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# «COGNITIVE WARS»: FEATURES OF THE GEOPOLITICAL CONFLICT IN 21<sup>st</sup> CENTURY

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### *Abstract*

The article is based on the analysis of the current state and development trends of cognitive warfare and their influence on ensuring national security and defence, taking into account the peculiarities of the high-tech development of mankind. The author analyzes current scientific reports related to the problem of information warfare and cognitive wars. The aspects that influence the growing number of threats and risks of informational, cyber and cognitive destructive impacts on high-tech systems through cyberspace in modern conditions and their transformation are studied. The main conclusion of the article is that in conditions of global instability, the main aspect of the global confrontation between strategic rivals will be the struggle for human consciousness and the formatting of the world, through the impact on the field of perception. The author makes the assumption, that proceeding from the impossibility of a global kinetic collision, the main type of rivalry between the superpowers will be the struggle for the information space.

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**Keywords:** Information technology information war cognitive war cognitive confrontation; hybrid war cognitive sphere.



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## **1. Introduction**

With the increasing globalization, socially active citizens spend a lot of time in a technologically created virtual world and transfer a number of characteristics to the real world. Telecommunications and Informatization are considered in the context of international security, and the term "information war" itself, which may have become a favorite technique for defining any battles in a virtual environment, is important for consideration in the classical sense – the basic one: Military confrontation for the mastery of command and control functions; confrontation between intelligence and counterintelligence; confrontation in the electronic sphere; psychological operations; organized hacker attacks on information systems; information and economic wars for control over the trade in information products and mastering the information necessary to overcome competitors; cyber wars in virtual space.

The analysis of the changes in the geopolitical and geostrategic environment shows the manifestations of fundamentally new trends in the formation of the future picture of the world. Its state and development are significantly influenced by new phenomena in the philosophy of war, which are based on innovative achievements of information and other high technologies, as well as traditional and radically new methods, forms and techniques of achieving the goals of conflicts of various intensities (including armed ones). Practice shows that in most countries of the world, in order to timely respond to the challenges and threats of today and ensure their future prevention, deterrence, and neutralization, the defense sector of states includes two main components: deterrence potential, as well as cyber military and other high-tech forces and means. Their effective actions in accordance with the set goals and objectives are synchronized, controlled and implemented within the framework of a single information and battle space based on the use of cybernetic systems and information technologies.

## **2. Problem Statement**

In terms of increasing global instability, the competition for human consciousness is the most relevant problem of political confrontation between leading powers. It is understood that the presence of nuclear weapons makes a large-scale conflict impossible at this stage of global peace development, due to the impossibility of consolidation of victory conditions for one of the parties. As a result of this, it is required to look for alternative ways of combating the enemy.

Those areas of public life that were previously seen as a mechanism for the humanization of international relations and the key to the dialogue between different cultures and peoples are now considered as a mechanism of political influence with the aim of influencing the moral spirit, cohesion and national consciousness of a potential adversary.

## **3. Research Questions**

In March 2019 The British Guardian newspaper published an article by journalist Damien Gayle, under the headline "the British military turns to universities to study psychological warfare." In it, the author announced information about the leaked documents of the defense science and technology laboratory (DSTL), a division of the British Ministry of defense. The documents showed that the laboratory staff

turned to British universities in order to recruit theologians, psychologists, and philosophers to conduct new methods of psychological warfare.

Earlier, the Vice-President of the center for strategic studies in Washington (CSIS), Lewis (2018), released a report "the Cognitive effect and conflict of States in cyberspace", in which the author discussed the possibility of cyber attacks not on the infrastructure of a potential enemy, but on its areas of perception, by destroying symbolic images of the nation (p. 2).

In a similar vein, the authors of the report "RAND Corporation" - a strategic center working on orders from the US government, "" the Will of the nation to fight. Why some States fight and others don't", trying to determine what actually determines the will of the nation to resist. The authors note that a strong national unity around symbols, as well as around political leaders, and trust in political leaders is an essential component of the will to fight.

Finally, we should mention the term "sharp power" that has appeared in scientific discourse, a concept developed by Walker and Ludwig (2017), which is a form of foreign policy activity that involves the use of means to manipulate public opinion in other countries and aimed at undermining their political systems.

These studies, though written far apart from each other they have one thing in common: they all relate in some aspect of conducting psychological warfare and ideas of mind control and opinion of a person or a large mass of people through the initiation of a certain psychic-emotional reactions: fear, pain, pleasure, anger, etc. For this reason, it is needed to identify the circumstances and factors of cognitive war.

#### **4. Purpose of the Study**

The purpose of the study is to identify based on the analysis and research of the current state and trends of cognitive warfare the features of cognitive, cybernetic and conventional wars in the 21st century and determine the tactics to be chosen by Russia to not only win them but also ensure sustainable development.

#### **5. Research Methods**

The theoretical and methodological base of the study is the works of political scientists, philosophers, scientists in the field of international relations, information wars, psychology and international security in terms of the issues under consideration. The research materials include a number of reports from analytic centers related to security, information warfare and cognitive impact (Lewis, 2018).

The authors apply such general scientific methods as induction and deduction, comparison, analogy, description and explanation, synthesis and analysis, the use of which allows a comprehensive study of the causes of the transformation of military strategy in the 21st century and the introduction of the exclusive role of the cognitive component in the geopolitical confrontation of the 21st century. The article is based on the hypothetical-deductive method, historical, evolutionary and systems approaches, as well as on the methods of conceptual modeling and forecasting to assess the prospects for the development of cognitive warfare.

## 6. Findings

Today it has become apparent that peace achieved as a result of a global war using nuclear weapons will not be comfortable. Today, nuclear deterrence has become a major factor in global security.

As the honorary representative of the Council on Foreign Defense Policy Karaganov notes, “The world lives objectively and will live in a pre-war state for a long time. In this situation, reliance on nuclear deterrence is a salvation. It is worth telling ourselves and the world the truth: we will not survive without nuclear weapons, no matter how dangerous it may be”.

Such a pre-war state is introduced in the world by the United States, which is being pushed by imperial egoism, the growth of Russia and China, and the transformation of Europe from an ally into a competitor. The United States is objectively losing its hegemony and trying to maintain the opportunity for American corporations to make a profit trying to restrain the development of all other countries, not only through economic and political pressure but also by influencing the consciousness of the enemy, while avoiding direct military confrontation, since Russia is able to inflict unacceptable damage to them, and therefore the probability of a nuclear conflict is low – the war will be of different nature.

In conditions of such a war, it is required first of all to destroy the enemy’s will to resist, and then take control of the vitally important sectors of government, placing the loyal people in key positions. After that, “dangerous objects” must be destroyed with targeted attacks, using limited-power weapons or the weakened enemy must be forced to do this.

Such a struggle is called "cognitive wars" - wars of knowledge and meanings, as the philosopher-anthropologist Vladimir Lepekhin argues (Lepekhin, 2016), or, as ukrainian theorist in the field of communication technologies, strategy issues, information wars Georgy Pocheptsov (2016) adds, the formatting of the world through one or another version of knowledge, that is, through interventions in science and education.

But not only in science and education, but also intervention in human consciousness". The purpose of such a war is to influence the morale of the population and the cohesion of the nation, undermine the political stability, reduce the will to resist and, ultimately, turn a potential adversary into a fail-state on the model. The demoralization of society will guarantee the absence of a nuclear response and a quick victory in the global confrontation.

Leading experts in the field of military art note that achieving the goal in military conflicts of the present and especially the future fully depends on the development of breakthrough and high technologies in the state and targeted system implementation, and the use of their products in the field of national security and defense. The participants in modern military conflicts have a steady tendency to use both experimental and serial high-tech weapons and military equipment, as well as the innovative technologies for their management (Ksenofontov, 2018). Moreover, usually such funds provide a decisive influence on the course and results of the conflict, even if they are not used massively.

Psychological warfare is not a new phenomenon. Its appearance falls on the years of the First World War. It was then that its principles and methods were developed. However, in the period of the 20th century, psychological warfare was rather an addition to the classical war of tanks, guns and blitzkriegs and was not considered as an independent phenomenon. Currently, the situation has changed. This happened for two reasons.

First, globalization has changed the nature of international conflicts and world politics, making it more accessible to the common people. Due to the scientific and technological revolution, world politics has ceased to be the work of the few.

Second, there came the understanding that the presence of modern types of weapons of mass destruction, makes impossible a unilateral nuclear blitzkrieg. In conditions when the world is transformed from monocentric to polycentric, the character of international confrontation is changing. The wars of the 21st century are not the wars of tank blitzkriegs and armadas of warcraft, on the contrary, they are primarily the wars of meanings and ideas. Therefore, the operations will be carried out not to capture the cities, but to form and replace human identities, both of domestic and foreign nations. Such operations will be many times cheaper, and most importantly safer for the attacking party, since by manipulating the human mind, the attacking party acts below the threshold for the use of force, respectively, without the risk of open war.

Now turn to the article published in *The Guardian*. The documents cited by the journalists say that the main goals of the project of the Laboratory for Defense Science and Technology are: “understanding and influencing people's behaviour”, in particular, through “targeted manipulation of information” and “coordinated use of the full range of national capabilities including military, non-military, open and hidden”. According to the documents of Cambridge University, this program will include “testing, refining and verification of working concepts, tools, techniques and methods to analyze the audience in order to inform about the planning of the relevant activities, their implementation and performance measurement”.

What is “understanding and influencing human behaviour”? Actually, this is a replacement of ideas that are responsible for the individual's behaviour, for his or her mental stability, ability to cohesion, the will to counteract and reflect, and possibility not merely to influence the individual's perception by manipulating his or her behavioural characteristics, but to change the consciousness of the nation by influencing history, culture and education, changing the future of the nation as a result.

An example: a person always knew that it was required to cross the road to the green light, and he always did so, but then he or she changed his/her mind and decided that it was required to cross the road to the red light, because certain pre-existing little constructs had formed a different behavior of this person, which is especially noticeable in the state of the crowd.

It will be appropriate to recall the French philosopher Gustave Le Bon, who studied the phenomenon of the crowd. Le Bon's idea is that when we people in a crowd, their individual thoughts, feelings and desires disappear under the pressure of that crowd. Then the will of this crowd prevails over everything else. Le Bon argued that, due to the volitional underdevelopment and low intellectual level of large masses of people, they are governed by unconscious instincts, especially when a person is in a crowd. There is a decrease in the level of intelligence, responsibility, independence, and criticality are falling, the personality as such disappears.

The presence of an effective control system of forces and means that operate in cyberspace provides an informational, cybernetic and cognitive advantage over the enemy and will contribute to the practical implementation of the “start defense” concept adopted by NATO countries, the key elements of which are high-tech personnel training and a balanced combination of the most effective aspects strategies “hard power” and “soft power”, through a balanced and coordinated use of the instrumentation of strategic communication, sanctions, persuasion and the use of force and other influences in a way that is most cost-

effective and has political and social legitimacy (Bagdasaryan, 2020). This is the phenomenon of sharp power.

Lewis (2018) points out that in the modern environment, the attacks on infrastructure are useless since they are unlikely to be able to deliver a crushing blow, but they can make the enemy angry. The manipulation of knowledge and opinions would be much more effective, according to Lewis.

The goal “is not a kinetic effect (achieved with shells and bombs), but a cognitive effect, in other words, manipulating information to change thoughts and behaviour. In fact, the strategic goal is to influence morale, cohesion, political stability and, ultimately, to reduce the opponent’s will to counteract. Cognitive operations make it possible to manipulate information and opinions in such a way as to have a coercive or disruptive effect, without the risk of open war, and the situation would remain below the threshold of “use of force” to reduce the risk of armed conflict or its escalation. (p.20)

In other words, there is an intervention in the human mind, aimed at the destruction of the value matrix. The object of such an intervention, which can be called a cognitive attack, are those areas of public life that are directly related to the formation of an individual’s identity, such as: history, culture, religion. In recent years, sports have become one of these areas.

The features of cognitive wars are:

- the transition from command and control of troops and weapons to the control of armed struggle, which is based on the cybernetic-cyclic concepts of action and the principle – intelligence, decision-making, defeat (Bagdasaryan, 2020).

- the formation and use in zones (areas) where the conventional actions of situational reconnaissance and strike systems take place, which, on the basis of existing systems and control and communications tools, combine available reconnaissance and destruction means into a single system;

- the emergence of a single combat space (operations space) with new characteristics: non-linearity, the absence in the traditional sense of the front, flank, rear, distribution simultaneously with integration and multidimensionality;

- transfer of the main load of actions (armed struggle) into cybernetic, cognitive and aerospace space;
- informational, psychological, cognitive, cybernetic actions become an integral and predominant component of military operations;

- the availability of all elements of the combat space of all participants in the actions;

- the dynamism of changing the spatial scale of conflicts, the possibility of their rapid development of the local to the global level, covering both individual regions and the entire territory of the state;

- the conduct of hostilities remotely;

- the robotization of weapons of war, the withdrawal of man from the battlefield;

- participation in the conflict of diverse forces and assets combined into combat modules and systems;

- the creation of coalitions at the strategic level, and at the operational level – groupings and tactical groups with given abilities and functionality to conduct operations for a specific purpose;

- an increase in the role and expansion of the use of special operations forces;
- the increase in the number of irregular and private armed formations and their influence on the course and results of hostilities;
- the conduct of the actions in the zones (areas) with a high degree of urbanization;
- the increase in the asymmetry in the nature of hostilities;
- the transition to adaptive forms and methods of warfare (Fedorov, 2018).

The world has changed. The presence of not only nuclear but also hypersonic weapons makes a military conflict pointless, both from ideological and strategic points of view, and due to a change in the world, the methods and actors of strategic rivalry are changing. The financial elite can no longer provide its hegemony in a rapidly globalizing world. The globalization privatized by the elite, which the elite hoped to put at their service, turned out to be its biggest enemy. Today it is no longer possible to come to the natives and buy gold for beads. Those days are long gone, since the once colonized themselves already mastered the skills and technologies of the former colonizers. Therefore, the goal of strategic rivalry of the 21st century is the struggle for human consciousness. Today not shells, bombs and missiles come to the fore, but the operations to create a cognitive effect and to shape the thinking of opponents and neutrals. This constitutes the phenomenon of cognitive power.

Lewis (2018) claims that: We live in a post-Yalta world, and this has wide implications for policymaking. Until 1945, the governments played a more strictly defined role both domestically and internationally. Some countries would prefer to return to this traditional definition of sovereignty, where universal rights are less important. The Western model of governance, based on representative, parliamentary democracy and related education standards, no longer ensures the consent of the governed. (p.9)

## **7. Conclusion**

The practice of armed conflicts of recent decades reasonably indicates that in modern warfare, the one who adopts the new technologies and implements them faster wins. The latest information technologies today are turning into a system-forming factor in modern warfare. Due to their use, the number of possible scenarios for resolving and conducting armed conflicts significantly increases, and detailed planning and forecasting of their consequences in all sectors (political, economic, military, etc.) are provided.

The high degree of integration and synergy of the actions of forces and means, which is achieved by creating a single information space of the force grouping in the conflict area, significantly increases the effectiveness of their use. Nowadays, the cyberspace has turned into a separate battlefield, where diverse incidents constantly occur. According to the goals, objectives, forms, and methods of ensuring cognition, in the military sphere, the forces and means involved in this, typical structures of governing bodies have been formed by now. A peculiarity in their formation was the combination in one structure of various activities related to each other by the ultimate goal.

Thus, the constant increase in the number of threats, incidents and the increasing influence on the population through cognitive warfare requires a combination of information and cybersecurity efforts,

including through the formation of a cybersecurity system in the military sphere and cyber defense with an appropriate management structure that will ensure coordinated management of all its components.

In conditions of global instability, the main aspect of the global confrontation between strategic rivals will be the struggle for human consciousness and the formatting of the world, through the impact on the field of perception.

The goal of such a struggle is not a kinetic effect, i.e. destruction of the enemy with weapons, but a cognitive effect, i.e. the impact on the enemy's consciousness in order to reduce the will to resist. The cognitive effect is the manipulation of information to change thoughts and behaviour.

It should also be understood that in the era of wars for consciousness and meanings or cognitive wars, the elite's only chance of survival is to deprive the rest of the population of their cognitive abilities, capacity for reflection and self-expression, which will be aimed at counteracting attempts to influence people's minds and hearts. Russia should use its accumulated potential in this area so as not only not to lose its areas of perception, but to transfer them to others.

However, it must be emphasized that all the described potential requires further, serious and in-depth study, since it is spontaneous, has no systematization. It is necessary to develop a concept and methods for using this potential with possible implementation in other areas of humanitarian activity. It is necessary to create a comprehensive strategy of external influence, which would be based on the release of the internal energy of society with translation into the world of Russian civilization code (Ilnitsky & Losev, 2018). According to the practice, it is Russia that has an advantage in this case.

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