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REDEFINITION OF WAR AND THE WEAPONS OF MASS DESTRUCTION IN THE 21ST CENTURY

ABSTRACT: War requires science and advanced technology to evolve. Until the technological revolution, wars were local, not global. The article presents the concept of a new idea of decentralized war as a civil and hybrid war. The research objective of the article is to initiate a discussion on the evolution of war and weapons of mass destruction. The research problem was formulated as follows: is it a new challenge requiring improvement in the field of education, training, equipment, and filling gaps in legal regulations and the existing strategy? Can the applicable legal acts and the activities of specialized institutions and bodies contribute to reducing the risk associated with the use of weapons of mass destruction? Bearing in mind the seriousness of the problem, the author hypothesizes that chemical, biological, radiological, and nuclear weapons may become one of the most effective means of achieving goals in armed conflicts. The study focuses on the issue of these weapons, because not only nuclear weapons can play an important role in the international security environment, and restrictions on the proliferation and use of chemical and biological weapons seem ineffective. The article, which is a consequence of the redefinition of war, is an attempt to rethink the concept of weapons of mass destruction by explaining the role of cyberattacks, political fanaticism, and hateful propaganda.

KEYWORDS: redefinition of war, decentralized war, hybrid warfare, cyberwar, weapons of mass destruction

REDEFINICJA WOJNY I BRONI MASOWEGO RAŻENIA W XXI WIEKU

ABSTRAKT: Wojna potrzebuje nauki i zaawansowanej technologii, aby ewoluować. Do czasów rewolucji technologicznej wojny miały charakter lokalny, a nie globalny. Artykuł przedstawia koncepcję nowej idei wojny zdecentralizowanej jako wojny domowej i hybrydowej. Celem badawczym artykułu jest zainicjowanie dyskusji na temat ewolucji wojny i broni masowego rażenia. Problem badawczy został sformułowany w następujący sposób: czy jest to nowe wyzwanie wymagające doskonalenia w zakresie edukacji, szkolenia, wyposażenia oraz uzupełniania luk w regulacjach prawnych i istniejącej strategii? Czy obowiązujące akty prawne oraz działania wyspecjalizowanych instytucji i organów mogą przyczynić się do zmniejszenia ryzyka związanego z użyciem broni masowego rażenia? Mając na uwadze powagę problemu, autor stawia hipotezę, że broń chemiczna, biologiczna, radiologiczna i nuklearna może stać się jednym z najskuteczniejszych sposobów osiągania celów w konfliktach zbrojnych. W opracowaniu skoncentrowano się na problematyce tej broni, ponieważ nie tylko broń jądrowa może odgrywać istotną rolę w środowisku bezpieczeństwa międzynarodowego, a ograniczenia w proliferacji i stosowaniu broni chemicznej i biologicznej wydają się nieskuteczne. Artykuł, będący konsekwencją redefinicji wojennej, jest próbą ponownego przemyślenia pojęcia broni masowego rażenia, poprzez wyjaśnienie roli cyberataków, fanatyzmu politycznego i nienawistnej propagandy.

SŁOWA KLUCZOWE: redefinicja pojęcia wojna, wojna zdecentralizowana, wojna hybrydowa, cyberwojna, broń masowego rażenia

INTRODUCTION

Victory in modern war depends on many factors. Nowadays, the basic condition for effective military operation is technological superiority, which is a necessary, but not always sufficient, precondition for military success. With the development of more and more precise weapons of mass destruction, less and less importance is placed on the size of the army itself. However, its level of technological advancement and mobility are still important. In addition, success on the battlefield is conditioned by the professionalism of the command staff, which can sometimes compensate for the preponderance of the enemy. This means that communication systems are an extremely sensitive area, because their paralysis not only prevents effective command of the armed forces, but also may deprive them of support. It should be noted here that the media also go to war, reporting current events on the battlefield, but also - whether they want it or not – they are used for propaganda purposes. Along with the development of military technologies, the way in which warfare is conducted is changing. Therefore, it is worth analyzing the specificity of a modern armed conflict. Modern military confrontations take full advantage of the opportunities offered by information technologies.

The 21st century brought many new security threats resulting from the scientific development and new technological solutions. As a consequence of digitization and decentralization, the danger of a new type of war and military conflicts has incredibly increased. The problem is related, among other things, to the specific decentralized war and hybrid warfare in which breaking human rights, crimes against humanity, and progressive disinformation play a priority. In such a war, the ignorance of political fanaticism leading to hateful propaganda, has become a response to the potential consequences of possible actions aimed at destroying or weakening the authoritarian regime.

Global public access to the international network was associated with an equal access to information for anyone who has the Internet. The expansion of virtual space and its growth in relation to reality, deliver new risks for civil and military security around the world. One of the most potent tools in cyberspace is hateful propaganda in social media¹. Therefore, independent committees should undertake actions to promote diversity, combat discrimination and the language of hate. Moreover, perpetrators should be punished, regardless of their political functions or social status.

¹ M. Ranstorp, G.P. Herd, *Approaches to Countering Terrorism and CIST*, [in:] A. Aldis, G.P. Herd (eds.), *The Ideological War on Terror. Worldwide Strategies for Counter-Terrorism*, pp. 15-19; M. Baylouny, *Countering Arab Television? Assessing the Effect of Alhurra*, [in:] A. Aldis, G.P. Herd (eds.), *Ideological War*, op. cit., p. 68; K. Ramakrishna, *It's the Story, Stupid. Neutralizing Radical Islam in the Southest Asia Theatre*, [in:] A. Aldis, G.P. Herd (eds.), *Ideological War*, op. cit., p. 128, 134; M.H. Hassan, *Counter-Ideological Work: Singapore Experience*, [in:] A. Aldis, G.P. Herd (eds.), *Ideological War*, op. cit., p. 150.

REDEFINIOTION OF WAR

For centuries, the main goal of war was to gain power and new territories. Along with technological progress, the means of fighting have changed (computerized weapons), the strategy has changed (special forces, no front line), soldiers have changed (trained commandos, military IT specialists, engineers and technicians designing and remotely operating military robots), as well as the battlefield has changed (cyberspace). In modern global wars, however, the point is to intercept information, penetrate economic and military secrets, take control of the information highway and energy sources, which in turn is supposed to lead to the disarmament and subordination of the enemy. All this, of course, must be realized with the least involvement of own forces and with the possibly smallest losses.

The so-called modernity is associated with a great variety of conflicts. Already, the war in Vietnam heralded the need to take into account new forms of military operations, i.e. excluding traditional fronts. This is now a major challenge for military strategists and politicians responsible for defense and constructing defense budgets. Present-day armies must be flexible and mobile due to the fact that it is difficult to predict conditions of potential forms and directions of military operations. Assuming 1989 as the turning point, i.e. the date related to the change of the political system in Europe, one can give many examples of very different military operations, including (1) regular army vs. regular army; (2) regular army vs. partisan units; (3) special forces vs. semi-regular army; (4) special forces vs. terrorists; (5) terrorists vs. civil population; (6) unmanned aerial vehicles vs. terrorists; (7) "hackers" vs. state information systems; (8) intelligence agents vs. terrorists. Although traditional clashes of large armies do not take place so often, the frequency of military conflicts is currently much higher. On the other hand, the number of so-called unbalanced wars, in which military superiority of one side is compensated for the guerrilla or terrorist actions of the other. The number of terrorist attacks against civilians also burgeons².

The use of armed forces for warfare is still a standard worldwide; however, an increasing number of economic activities are undertaken based on remote cooperation, enabling a rapid response to information and external threats. Most attention in history and theory of war was devoted to interstate wars because these are large-scale conflicts and they require the armed forces of various countries in the world³. International conflicts are analyzed much more often due to the widespread awareness of cruelty and aggression directed against civilians⁴.

² W. Broszkiewicz, *Wojna w dobie społeczeństwa informacyjnego*, [in:] M. Bodziany (ed.), *Społeczeństwo a wojna. Paradoks wojny we współczesnym ładzie międzynarodowym*, Wrocław 2013, p. 257.

³ G. Cashman, *What Causes War? An Introduction to Theories of International Conflict*, Lanham – Boulder – New York – Toronto – Plymouth, 2014, p. 1.

⁴ See, for example, B. Heuser, *The Evolution of Strategy. Thinking War from Antiquity to the Present*, Cambridge – New York – Melbourne – Madrid – Cape Town – Singapore – São Paulo – Delhi – Tokyo – Mexico City 2010; M.R. Sarkees, F.W. Wayman, *A Data Guide to Inter-State, Extra-State, and Non-State Wars, 1816-2007*, Washington 2010; E. Forner, *Politics and Ideology in the Age of Civil War*, Oxford – New York – Toronto – Melbourne 1980; A. Aldis, G.P. Herd, *War on Terror*, op. cit.; M.B. Steger, *The Rise of the Global Imaginary. Political Ideologies from the French Revolution to the Global War on Terror*, Oxford – New York 2008.

Organized military groups realize various governmental interests at the cost of thousands or millions of citizens of the state, in which the war is fought. The idea of war is protected by language. When a pejorative connotation of an ideology take root in the public mind, material reality is distorted by hateful propaganda, and the authoritarian regimes win⁵. One of the key challenges of modern international relations is the analysis of authoritarian regimes and their development to avoid threats to global security. If the authoritarian actors are more powerful than democratic, all authoritarian regimes are threats for international security, mainly if the authoritarian regime exists in a democratic country and it is based on ideological language promoting hateful propaganda against minorities⁶. Decentralized war is focused on social divisions, mass panic effects, manipulation with hateful propaganda. The participation of mass media in the modern ideological and economic war distorts human civilization and leads to electromagnetic storm caused by the misuse of technologies⁷. Decentralized war uses technologies and civilians and it goes on inside different countries in the world as a result of progressive decentralization. Like every war, decentralized warfare uses modern technologies without creating a threat of using military forces. The psychological and sociological decentralized war is an example of the use of the media as a new "weapon of mass destruction". Access to mass media and susceptibility to propaganda and manipulation make decentralized war a real threat.

It is clear that many countries are reconstructing and modernizing their armies. In the case of superpowers such as the USA, Great Britain and Germany, these actions clearly prove that a new concept of a smaller but more effective and mobile troops has been adopted. Due to the financial crisis of the first decade of the 21st century, in all these countries, military budgets have been limited. However, the limitations concern mainly personnel, conventional weapons (tanks, aircraft carriers) and infrastructure (military bases). At the same time, funds for defense against cyberwar (unmanned technologies such as drones, so-called smart bombs, computer and communication systems, military viruses, etc.) are increasing⁸.

NEW FACES OF WAR: CYBERWAR, CYBERATTACK, CYBERPROPAGANDA

Nowadays, the most characteristic attribute of modern warfare is the so-called cyber war. The novelty of the issue is evidenced by the fact that the term itself is still unclear and raises controversies. Germany defines a cyber war as a conflict that takes place in cyberspace and is directed against information systems with the aim of damaging security, obtaining confidential data and destroying the integrity of systems. The UK definition of cyber war includes various methods of cyber attack: electronic attack, breaking the communication chain, manipulation of the radio spectrum and jamming of electronics using high power radio frequencies. Americans

⁵ See, for example, M.B. Steger, *The Rise of the Global Imaginary*, op. cit., pp. 14-25, 108-156.

⁶ See I. Arreguín-Thoft, *How the Weak Win Wars: A Theory of Asymmetric Conflict*, Cambridge – New York 2005. ⁷ T.G. Mahnken J.R. FitzSimonds, *Revolutionary Ambivalence. Understanding Officer Attitudes towards Transformation*, "International Security" 2003, 28(2), pp. 112-148.

⁸ W. Broszkiewicz, *Wojna w dobie społeczeństwa informacyjnego*, [in:] M. Bodziany (ed.), op. cit., p. 272.

define a cyber war as any actions taken through computer networks to disrupt, distort, or destroy the information saved on computers and computer networks. As one can see, the Americans, unlike the Germans, do not treat activities in the field of electronic espionage as a cyberattack⁹.

This type of warfare is a complex problem because it involves an attack on the state's electronic infrastructure. Cyber warfare is waged by small groups or even individuals. The effects of such a war far outweigh the outlays necessary to conduct it. It is also difficult to unquestionably indicate the sources of such acts. The most spectacular event of this type was the attack on Estonian infrastructure, for which a 20-year-old Russian student was convicted a year later¹⁰. Another event, closer in time, took place on the day of Russia's invasion of Ukraine. Digital "guerrillas" identifying themselves as the Anonymous group, declared a cybernetic war on the aggressor. Since then, the group of hackers has claimed responsibility for shutting down important Russian government, news and corporate websites and leaking data from companies such as Roskomnadzor, and the agency responsible for censoring Russian media¹¹.

The Internet, as a total means of communication, is perfectly suited for information and propaganda warfare. Therefore, it was quickly adapted as a tool of psychological influence. Considering the general fact that language is primarily used for communication, the Internet is used for more purposes: to influence thinking, views and behavior of other people. In this sense, it should be said that mass media, in fact, constitute "the factories of persuasion"¹².

Cyberattacks have become a popular extension of virtual space and an essential part of cyberterrorism and cybercrimes¹³. The attacks on an individual user concentrate on gaining access to the private data of the individual, which is why modern solutions have recently been created to allow increased protection of privacy, as is the case with blockchain networks. Many perpetrators of organized crimes use electronic tools to communicate, and due to the high level of security systems used by criminalists, it is hard to break the codes. It takes a long time to capture the criminals. In consequence of a dynamically changing world, digital forensics is focused on collecting, preserving, examining, analyzing, and presenting relevant digital evidence for use in judicial proceedings¹⁴. Cyberwar became a non-contact war between citizens, and hate speech and hate propaganda are crucial tools used to achieve war goals.

⁹ A. Klimberg, National Cyber Security. Framework manual, Tallin 2012, p. 8

¹⁰ See: *Rosyjski haker osądzony za cyberatak na Estonię*, qub, AFP http://wyborcza.biz/biznes/1,101562,4864455.html (15.12.2022).

¹¹ See: *Anonymous wypowiedzieli Rosji "cybernetyczną wojnę"*. *Oto efekty* (16.03.2022); https://www.money.pl/gospodarka/anonymous-wypowiedzieli-rosji-cybernetyczna-wojne-oto-efekty-6747871162817280a.html (16.12.2022).

¹² W. Broszkiewicz, *Wojna w dobie społeczeństwa informacyjnego*, op. cit., p. 267.

¹³ M. Bada, J.R.C. Nurse, *The social and psychological impact of cyberattacks*, [in:] V. Benson, J. Mcalaney (eds.), *Emerging Cyber Threats and Cognitive Vulnerabilities*, Academic Press 2020, pp. 73-75.

¹⁴ A.M. Talib, F.O. Alomary, *Towards a Comprehensive Ontology Based – Investigation for Digital Forensics Cybercrime*, "International Journal on Communications Antenna and Propagation" 2015, 5(5), p. 263.

Electronic tools, necessary for fast and safe communication between criminals, protect their privacy, and allow them to develop organized crime¹⁵. Cooperation takes the form of criminal networks, including army officers, businessmen, local party officials, civic leaders and private criminal networks. The pathological phenomenon can be observed both in western, more civilized countries, and the impoverished regions, such as Nigeria, Chad, and the Central African Republic¹⁶. Creating social divisions as part of hateful propaganda on media, generated by politicians, becomes a strategy of contactless war strengthening the ruling elites.

The idea of war and concepts of cyberwar are related to national and international security at each level. Such a war grows up as a result of activities in cyberspace transferred to reality, directed against domestic and civil protection, like the Stuxnet worm, events in Georgia, Estonia, or hacking of military computer networks in the United States of America¹⁷. Threats associated with technological solutions based on automated systems are only a part of cyberwar, which give opportunity to control and manipulate civils by negative information presented in mass media¹⁸.

Cyberwar in the digital era is the war between civilians, which should change the role of democracy, decentralization, and freedom. Cyber terrorism does not always mean a direct attack – in a digitized world it becomes a tool that changes human consciousness and creates violence. Its central premise is to cause changes conducive to building a new political and social order. Electronic structures of the security system can be improved based on the development of modern technologies and science, anticipating the activities of civilians related to action in virtual space is a problematic issue to predict, both in terms of assessing the possible threat to national security, and its potential to escalate a conflict on a global scale.

Cyber-attacks against national and international structures weaken national security and destabilize international relations and alliances between countries. Globalization and decentralization increased the range of terrorism – because of the Internet, the impetus for imitation spread throughout the whole world. Before digitization, information on terrorism and crime was a problem limited to one country. The comprehensive coverage of the global network enabled the presentation of negative phenomena on a worldwide scale, which directly contributed to the escalation of terrorism and crime. Human nature has equipped man with the ability to learn by imitating. One of the responses to cyber-terrorism and other forms of corruption is to mimic pathological behaviors presented in the media¹⁹.

A decentralized war is a civil war conducted in all civilized countries, in which human rights are violated. And the mass media, being the main information carrier, disseminate

¹⁵ See: *NCA*, "NCA and Police Smash Thousands of Criminal Conspiracies After Infiltration of Encrypted Communication Platform in UK's Biggest Ever Law Enforcement Operation" (2 July 2020), https://nationalcrimeagency.gov.uk/news/operation-venetic.

¹⁶ G. Anders, M. Nuijten, *Corruption and the Secret Law*, Aldershot 2007, p. 12.

¹⁷ E. Gartzke, *The Myth of Cyberwar: Bringing War in Cyberspace Back Down to Earth*, "International Security" 2013, 38(2), pp. 41-73.

¹⁸ D.D.P. Johnson, D. Tierney, *Bad World: The Negativity Bias in International Politics*, "International Security" 2019, 43(3), pp. 96-140.

¹⁹ Ch. Townshend, *Terrorism: A Very Short Introduction*, Oxford 2002, p. 114.

disinformation, misinformation, and hate speech. They often constitute the vital propaganda tool, thus preserving the language of hate. Despite the skillful determination of the perpetrator of the criminal act, many criminals remain legally protected, and media propaganda contributes to growing social divisions based on hate crimes. Hateful propaganda has become a war tool spreading thanks to the new generation of mass destruction weapons on a global scale – mass communication. Mass communication using modern technologies (such as telecommunications, Internet, and transport) weakens international security and destabilizes national security. The current use of military forces to destroy strategic points in a specific area has been replaced by the language of propaganda, by which civilians kill themselves because of ideologies promoted in the media.

REDEFINITION OF MASS DESTRUCTION WEAPON

The history of weapons of mass destruction shows that one of the most important consequences of using them is to kill thousands of people, like it was in Hiroshima and Nagasaki. The term "the weapon of mass destruction" (WMD – the weapon of mass destruction) is commonly used to describe nuclear, chemical, and biological weapons²⁰, but in the XXI century, WMD can mean each new generation weapon able to kill people on a large scale – directly and indirectly. Initially, weapons of mass destruction referred to all modern weapons, with particular emphasis on aircraft as carriers of chemical and biological weapons²¹. The criterion for deciding whether a weapon is classified as a weapon of mass destruction is the total number of deaths caused by the use of a given factor²².

Most definitions of weapons of mass destruction describe these weapon as nuclear, biological, chemical, and other ones having a similar effect²³. The economic and social changes make it possible to use an indirect agent without using physical force to significantly reduce the population. Moreover, the growing interest in obtaining toxic chemicals, biological and radiological materials in order to combine them with an explosive material proves the need for interdisciplinary cooperation between emergency services, exchange of knowledge and practical skills. On the other hand, one of the most difficult challenges regarding weapon of mass destruction is the reduction of combined threats. Such threats concern a terrorist attack with the use of the so-called "dirty bomb", where chemical, biological or radioactive material has been used in addition to explosives. The elimination of such a threat requires both specialist

²⁰ V.W. Sidel, B.S. Levy, *Weapons of Mass Destruction*, [in:] S.R. Quah (ed.), "International Encyclopedia of Public Health", Vol. 7, SOU-Z. 2nd Ed., Oxford 2017, pp. 564-570.

²¹ See E.A. Corrody, J.J. Wirtz, *Preface: Weapons of Mass Destruction*, [in:] E.A. Corrody, J.J. Wirtz, J. Larsen (eds.), *Weapons of Mass Destruction. An Encyclopedia of Worldwide Policy, Technology, and History*, Santa Barbara 2005, p. IX.

²² E.A. Corrody, *Introduction: Chemical and Biological Weapons*, [in:] E.A. Corrody, J.J. Wirtz, J. Larsen (eds.), *Weapons*, op. cit., p. XXV-XXVIII.

 ²³ See: M.B. Davis, A.H. Purcell, *Weapons of Mass Destruction*, New York 2006; WMDC, Weapons of Terror. Freeing the World of Nuclear, Biological, and Chemical Arms, Stockholm: Weapons of Mass Destruction Commission 2006; H. Vogel, *Weapons of Mass Destruction, WMD*, "European Journal of Radiology" 2007, 63(2), pp. 205-213.

knowledge in the field of civil protection, as well as the presence and cooperation of many services at the scene of the accident.

In the past, and in its initial phase, the weapons of mass destruction (mainly nuclear weapons) constituted an important component of the security policy of the greatest powers. The weapons were an integral element of the doctrines, tactics and security strategies of both the United States and NATO, as well as the Soviet Union and the Warsaw Pact. It was the basis of balance of power and fear and, paradoxically, a condition for the preservation of international security and peace in the world. Nuclear weapons were a key factor in stopping the military aggression of the Warsaw Pact troops directed at NATO members.

Nowadays, there are more and more services and entities responsible for ensuring public safety and counteracting threats related to the use of CBRN agents and materials. All of them carry out the tasks resulting from the applicable provisions of law and take part in rescue operations related to prevention, response, protection of life and health, and the recovery of resources after the elimination of the threat. Until 2014, the fight against terrorism and CBRN threat in Poland was based on inconsistent legislation. There were no regulations governing the principles of countering terrorist threats or threats related to the use of CBRN agents. Therefore, it is not surprising that this lack of legal regulation was deemed dangerous. Due to the concerns of the Polish government and citizens, an extensive legislative activity was undertaken in 2015 to organize the provisions of law and to develop new legal acts that would be substantially compatible with new types of threats.

Due to their destructive power, nuclear weapons have not proven to be a viable weapon used in a military conflict as a political and psychological deterrent. Fear of the consequences of the massive use of atomic weapons guaranteed the stability of the bipolar division of the world. The principle made the powers aware of the consequences, and neither of them dared to start a conflict with the use of nuclear weapons. But nowadays, hateful propaganda in the mass media has become a new weapon of mass destruction with global consequences which means that war does not require a physical attack on civilians. Civilians are at war with each other based on hateful media propaganda, becoming a tool for authoritarian political ideologies. Secondary mass destruction weapons became mass media hate-based and provide tools and mechanisms to commit hate crimes. By misinformation and deliberately created incorrect information, the mass media diverts attention from real problems and threats, often contributing to ignoring signals proving impending danger. Mass media has directly influenced social behaviors, which are causes of terrorist attacks, violence, and hate crimes²⁴.

Modern weapons of mass destruction are much more dangerous than those known in the 1940s or 1950s. This situation is not currently shaped, as dynamic scientific and technological progress allows the development of various categories of weapons of mass destruction, whose weapons are based on innovative assumptions that enable the realization of advanced political

²⁴ See, for example, A. Aldis, G.P. Herd (eds.), op. cit., p. 78.

goals focused on maintaining power.²⁵ The new generation of weapons of mass destruction is a rapidly spreading propaganda aimed at promoting hateful attitudes based on actions aimed at "a common enemy". The common enemy in civilized countries is the ethnic, religious, sexual, and other minorities against which the attack is directed. Rapidly spreading hateful propaganda in the virtual world and in the media is quickly becoming a reality in the real world, in which minority groups suffer oppression, persecution, violence, and acts that are punishable under national and international law.

CONCLUSIONS

The modern view of warfare has been marked by the experience of World War I and World War II. Both wars marked whole generations. In many European families, there was no question of normal life for decades. It is estimated that more than 55 million soldiers fought in it, of which over 8 million died. Numerous war participants suffered physical and mental mutilations. These conflicts were fought mostly on the battlefields, and human losses concerned mainly soldiers, however it was not only the number of fallen soldiers that caused a shock, but also the losses among the civilian population. According to Norman Davies, "the violence, destructive force and unpredictability of the Second World War were so great that most warring nations lost their sense of all other purposes of combat other than simple survival"²⁶. Destruction was not the only result of this war. Its effect was also the emergence of a new order in the world and the emergence of new economic leaders (West Germany and Japan, i.e. countries defeated in the global conflict). These countries, subject to restrictions, did not have the full possibility of restitution of their military potential, and, therefore, their economies were not burdened with the costs of modernizing their armed forces.

Taking into account the issue of vague terms such as "defensive war" and "preventive war", it can be said that currently the basic problem in the case of democratic countries is to convince the public opinion of the legitimacy of military intervention and armed struggle. How important this factor is in the case of warfare is evidenced by the events that took place in the USA at the time when this country was involved in the Vietnam War. Another example is the ongoing armed conflict in Ukraine accompanied by disinformation and hateful propaganda.

The variety of ways to define the concept of war and weapons of mass destruction confirms the confusion related to these terms. The main aim of the study was to analyze the forms of war and the weapons of mass destruction and to indicate the most optimal definition from the point of view of adequacy, clarity and usefulness. In the author's opinion, the definition according to which weapons of mass destruction are understood as nuclear, chemical, biological, and radiological weapons seems to be an insufficient solution as this definition is strongly rooted in the science of international relations. Modern weapons of mass destruction are much more

²⁵ T. Mahnken, op. cit., pp. 112-115.

²⁶ N. Davies, *Europa walczy 1939-1945*. Nie takie proste zwycięstwo, Kraków 2008, p. 61.

diversified and dangerous than those known in the 1960s. The situation is dynamic and it is currently being shaped - the scientific and technological progress allows the development of various categories of war and weapons of mass destruction based on innovative solutions that enable the realization of advanced political goals focused on maintaining power. The new generation of weapons of mass destruction is a rapidly spreading propaganda aimed at promoting hateful attitudes based on actions aimed at "a common enemy". The common enemy in civilized countries is ethnic, religious, sexual, and other minorities against whom the attack is directed. Rapidly spreading hateful propaganda in the virtual world and the media is quickly becoming a reality.

The use of modern military technology then raises ethical dilemmas. Although the experience of World War I resulted in the banning of the use of poison gas, it was used many times (Morocco, Ethiopia, Vietnam, Iran, Kurds). Until today, there have been disputes over the legitimacy of the US dropping the atomic bomb on Nagasaki. It turns out that modern warfare based on knowledge and information reveals a certain paradox. Societies of this type are highly developed structures not only in terms of technology, but they are also communities that cultivate humanitarian ideas, of which information and knowledge are the basic values. They are participatory societies, very sensitive to freedom and human rights. They strive to provide the best possible living conditions for their members, both in terms of quantity and quality. Such social development requires peace. At the same time, modern technologies that make everyday life easier are largely developed thanks to the military industry. War has so imperceptibly permeated all areas of life, that people do not see the militarized reality and do not realize that they are civilian soldiers through the agency of Facebook, Twitter, Instagram and other social media. Information technology has transformed the nature of modern warfare, and has so blurred the distinction between the military and civilian spheres, that we all live today in a military information society.

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