THE FUTURE WAR – A CONTEMPORARY MILITARY PHENOMENON IN THE LIGHT OF CRITICAL INFRASTRUCTURE

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Abstract: The idea of developing this article started from the need to present a unified and coherent conception of the fundamental problem of informational war as contemporary military phenomenon. In this article we will present topics such as: the emergence and development of future concepts of war; features of contemporary military phenomenon from the perspective of critical infrastructure; War concept works type social conflict. Capable of international bodies (UN, EU, NATO, OSCE, CSTO, SCO, etc.) to face new challenges such as network warfare, transnational organized crime, terrorism information, proliferation of weapons of mass destruction, to name just a few of the great dangers that could throw humanity into chaos and anarchy? Old tools can be effective (the system of international humanitarian law, intelligence, counterintelligence and security) to restore peace and prosperity of the peoples and nations of the world? Here are a few questions that bothers civil society alongside community politicians, the military, and not least the secret frontline protagonists. Of course every interrogation in part could be a separate research and meditation. A treat them together, mean an effort synthesis of all that is, or should be linked to the issue, so complex security. The approach is circumscribed efforts that have been made in recent years to develop a new conception of theoretical and practical future war as a phenomenon of the contemporary military and valorization of designed, they play an extremely important role in informing, but also in the formation of which it intends to deepen further this area.

Key words: future war, weapons of war, contemporary military phenomenon, critical infrastructure, war-type social conflict, war industrialization, vector power.

1. Introduction

After 1989, the world has designed a new strategic situation with a high degree of complexity and in this context the issue of military action is analyzed from different angles and points of view from different angles, trying to highlight the more significant lessons from conducting wars older or more recent lessons that can be the basis of deciphering the laws and regulations that take into account the current and especially future conflicts in order to achieve success against the opponent.

The beginning of the century and millennium, highlights the new conception of waging military conflicts. The phenomenon of modern military that using all means in an armed confrontation, give increasingly more new battle physiognomy and operation as critical infrastructure.
Modern army confrontation will look increasingly integrated, the battlefield being characterized by new dimensions and traits that are found in discontinuous fronts, speed in organization, planning and execution of maneuvers, hitting simultaneous targets, both in contact and in depth. Current improvements of military equipment, is a result and also a kind of continuation in military technological advancement of the natural sciences: modern physics, mathematics, astrology, chemistry, cybernetics, electronics and other sciences that have found specific applications in the military.

So, the war of the future based on critical infrastructure, provides for certain improvement of certain categories of weapons systems, high destructive power capable of operating in the four media confrontation to hit targets at great distances in a short time and with maximum precision in any conditions of time, seasons and weather conditions.

1.1. Definition

The trends of the military are given by law to manifest violence without limits, actually "use of physical violence - says Clausewitz - in all its magnitude (...) must obtain a superiority if the opponent does not. By this he requires the other to law and thus both are even further to the extreme, but may be other inherent limitations than those of counterweights."

In certain stages and moments, trends are evidenced by facts and events as qualitative moments which to dress in military phenomenon evolution. Facts and events are political, economic, scientific, social, etc. This mode makes the phenomenon a certain stage or moment not to be identical to a last step or the next.

1.2. Features of the contemporary military phenomenon

Regardless of qualitative moments that you put on the military phenomenon, a time or another, the overall trends are the same. An overview of the military points out that:

- Natural tendencies absolutely oppose the war factors (political, economic, moral, religious, etc.) which, depending on the situation and circumstances, oppose lifting the extreme violence in armed struggle;
- Subordination of the military political goal: violence, brute force, as the main element of power was, is and will be an instrument for promoting and imposing political goal;
- Military phenomenon is manifested primarily through armed struggle which is a specific type of social action that aims disruption of enemy action system, capturing or destroying it;
- The use of violence in all its magnitude requires to get superiority over the opponent, using intelligence, i.e. a high rationality of action, which involves the invention of tools becoming more "intelligent" and a normalization accordingly so as to minimize direct intervention fighter in the armed struggle, turning it into "the fight supervisor interventionist" with a longing for a "pure supervision";
- Military phenomenon tends to form structures designed to confer the ability to behave as a phenomenon totalizing subordination of all natural resources, human and material of social actions and institutions corresponding to impose some order military social system, understood as "... all activities, connections and processes that give content and purpose military sphere development in the world generating some pyramid of power, domination and subordination system, a network of hierarchical dependencies and control structure based on manipulating force
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armed (in all its determinations), embody contemporary international relations.”

[1] Order military is characterized by the relations between the main centers of power which are competitive and, because of its nature global, adversity is transmitted or is manifested by numerous other subjects of international life levels and in various areas. This trend is negated by the redistribution of power, the multiplying power centers in the ongoing domestic and international life;

- As a manifestation of paroxysmal violence, military phenomenon is established as a "major constituent or even as a single element of security" [2], the balance within a social system or state or global in nature. The presence and share in the balance of power leads to changes in the military balance security. The security equation - the military, the latter determines most cases, security syndrome. This syndrome is caused by those powers that nobody could to abolish national independence and sovereignty, and therefore, they are, as noted Karl Deutsch "those who spend the utmost money, labor, resources, efforts pursuit of what governments, elites and people consider their national security." But that observes the same author, does is to undergo a"... as applied Parkinson law of national security; a nation's sense of insecurity increases with power [3]. Although state security depends, ultimately, military power, increases with increasing insecurity was.

21st century shows that insecurity syndrome is moving exclusively from the military to the economic. Resources - raw materials, primary sources of energy, food, water etc are essential to national security strategies, but especially to the global ones. The Military phenomenon still remains a potential and really power vector in achieving national security and global strategies.

1.3. War specific type of social conflict

The ending of the Second World War and the beginning of a new period in human history formulates for the military phenomenon unprecedented requires and claims new military roles. The advent of nuclear weapons, equipped with the means for carrying the target (intercontinental missiles, cruise missiles, bombers, submarines, platforms space), the acceleration of growth in military spending by launching programs on which will be developed and introduced new weapons, massive militarization of science etc. created to expand the availability of spectrum halves war.

Nuclear weapons began to be judged as "weapons of war" and their operation should be defined by the doctrine-strategic concepts directly related to wearing and winning the war. The war was expected to be held, and military conflicts postwar took place under the umbrella of "equilibrium theory" (strategic concepts "Massive retaliation", "Retorted graduated," "Controlled response", "Destruction of mutually assured", "Nuclear options limited" "Essential equivalence", etc.), nuclear deterrence, a trend that manifested itself in the late twentieth century, and in this century. Technological improvement - including typological diversification - nuclear weapons have led to military theorists and political scientists consider less viable recourse to nuclear weapons for crisis management and resolution about violent international disputes. "The new weapons were so destructive" - Professor Steven J. Zolga shows - that it seemed inconceivable that any city or people to resist the ravages caused by them in a war that indubitable leads to death. In less than a century, the weapons have evolved from cannons loaded at the breech, which target a few yards and destroying everything within a distance of a few yards from the place of impact, rockets thermonuclear capable of hitting thousands of miles and to destroy entire cities. Attacking cities had the effect that civilians could now be, as much as soldiers, victims of new technologies of war [4].
The massive militarization of science, both those who study the substance and of the Humanities, led to the "industrialization of war". The vital role of military industries in creating and sustaining military power grew up, the economic centers of the enemy were turned in vital goals for new weapons. If today there are differences of opinion on the importance of the bombing industrial targets in winning the Second World War, the development of nuclear weapons ended the dispute on the ultimate effectiveness of strategic air supremacy. Technological leaps whose beginnings them is launching for the first time in the space of an artificial satellite by the Soviets - PS Sputnic on October 4, 1957 - Now that the writers "Assault cosmos began", and the US was a kind the "Pearl Harbor" technological [5], war and the cosmos expanded. It is recognized that in space there is no national sovereignty and also the race for invulnerability gained new qualitative dimensions. On the other hand, the militarization of science to print another feature of postwar military conflicts, the cumulative. On the other hand, science militarization enfaced another feature of postwar military conflicts, the cumulative one. The postwar period brought a real "confusion" between peace and war, the ambiguity of state that was once defined as "silent weapons". While "peace" humanity has been confronted with massive use of force or was spoken, which is now more explicit, for example, psychological warfare, economic warfare, ideological, informational etc. It is not a matter of semantics, but a real phenomenon of the proliferation of war, the multiplying presence - in various forms - armed violence in society, and relations between states.

Most of the postwar period was dominated by that of the Cold War, in which peace can be truly regarded as a kind of "continuation of the conflict with (somewhat) other means" is an eloquent expression of this reality. Its existence cannot be questioned even now, when we speak of the beginning of detente era anachronism or logic of confrontation. Military phenomenon has made its presence felt by many facts, namely: keeping the millions under arms, which once unthinkable in peacetime; obstinate proliferation of structures "live" from preparing or waging war and subordination by the military has new sectors of public life: the arms race, preservation of hotbeds of tension in various parts of the world; use "unofficial" without a declaration of war and sometimes later became known to the public, the provisional closure of almost all conflicts etc.

Analysis allows military activities to highlight the remarkable increase in the frequency and intensity as a classic war, the number of conflicts, the size of the forces involved, the geographical area covered and the number of countries involved, its human and material costs. All these aspects make its appearance on a new type of large-scale armed conflict: local prolonged conflict. Proliferated in the shadow of "equilibrium theory" led means "traditional" kind of war did three decades and nearly as many victims in the last world conflagration; the consequences as they do not confined to a particular region of the globe but the structure of indivisible the world today, can degenerate, affecting the entire balance climbing world.

The evolution of nuclear weapons has determined that military action planned to take place in the main theaters of military action (especially in theaters of military actions in Europe) be subordinated to the strategic nuclear doctrines developed by the two great powers of the moment U.S. military and U.R.S.S. both as independent political and military powers and by two military-political blocs built by them: NATO and the Warsaw Pact. Strategic technology programs have brought substantial changes in the organization and composition of the different categories of armed forces and weapons. Spectacular jump is recorded on how the decision making is done. Both the cibernetization and mathematization of the decision-making process increased the effectiveness of a high streamlining vertically and horizontally leadership.
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In the postwar era, war scenarios of the two superpowers politico-military, depicting the full range of nuclear weapons use and deployment of large formations of tanks advancing on a carpet in the supreme nuclear and chemical war of attrition. The relationship between the superpowers was dominated by nuclear weapons of mass destruction and power at an absolute level. In the race to increase the scale, speed and strength weapons destruction, limits were achieved supreme in every way practical. "Development of modern war - war industrial era - said A. Toffler, reached the final contradiction. This will require a revolution to reflect new economic and technological forces released by the Third Wave of Changes" [6].

1.4. Future war: Improve traditional actions; The evolution of the traditional actions.

The new dimension of the scientific and technical revolution is changing the way of attaining wealth. Knowledge is inexhaustible and also the object of labor and wealth based training. Ability to acquire, generate, distribute and implement strategic and operational knowledge are intangible values.

On the background of fundamental transformations driven by knowledge decays entire structure of world power that kept assembled and arises a new structure of power radical referred to the phenomenon that happens at all levels of human society. Structural violence takes other subtler guises, tending to become the holistic nature. Office, supermarket, bank, administrative offices, churches, hospitals, schools and homes, old patterns of power is split along lines strange [7].

This old-style breaking of authority in business and everyday life is accelerating even now, when global power structures disintegrate themselves. We have reason to believe that the forces which presently shakes at all levels of human power will become more intense and pervasive in the coming years. From this massive restructuring of power relations, like movement and friction of tectonic plates before an earthquake will come one of the rare moments of human history: a revolution in the nature of power. A "power-shift" is not only the transfer of power. A converted [8].

The emergence of new centers of regional power with growing global influence, is another trait of the manifestation of power. The world slips gradually and safely towards a multipolar configuration where superpowers are far from being a factor in the overall global relations. The vector of power - military factor (violence) - ceases to be the preserve of the two superpowers USA and Russia. The new centers of power - China, Japan, Germany, Europe, with its Franco-German motor, Iran and countries emerging power centers as India, Brazil, Nigeria - advertising management right from the military factor in the decision. In these circumstances the use of military factor in the hot areas of the world are "democratized". The new power centers will participate, depending on the immediate or strategic interests and in different proportions for crisis management (coalition). Multinational coalition, whose leader was the US against Iraq, the crisis in the Persian Gulf (1990, 1991 and 2003) involving NATO and other centers of power in the conflict in the former Yugoslavia and Afghanistan and other places tension and military conflict marks the beginning of democratization military factor and making it available to international organizations and bodies and international courts created term.

In the future, violence becomes increasingly dependent on knowledge intensive technologies, such as microelectronics, advanced materials, optics, artificial intelligence, satellites, telecommunications, and software simulations performed. The phenomenon military, military force in particular proves its hyper-violence. Gaps left by the dissolution
of bipolarize are filled by other nations. They became big buyer of high technology to achieve the ambitious programs destructive acquisition of powerful capabilities. Designing and performed installations for the production of nuclear, chemical and bacteriological and vectors to target transport, which makes the distribution of these weapons in the world cannot be fixed or stable.

The De-monopolizing of nuclear weapons and conventional weapons modernization opened a fierce battle microelectronics and optoelectronics market for the acquisition of equipment and components needed to dramatically improving accuracy. It is estimated that if the countries producing components of artificial intelligence would cease selling them to major nuclear powers could give rise to unforeseen circumstances. Referring to the needs of the US advanced technology semiconductor manufacturing Japanese Shintaro Ishihara, a former Cabinet member in Japan, show in a paper "Japan that can say no" (1989), that: 'It was where no matter how much the continuing military expansion, if Japan would cease to sell the chips would not do anything. If, for example, Japan would sell the Soviet Union (now Russia a.c.) and would cease to sell them Americans, this would change the military balance across; Some soldiers say whether Japan would think to do that would be occupied. Definitely, we live in times when it can reach even up there." [9].

Transformations of power situation requires a revolution in military thinking, a revolution that reflects the new economic and technological forces developed by the Third Wave. Science and communication will not clear 21st century. This is the new power A. Toffler says. Intelligent tools produce smart weapons. Nothing demonstrates better than what took place in 1991 Persian Gulf War, which can be characterized as a "war of the mind (spirit) against the matter".

War changes its physiognomy namely: concept, typology, the paradigm of strategic doctrines, actions (preparation of troops, weapons and technical leadership warfare, forms and techniques of fighting etc). Theaters of military operations of the last decade of the twentieth and early twenty-first century can appreciate that became phrase leaps from armed mass task forces supple and systems classical weapons systems that confrontation is not only forces and means but also military systems. In fact, the Gulf War - appreciate Newt Gingrich - the world witnessed the first war between the military systems of the Third Wave and Second Wave of a machine. Operation "Desert Storm" was the annihilation of Iraqis by the Americans and their allies, largely because systems Third Wave proved simply overwhelming. Antiaircraft systems very sophisticated, own of the Second Wave, they have been of no use in dealing with aircraft imperceptible Third Wave. Armies in the trenches of the Second Wave were simply outdated and dismantled before targeting systems and logistics Third Wave. The result was a campaign as crucial as defeating the forces of the Mahdi genre's First Wave of Omdurman by Anglo-Egyptian Army Second Wave in 1989 [10]. Conduct of the war was entirely reversed.

Future war as critical infrastructure will become essential and will change the whole nature of belligerence, namely:

- causes movement of military conflicts in the real (economic) towards the ethnic and religious mainly the Enemy no longer considered "alien" that cannot communicate through language, but relatives, friends, the speaker of the same language or dialect; more precisely, it can be said that in the economic area, the conflict has passed in the moral-religious, then the ideology, and today, in emptiness moral and ideological, is introduced ethnic racially and the religious (inter and inter-confessional);

- Passing from a brutal use of force in subtler ways: armed interventions to support or installing a constitutional regime or not, favorable politico-
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military interventionist power; imposing or maintaining peace; blockades etc. In other words, the emergence of new types of military operations against the classical other than war;

- Combining classic type with new types of aggression: aggression economic, cultural, psychological, religious, computer; information, among which the symbolic plays an important role. Information warfare has become a reality in a world consumption of signs and symbols. In fact, this type of warfare can be defined as the conquest and mastery of mind by signs, symbols and consensus on their meaning; It will be a war of civilizations and not a war of cultures. It will be a total and absolute war, since the target is the entire population of a state, and the aim is, as the target is the entire population of a state, and the aim is, ultimately, changing attitudes and values system. Actually battlefield will be the world we think;

- The armed forces, military assets retain their role as "the best solution" that a political and military power to impose its interests to restore or maintain political order, to enforce or maintain peace in the relevant area. The new army being built now will have to change their orientation space with an orientation to time, taking action shaping force to match current and future imperatives. A feature will be fundamental in the future, namely, professionalism, which will increase the value of employment, based on competence and responsibility;

- The adequacy of military doctrines in order to increase the ability to project power over long distances, higher speed, focusing on operations conjugate between various services, multinational operations, simultaneous attacks synchronized control of the execution while their real and tempo battles and the further development of the initiative and a greater confidence in the quality soldiers. The military doctrine - noted A. Toffler - continues to change in all armies of the world. But if you listen carefully, whether the terms formulated in Chinese or Italian, French or Russian, the central themes remain those of the fight Aero-Terrestrial and Operations Aero-land, the ability to see deep, a fact completely accomplished after the publication of doctrine US revised "Aero Battle Ground" in 1986, which focused on operational art. The new military doctrine retains the role of nuclear weapons and threat deterrence. The basic aim of nuclear forces N.A.T.O. - Shown in documents Alliance - remains political: preserve peace and avoid war or any kind of coercion. Are designed and introduced new technologies, high-tech weapons that defy old military doctrine. Placing them on the battlefield have emerged as part of the new doctrine to focus on close coordination between ground and air, kicks in depth to prevent echelons one, two and next to arrive in theater and most significantly - the using new technology to hit the targets previously assigned to nuclear weapons [11]. This reduces the risk of nuclear confrontation;

- Military action, fighting in particular, will differ greatly from those in the Second World War and postwar military conflicts. Today and into the future, military action is individualized relative to the postwar through: the scale of time and space, force and special means, complexity, intensity, sudden change situations at all levels; warfare will result in all environments on land, water, air, underwater and in space; the use of forces and means diversified with specific technical and tactical superior having high mobility, firepower, beating precision, effect increased destruction and wreckage context in which capturing technology and taking action to prevent it will continue to play a role important; shares with a particularly maneuver
insisting particularly on the surround and return; high consumption of ammunition, fuel and other materials, destruction ways and communications nodes, works of art and huge population displacement on ethnic, religious etc.; tend, in most cases, to avoid direct confrontations, front, the actions taken by small parties, with great firepower, relative autonomy in action through a variety of methods tactical, particularly in the wings at intervals and in depth enemy device, where and when he least expects; combat engagement of true professionals with high physical and mental qualities, able to employ complex actions, quick and great violence, under varying terrain, climate, season, day and night; achieving a balance between an outstanding level of training and equipping weapons and combat equipment, systems and peripherals. Are outlined in various studies carried out by military experts, the new features of operation and battle as: asymmetrical actions, mobility, adaptability, decentralization, maneuverability, flexibility, simultaneity, continuity, high rate action, modularity, digitalization, force amplification striking et.a.

- Success on the battlefield and in the future will be based on sound and rigorous organization and preparation of actions in the smallest details, and standardization on a clear, precise and flexible. In this sense, the armies of almost all the developed countries in Europe, North America, Middle East and Asia have intensified concerns for developing new regulations to fight in agreement with the strategic objectives, the development of modern technology and organizational structures adopted or the adoption of new concepts to project military force and in other media than war and with that today and in the future action of the commanders on the highest step down the military hierarchy is consistent with the policy objectives in conflict by the authority at the highest level. Beyond any speculation that military action is done in theory, military action today is facing a new way to rule;

- Battlefield of future military action will be quite different so far. A series of studies on the battlefield of the 2000s or "war of Third Wave" have introduced the concepts of "expanded field magnifying glass." Concept traditional (linear) that there is a front and depth, will follow a battlefield extended (three-dimensional), where no zones will prevent precise and destructive attacks. Extending the battlefield in time, space and purpose all available resources will require a variety of options in decision making, decentralization of implementation, access to information, civil-military relations, the capacity to manage post-conflict situation etc.

2. Conclusion

Certainly, the future war as a military phenomenon evolves with the evolution of postmodern society. The transition period will be marked by many conflicts where the armed forces’ doctrines, structures and equipment company specific information word order will prevail. Asymmetrical reactions to modern military actions are likely to endure for long, taking place to classical military conflicts.

Reactions to modern asymmetrical military actions rephrase
I believe that contemporary military phenomenon has highlighted the integrated nature, land and aero-naval military actions, demonstrating that use of all resources,
specialties and military means in a modern confrontation leads to victory in the battlefield of the future.

Note that one of the particular implications of military phenomenon evolution upon military actions physiognomy is reflected in the speed of response and action necessary under current conditions. High rate of change in the modern battlefield requires a short time for information, decision and action. This requirement involves the development of complex systems research, monitoring and impact that human intervention is minimal.

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