, examining their contemporary significance and evolution under the influence of technological advancements and political developments affecting national defense capabilities. Special attention has been devoted to

analyzing the determinants of military organizational effectiveness within the context of modern technological, economic, and both external and internal political conditions. This encompasses the investigation of the armed forces' organization, structural composition, methods of preparation and training, leadership and command systems, as well as doctrinal principles governing their employment. Additionally, the Institute has continuously monitored and studied the state and transformation of the organization, formation, and structure of armed forces across various countries (Šaranović & Milkić, 2024, p. 53).

Since its establishment, the SRI has operated as a scientific research institution focused primarily on the field of military sciences, with an emphasis on strategy. The focus of the work was on the study of the factors of war, their modern meaning and evolution under the influence of technological and political implications on the defense power of the country. Special attention was paid to the study of the factors of the efficiency of the military organization in modern technological, economic, and external and internal political conditions. This included an investigation of the way in which the armed forces were organized, a study of their structure, methods of preparation and training, the system of leadership and command, and the doctrine of use. The institute monitored and studied the state and changes in the organization, formation, and structure of the armed forces of different countries (Šaranović & Milkić, 2024, p. 53).

Throughout its existence, the Institute has initiated and conducted numerous scientific research projects. The primary research focus has encompassed: (1) general strategic and conceptual-doctrinal issues; (2) challenges related to the organization and functioning of the defense system, with an emphasis on the preparation and deployment of the armed forces; (3) logistical support within the defense system; and (4) topics within scientific disciplines functionally connected to defense sciences, specifically military sciences, including areas such as military sociology, military psychology, and military andragogy. Each of these thematic areas has been explored through research projects executed either independently by the Institute or in collaboration with other organizational units (Šaranović & Vuletić, 2011, pp. 333–334). Among the numerous projects carried out at the Strategic Research Institute, the following stand out as particularly significant (Šaranović & Milkić, 2024, pp. 67–106):

- The scientific construction of the art of war,
- History of war art,
- Military strategy and the scientific and technical factor,
- Military expert analysis of armed conflicts in the former SFRY and FRY (1991 to 1999),
- Theoretical foundations for determining the effectiveness of military organizational systems,
- The defense system of the Republic of Serbia in countering modern terrorism,
- The military profession in Serbia: current status and future perspectives
- Development of military psychology in Serbia (1947–2017),
- Identifying contemporary asymmetric forms of endangering security, History of the Serbian and Yugoslav army in the 19th and 20th centuries,
- Hybrid warfare: experiences and perspectives,

- Development of a professional military organization in Serbia (1804–1990): experiences and lessons learned
- Physiognomy of modern armed conflicts,
- Projection of security-relevant trends in the Republic of Serbia until 2030,
- The military profession in Serbia within the modern security environment.

In addition to the outcomes of its numerous research projects, the Institute has significantly contributed to the advancement of military sciences through the organization of scientific conferences (Šaranović & Vuletić, 2011, p. 337; Šaranović & Milkić, 2024, p. 111). Among the many scientific events organized or co-organized by the Institute's members, and where their contribution to the development of military sciences has been particularly notable, the following stand out:

- The Symposium on Military Science SIMVON-97, titled "Military Science and Military Doctrine," was held from June 25 to 27, 1997. The symposium focused on two main areas: the scientific foundations of military science and the relationship between military science and military doctrine (Šaranović & Vuletić, 2011, p. 337).
- The Symposium on military science SIMVON-2001 under the theme "Scientific Structure and Factors of Military Strategy," took place on June 27 and 28, 2001. The event aimed to identify the fundamental challenges in military strategy to establish the most reliable premises for the development of a scientific theory of military strategy (Šaranović & Milkić, 2024, pp. 117-118).
- The foundation of the Institute's publishing activities is anchored in the scientific journals *Vojno delo* and *Vojnoistorijski glasnik*. Over more than four decades of scientific research, members of the Strategic Research Institute have published numerous monographs, studies, and collections aimed at supporting the defense system. The Institute has established extensive cooperation with scientific institutions both domestically and internationally. This collaboration includes participation in scientific research projects, organization of scientific conferences, exchange and publication of library and informational-documentary materials, as well as the publication of scholarly articles in academic journals. A significant portion of these cooperative activities is focused on military sciences (Šaranović & Milkić, 2024, pp. 159–177). Since its inception, the Institute's researchers have also actively participated in the educational process at various levels of instruction and training within the University of Defense.

The backbone of the Institute's publishing activity is represented by the scientific journals "Vojno delo" and "Vojnoistorijski glasnik". During more than four decades of scientific research, the members of the Institute for Strategic Research published numerous monographs, studies, and collections for the needs of the defense system. The SRI has developed cooperation with scientific institutions in the country and abroad. Cooperation with institutes and faculties in the Republic of Serbia and abroad takes place through participation in scientific research projects, the organization of scientific conferences, the publication and exchange of library and information-documentary material, as well as publication of scientific articles in academic journals. Part of the cooperation activities also

refers to military sciences (Šaranović & Milkić, 2021, pp. 159-177). Since the establishment of the Institute, researchers, in addition to scientific research work, have been involved in the teaching process at various levels of education and training at the University of Defense.

Conclusion

Military science significantly contributes to national security, particularly in the protection of national interests. Research within this discipline facilitates the identification of future trends in the development of weaponry and military equipment, as well as the recognition of the evolving characteristics of contemporary armed conflicts (Topor, 2024, p. 16). Members of the Strategic Research Institute (SRI) have played a pivotal role in the advancement of military science through the execution of numerous research projects and active participation in scientific forums. These efforts have resulted in the publication of a substantial body of scholarly articles and other academic outputs, which have garnered recognition both within the academic community and the broader society.

Military sciences possess a certain degree of predictive capacity; however, this capacity is inherently constrained when compared to the natural sciences, as their subject matter, society and the individual, is characterized by a high degree of variability and instability. In the foreseeable future, a transformation in the role of military and other social sciences appears inevitable, driven by the accelerating dynamics of social change. This transformation is likely to manifest through an increased emphasis on forecasting and prevention, while still maintaining the essential functions of interpreting past and present phenomena or offering practical solutions to contemporary challenges.

Whether by choice or necessity, military and other social and humanistic sciences will be able to maintain their relevance only by moving closer to the natural sciences, not through imitation or competition, but through a commitment to enhancing their societal value. This is vital not only to justify their continued existence but also to ensure their future development and impact. The future of military and other social and humanistic sciences lies in interdisciplinarity, which entails closer collaboration with the natural sciences and the integration of their methodologies and theoretical frameworks. Ultimately, not just the importance, but the very survival of military and other social sciences, particularly the humanities, will depend on their ability to rapidly interpret emerging social challenges, understand their causes and trajectories, and deliver timely and effective solutions (Simeunović, 2024, pp. 34–37).

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