



Artsrun Hovhannisyan, *The Complex/Multilayered Warfare: Summary of Sixth-Generation Warfare*, Yerevan, 2025, “Antares”, 216 p.

By decision of the Academic Council of Vazgen Sargsyan Military Academy of the Ministry of Defense of the Republic of Armenia, a quite remarkable and unique work (both in military science and military strategy theory) by Artsrun Hovhannisyan, Colonel, PhD, Associate Professor, Head of the Commander and Staff Institute named after Marshal Baghramyan of the same academy, has been published: “The Complex/Multilayered Warfare: Summary of Sixth-Generation Warfare.” This and previous works by the author are unique examples for the Armenian-speaking audience (particularly for high-ranking officers, specialists in military science theory, and military art history) for understanding modern wars and strategic concepts.

The publication of the monograph is consistent with the spirit of the reforms gaining momentum in the Armed Forces of the Republic of Armenia. Moreover, this work can serve as a guideline for these reforms. All military science specialists, or non-specialists interested in the history of military art who have delved into the problems of military affairs and art, know that the 20th century, more than any previous century, brought numerous innovative directions in the field of military science. And this work comes to supplement that series. The basis of the work is the author’s unique theory of “Complex/Multilayered” warfare, which he put forward in military science, presented through the prism of simple and complex problems of determinism in military art theory. In confirmation of the above, the author notes in the preface of the work: “The Complex/Multilayered theory is a set of proposals to change the classical coefficients, rules, and tactics of forces and means of war, and to change the forms and methods of military operations” (page 8).

The work consists of an introduction, authored by former Colonel Vahram Grigoryan, a preface, 15 sub-chapters (although the author does not divide the work into chapters), a conclusion, an explanation of abbreviations, and a list of references. To make the problems raised in the monograph more illustrative, diagrams have been used according to the relevant section and problems.

In the first chapter (“Foundations and Connection of Strategy and Military Science,” pages 9-26), the author briefly presents the prerequisites for the development of classical military science in military schools (mainly in the USA in the West and in the USSR and its successor, the Russian Federation, in the East, as well as in the Republic of Armenia, which is interconnected with the latter) and its three main levels. Here, as in his other works, he rightly presents the incompatibility and inefficiency of Soviet-Russian

military science and theory when applied to the physical-geographical area of responsibility of the Armenian Armed Forces. Moreover, he considers the necessity and urgency of reforming the Armenian Armed Forces along the Western path. In this regard, he notes: "Eventually, the Armenian military science school will go this way; there are several reasons for this:

- The demands for mathematical concreteness of the Soviet and its successor Russian school do not correspond to our terrain and other conditions.
- The Russian military science school is not at all the most advanced and often follows Western schools, currently experiencing its difficult times.
- Our national mindset is freer, more creative; in real life, we, nevertheless, act by other rules" (pages 14-15).

In this chapter, the author also presents the main components of modern wars, which he outlines in 11 points (pages 22-23), as well as the three main challenges facing modern armed forces (pages 24-25).

In the next, short chapter ("New Concepts of War in the Digital Age," pages 27-31), the principles of superior-subordinate and subordinate-superior relations of the aforementioned military schools are presented: The "Teach-Trust-Follow" scheme was in operation, which fundamentally differed from the Soviet "Show-Permit-Control" scheme" (page 30). Here again, based on the ethno-psychological, value-based, and worldview starting points of Armenians, the author concludes that these principles of the Russian military school are incompatible with the Armenian Armed Forces and that there is a need to fundamentally change them. In a series of subsequent chapters ("The Role of Precision Weapons and Weapons of Mass Destruction in the Concept of These Wars," pages 32-34, "Electrofiring Battle and Operation," pages 35-41, "Six Rules for Ensuring Air Superiority," pages 42-67, "Network-Centric Operations and War," pages 68-75, and "Network-Platform-Centric and Complex/Multilayered Wars," pages 76-81), the author, in the process of developing his theory, presents the methods of using material and technical means and armaments in military operations conducted by the US and its allies (Vietnam, Afghanistan, Libya, Iraq, etc.), the 44-day Artsakh War, and the Russian-Ukrainian War. Here he notes that in each war, mainly thanks to American military thought, not only the quantity but also the diversity, reliability, and accuracy of the means used increased. Precision means were among the first indicators that classical combined arms battle and military operation were in crisis. Electrofiring battle was born (page 33). The latter, in turn, is a new type of combined arms/combined platform battle. It is a combination of electronic and fire strikes and impacts, although it can also appear separately. Cyber attacks and cyber operations, which some specialists mistakenly call cyber wars, are separate components of electrofiring battle and its higher-level operation (page 38). He also states that all information-psychological work, with its multifaceted and deep sub-layers, which is widely spread today, is merely a sub-level or sub-section of electrofiring battle or its higher level, "Hybrid Wars" (page 39). And electrofiring battle, in its normal, gradual development,

can grow into an electrofiring battle, but at a higher level, it is already called Complex/Multilayered War (page 40).

In the realm of air superiority, he notes that in Russian military culture, the air force is an auxiliary branch of service. These forces always slowly gather their potential and are used passively, which is generally characteristic of the Russian army, but in the case of the air force, its shortcomings are felt more acutely. Implementing reforms in the armed forces based on this viewpoint is dangerous. And it is sadly emphasized that, by the way, the localization of Russian models still continues in Armenia (page 55). This is even though Russian military science today lags behind global developments, where operational art is in decline, merging with the upper and lower echelons (page 57). This is even though during the 44-day war, “Unfortunately, we Armenians also became victims of these non-existent concepts. In the 2020 Artsakh War, the Azerbaijani-Turkish air force won against the Armenian air defense forces” (page 57). And the Ukrainian war, in turn, simply proved once again that there can be no successful ground attack without classical air superiority, especially at the operational and strategic levels (page 63).

As a result of describing multi-layered, complex, and network-platform-centric wars, which are the author’s military-theoretical theories, looking back at the 44-day war, he states: “It turned out that societies, state, and private structures are not ready for long-term conflict. Often, from simple bomb shelters to the lack of necessary reserves of appropriate state reserve means, and the slowness of the mobilization system, serious problems arise for conducting modern wars. Here a very important question arises related to the training of the reserve, particularly in peacetime” (page 79). He then presents the global strategic, economic, political, scientific, sociological, and many other factors that, according to the author, are four (pages 79-80), influencing the degrees and layers of complexity of complex/multilayered wars threatening humanity in the future. Then, the 11 military factors and degrees of complexity (pages 80-81).

In the next chapter (“Measurements, Domains, and Layers of Complex/Multilayered Wars,” pages 82-84), the author presents the main factors of his theory: “The domains or planes of Complex/Multilayered Wars are as follows: land, air, water, space, cyber-virtual, and cognitive, which is more of a dimension than a domain, but we also consider it as a domain. Often, cyber-virtual and cognitive domains are considered as one plane, but we believe it is more correct to consider them separately, as all of this fits into three dimensions: physical (land, air, water, and space), informational (cyber-virtual), and cognitive (conscious)” (page 82). He then presents the starting point of the “Complex/Multilayered War” theory: “The simple layers (of Complex/Multilayered Wars – R. Ts.) are ordinary battles, from the weakest militia units to regular troops, while the most complex layers are electrofiring battles and operations with ultra-modern armaments, robotic systems, and control systems equipped with artificial intelligence and other solutions. One layer of war, regardless of everything, is the special forces

fighting in enemy territory, another layer is the regular army fighting at our border or at important nodal points, the third layer is the militia pursuing the enemy deep in our territory. However, these are only the layers of the land domain. Thus, each domain has its layers, and each dimension has its domains. That is why this war is called complex, and its management requires a super-professional team and systems, which today work much more effectively with artificial intelligence technologies” (pages 83-84).

Developing his theory (The Impact of the “Fourth Industrial Revolution” on Complex/Multilayered War, pages 85-95, New Perceptions and Concepts in Complex/Multilayered War as Layers of Complexity, pages 96-106, Solving Issues of Air Superiority, Precision Weapons, and Other Matters in Complex/Multilayered War, pages 107-116), he notes that in the case of powerful security systems and established institutions of comprehensive security, one of the important tools of complex/multilayered war are precisely these units capable of irregular warfare, which can manifest as high-quality private armies, as well as territorial defense and limited combat-capable militia forces, which will operate under a unified command, within the framework of a general operational concept (page 99).

Future wars, according to the author, can be transitional, hybrid, with an emphasis on irregular combat operations. However, it should be noted that they must be short-lived, because their prolongation becomes regular, albeit new, but regular (page 100). Then, addressing irregular combat operations, he considers them as a retreat from classical combat operations, a new phenomenon, an unusual, irregular form of combat used against classical military machines as an effective option, or conversely, some argue that irregular combat operations are more a type of new generation warfare (page 100).

In the chapter on the military-scientific measurements of complex wars (pages 117-134), 27 factors and components of this war are presented. In point 27, the author states that in future wars, the number of armies will increase, but the highly layered, professional army will be small, while the number of mercenaries, militia, and other formats of relatively low combat-capable troops will be very large. The former will be distinguished not only by fighting better but primarily by entering battle quickly, as the time factor is paramount (page 129). Furthermore, it is strictly necessary that territorial defense forces and militia should be constantly trained, and mobilization should always be carried out in peacetime, as a lot of time is needed for harmonization, since poorly trained reserves cannot be prepared to the required quality and enter battle during intensive combat operations (page 130). At the end of the chapter, the author sadly notes that for many years we were guided by wrong benchmarks in military art and army building, following the already dead Soviet military science and standards. And that it is long overdue to correct everything and carry out fundamental reforms, to create a new army (page 134).

In the chapter “Branches of the Complex Wars: Their Composition and Structure” (pages 135-159), the author covers everything from the continuous self-improvement of

officers and soldiers in line with the times, and the necessary reforms in the educational system, to the types and forms of conducting military operations. As for the branches of the Armed Forces, the author groups them into four main categories: 1. Ground forces (which, in turn, are divided by tasks), 2. Air and space domain forces, 3. Virtual-cyber-cognitive domain forces, and 4. Naval forces (pages 135-136). He then presents their structure by subdivisions (pages 137-140). And as for the Armenian Armed Forces, they must have both a regular force base and units and subdivisions for conducting irregular combat operations, the basis of which, of course, will be special forces (pages 144-145). In the case of the Armenian Armed Forces, for managing complex battles and operations with regular and irregular tactics in the air, on land, underground, in space, and in the virtual-cyber domain, powerful headquarters and a network-platform-centric command system are necessary for the complex structure of branches and force groups (page 145).

The penultimate chapter, titled “Cyber and Cognitive Domains of Complex Warfare” (pages 160-179), again looking back at the Artsakh War, states: “Today we clearly feel this on our skin. After 2003, Azerbaijan adopted an aggressive information-psychological influence policy. We are all witnesses to its forms of expression (hacking websites, social media accounts, changing pictures, etc.). However, that is not the essential point. Azerbaijan began to wage hybrid warfare with its full potential, actively using all its tools: information-psychological, cyber, propaganda, political, economic, and others, achieving great cognitive results. Especially during and immediately after the 44-day war, using a wide range of methods, it achieved the consciousness of Azerbaijani invincibility and Armenian helplessness” (pages 163-164). Examining in detail the cyber and cognitive domains of Complex Warfare, he notes their 3 dimensions and 4 components (pages 168-169), and then the 11 dimensions of cyber operations (pages 175-176). The chapter concludes with the finding that in modern warfare, you cannot achieve victory if, first and foremost, you have not achieved cyber and cognitive superiority over the enemy. Even traditional air superiority in the physical domain first requires cyber advantage (page 179).

In the last chapter, “Hybrid Challenges” (pages 180-187), the author emphasizes that cyber and information security are inextricably linked to hybrid risks. The modern understanding of hybrid warfare, as we mentioned, first and foremost refers to winning by using non-violent methods, imposing your will (page 181). He also notes that information has long since evolved into cyber, cyber, in turn, has long been a large part of hybrid challenges, and all of these, in turn, have long been a large layer of cognitive influences (page 183). And that in the domain of Hybrid Challenges, all branches of service operate, but mainly two branches are constantly and continuously active: cyber forces and special operations command forces (page 183). The author concludes the chapter not with a generalizing paragraph, but with a proposal: “We believe that in our country, a superior departmental body is first needed, which will be directly subordinate to the head of the country, which can be part of the Security Council or operate

separately. However, at the same time, functional bodies for this function must also exist in power agencies and all those agencies and bodies whose activities are to some extent related to the state administration system and the country's security" (page 187).

In the conclusion of the monograph (pages 188-191), the author, speaking about strategic issues, the educational level of military personnel, and the continuous improvement of their skills and abilities, generalizes his quite remarkable theory.

In summary, it is necessary to note that the author mainly used the historical-comparative analysis method, which contributed to demonstrating a correct scientific approach.

Within the scope of the topic, the author diligently collected and presented all available materials (pages 194-215).

Generalizing the above, we find that this new theory of "Complex/Multilayered Wars" opens a new horizon in the history of the upward development of military science. It is an entirely new word in Armenian-language military-scientific literature. And we are confident that as a result of the continuous development of the theory, a new chapter will open in the history of military science and military art. We hope and it is highly necessary that in the future, the author's theory of "Complex/Multilayered Wars" will be published as a separate article in the best periodicals in the field included in the list of international scientific databases or as a revised monograph by one of the international reputable publishers.

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