

Perspectives of regulation on the use of new military technologies as means of war

Perspectivas de regulación sobre el uso de nuevas tecnologías militares como medios de guerra

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Abstract

The study of war offers various prisms of analysis since it covers a wide spectrum of human coexistence. Among the possible approaches to the topic are the legal aspects, since the law has an action in relations prior to war, during its development, and after conflicts are terminated. Within legal issues are the problems related to the regulation of new technologies, such as the use of artificial intelligence. Thus, starting from Clausewitz's theory regarding war, and observing its unfolding in the current international context, where fourth and fifth generation conflicts occur, the present study aimed to investigate the implications of the proposals for regulation of new technologies in this scenario. Thus, with a bibliographic approach, the current study presents general considerations on the subject of war and technology, followed by a look at different positions of regulation of new technologies today.

Keywords: *New military technologies, regulations, artificial intelligence, war.*

Resumen

El estudio de la guerra ofrece diversos prismas de análisis, pues abarca un ancho espectro de la convivencia humana. Entre los posibles enfoques del tema se encuentran los aspectos jurídicos, ya que el derecho tiene actuación en las relaciones antes de la guerra, durante su desarrollo, como después de cerrados los conflictos. En el medio de las cuestiones jurídicas se encuentran los problemas relacionados a la regulación de nuevas tecnologías, como es el caso del uso de la inteligencia artificial. Así, partiendo de la teoría de Clausewitz respecto de la guerra, y observados sus desdoblamientos en el contexto internacional vigente, donde ocurren conflictos de cuarta y quinta generación, el presente estudio tuvo como objetivo investigar las implicaciones de las propuestas de regulación de las nuevas tecnologías en este escenario. De ese modo, con un abordaje de naturaleza bibliográfica, el artículo presenta consideraciones generales sobre el tema de la guerra y la tecnología, seguidas de una verificación profundizada sobre las propuestas de regulación de las nuevas tecnologías en la actualidad.

Keywords: *Nuevas Tecnologías Militares, Normatividad, Guerra.*



Fecha de Recepción: 19/07/2023 - Aceptado: 15/09/2023 - Publicado: 22/12/2023
ISSN: 2477-9253 - DOI: <http://dx.doi.org/10.24133/RCS.D.VOL08.N03.2023.01>

I. Introduction

In the classic work about war Clausewitz (2010), who considers that as a matter derived from politics, its nature does not change, only the way the fighting is fought. In retrospect, it is possible to agree with the Prussian general's assertion, since war persists as a reality of human society, although battles tend to change for a long time, driven by strategic and tactical changes related to the transformation of technologies (Showalter, 2017).

Technological issues are a sensitive topic in the field of military studies where the ideas of Military Revolution (RM) and Revolution in Military Affairs (RMA) can be found, although more recent developments do not consider RM or RMA as changes directly dependent on new technologies, rather, RMA would be a paradigm shift relative to the nature and conduct of military operations (Saint-Pierre and Goncalvess, 2018). In this context, fourth and fifth generation wars, once they can use non-advanced war tactics, are an example of how technology is not always the determining factor for victory on the battlefield.

Another problem inherent in the subject now discussed is those new technologies, although they are not decisive for changes in the environment of war, when they collaborate for the advancement of the lethality of armaments, generate concerns intertwined with humanitarian issues (Salwan, 1997; Haner & Garcia, 2019). Thus, the expansion of the possibility of violation of human integrity necessitates the broadening of debates about how the regulation of such uses can be constructed by international law. An example is the ban on the use of incendiary weapons today (1980), despite their use in the First World War (1914-1918) (Carvin, 2017; Fenrick, 1982).

It is fundamental to address the problem of political demands or present in this scenario, since war, as the continuation of politics, integrates the dynamics of international relations, where concerns with security and conflict cannot remove the possibility of the use of military power. Thus, with a research of a bibliographic nature, the present study was divided into three parts, dealing with the first of the introductory considerations on the subject of war, the second addresses new technologies, and the third, with greater precision, on the positions of different countries relating to the regulation of these technological uses.

II. Methodology

The purpose of this study is to investigate the positions taken by different countries on the use of new military technologies, based on a documentary review exercise. At first, an analysis of the background of the war has been realized from the perspective of different authors, highlighting the changes that have arisen over time, emphasizing the means of war to reach those that are used today thanks to the intervention of technology which has generated an interesting debate for the regulation of its use. Therefore, the methodology was searched in different data bases, as well as in academic repositories and libraries, which has been realized using the keywords new military technologies, normativity, artificial intelligence as well as war. In this way, it was possible to select relevant studies that were within the last ten years with the purpose of having a broader margin of time for the analysis of the object of the current study. Then, they were reflected in a matrix that was synthesized until reaching the most relevant positions for the topic in question, from it to apply the analysis and finally conclude the given issues.

III. Evaluation of Results and Discussion

3.1. The current facets of the world in the framework of the new military technologies

The classical definition of politics, originating in the teachings of Aristotle, links it to the idea of *pólis*, to urban life, to civil existence destined to the obtaining of a greater good, where all the activity of the political man and the legislator takes place (Aristotle, 2021). In addition, being a typically human practice, it is directly related to the notion of power, political power consisting in the imposition of men's desires on other men in the context of a society (Bobbio et al, 1998). Power relations find a place in the interactions observed in the internal sphere of States, since it is in them that human life actually develops, but it extrapolates State borders, becoming present in international relations (Jackson, 2020; Gaventa, 2006).

Thus, power relations have strong ties with the vicissitudes of human existence, which are involved in the mechanisms aimed at establishing social coexistence at the various levels of human concern (Billings, 2002; Shils, 1966). Among the questions belonging to the universe of power relations are wars, a phenomenon of a political nature, whose study demands an approach to history, as well as the social and cultural aspects to help understanding it (Barkawi & Brighton, 2011; Bigo, 2011).

In his striking work on war, the Prussian general Clausewitz (2010) considers it as an act of violence, aimed at forcing the adversary to submit to our desires. In addition, it should be noted that war is the continuation of politics by other means, so that the nature of war, being political, is immutable, despite the historical, social or cultural variables involved in the context (Clausewitz, 2010).

From another point of view, it is fundamental to consider that the persistence of war as a phenomenon of a political nature triggered several thematic meanings in its regard, from the attempt to justify it through Jusphilosophical parameters, as is the case of the theory of just war supported by Hugo Grotius in the seventeenth century, based on Natural Law, to its prohibition as a resource of international politics, with the advent of the United Nations (1945). Such circumstances reinforce the close ties between war and politics, despite the transformations observed in human societies, both within States and in the field of international relations. This normative interest in respect of war is a manifestation of current needs, since coexistence based on the norm assumes new aspects on the occasion of major armed conflicts, since state constitutions have a direct link with the way in which states relate (Bobbitt, 2003). Thus were the Treaties of Westfalia (1648) concerning the confirmation of the idea of sovereignty, as well as the institution of the Weimar State in Germany, as the splitting of the Treaty of Versailles (1919) (Lesaffer, 1997; De Ridder, 2020; Milton, 2020).

Returning to Clausewitz (2010), it is noteworthy the constant presence in his theory of war of three fundamental elements, that is, the so-called Clausewitzian paradoxical trinity, constituted by passion, chance and reason (Villacrés & Basford, 1995; Basford, 2007). The first element concerns the people, where it is possible to encounter feelings of hostility and hostile intent (DeCastro et al., 2002). However, the feeling of hostility is insufficient when there is no hostile intention, so, according to Clausewitz (2010), the question is how strong the intention can be to generate a war. The second component of the trinity is chance, represented by military forces, and this is because war, whatever its motivations, develops through combat, where uncertainty reigns. The last element is reason, represented by politics, responsible for leading the roads of war, in a broader sense than that attributed to the art of the generals, since, the aim of war being to disarm the enemy, politics, as a rational element, must lead to this endeavor in such a way as to avoid barbarism.

Continuing with Clausewitz's (2010) theory of war, whose contours will largely shape the modern conception of war in the West, he emphasizes that the general objective is to disarm the enemy. In that sense, the attempt can be obtained not only with the destruction of the forces of the adversary, but also with the neutralization of this, preventing him from fighting. Although Keegan (2006), who disagrees with Clausewitz about the political nature of war, he demonstrates that the tradition of war in the West has the characteristics found in Clausewitz, that is, the search for direct combat, as well as the idea of a definitive battle in the course of the conflict.

Clausewitz extensively examined the significance of the Napoleonic Wars (1803-1815), particularly within the context of military strategy and warfare evolution. It is noteworthy to underscore that these conflicts heralded a transformative shift in conventional paradigms, classified as wars of the first generation by Gates (2011). Central to this transformation was the establishment of the modern state, epitomized by the consolidation of the monopoly of force, a concept deeply rooted in the Treaties of Westphalia (1648), which brought an end to the Thirty Years' War. Despite their categorization into chivalric wars and those instigated by the Napoleonic upheaval—a consequence of the French Revolution (1789)—wars of this era shared notable features, notably the widespread adoption of gunpowder and musket weaponry. The use of Westphalia (1648) as the first reference for the classification of wars is therefore not a mere arbitration, since it is related to the idea of consolidation of the modern State, when the reality of a centralized authority demanded the gradual formation of standing armies. However, it is relevant to mention that the tradition of war in the West dates back to ancient Greece, where the use of force as an extension of politics was already visible (Hanson, 2002).

The wars of the first generation cover a period where issues of a technological nature are well marked. The use of gunpowder has led to adjustments in military doctrines, considering the need for adaptations in combat strategies and tactics. Just as medieval fortifications no longer represented sufficient defensive obstacles in front of the cannons, the mounted troops lost their scoop in front of the infantry. In this way, adaptations such as the bayonet, a spear and musket mist, can be mentioned as a union between new technologies and military uses (Keegan, 2006). In addition, the adjustments observed, especially in the eighteenth century, sought to restore the question of order on the battlefields, agitated by the processes of transition between the forms of war preceding the Modern State, the intense use of gunpowder and the great national armies. Therefore, according to Monteiro (2017), the wars of the first generation, even here the American Civil War (1861-1865), were spent in very orderly battlefields, between numerous armies, arranged, generally in line, in such a way as to take better advantage of the firepower of muskets, forward-loading and smooth-bored.

The replacement of infantry in the front line by artillery is one of the characteristics of second-generation warfare. This change can be observed in the First World War (1914-1918), when the use of more accurate weapons and machine guns led to the insertion of trenches on the battlefield (Keegan, 2006), and the tactics of advance focused on the enemy's attack from the flanks and/or from his rear. It is also characterized by the use of radio communication and the introduction of war signals at the end of the conflict. As Lind (2005, p. 13) explains, the question of order is very present in the second generation of warfare, because of the way available means were used in an optimized way, thus, "firepower was carefully synchronized [...] for infantry, war cars and artillery where the commander was, in effect, an orchestra driver."

The third generation, to which the Second World War belongs, has in the German blitzkrieg a possible tactic thanks to the advance of the technology of the war cells and the use of aircraft, so that submarines, made a three-dimensional scenario until then two-dimensional. According to Monteiro (2017, 1004), the third generation "meant the triumph of mobility and speed over wear and represented the end of linear combat tactics." The motto in the third generation was to pass quickly and cause collapse (Lind, 2005).

In the context of the history of wars and their relationship with technological advances, it is important to note that the greater lethality of weapons and the corresponding strategic and tactical adaptations triggered the construction of more elaborate norms about the protection of the individual, where the Conventions of Geneva, whose first settlement dates from 1864, a period in which the first generation of modern warfare is situated. However, the technologies have, at least, two relevant aspects for this study, the first or, in relation to the constant need for modernization of the Armed Forces, and the second, corresponding to the concern with human rights. In addition to these two points, it is important to emphasize that new technologies, with their high capacity to generate innovations in the field of war, are not decisive for military victory, as happened with the implications of fourth generation wars. On this, Saint-Pierre and Goncalves (2018, p. 32) conclude:

[...] It is the history of wars that provides proof that it is not the technological superiority of armaments per se that guarantees military victory. As Clausewitz stated, victory in war is the result of a complex equation involving non-quantifiable variables, such as political will, the cunning of the strategist, the morale of the troops and the resilience of a people.

Also, the regulation of new military technologies, being able to unblock roads or generate obstacles, fits into the dilemma pertinent to peripheral states, that is, to continue with technological modernization, according to their possibilities, or to become increasingly vulnerable compared to developed countries (Alsina, 2009), where it is clear that the need is to observe what are the actual threats to the respective sovereignties. These two issues are in accord with the facets observed in fourth-generation warfare, a concept introduced by William S. Lind, in 1989 and deepened by Thomas X. Hammes in his book "The Sling and the Stone: On War in 21st Century", 2004, because new military technologies are not a monopoly of the State, considering the globalized context of today, where organizations with international reach can stop more power than sovereign units. The fourth generation of warfare implies a strategic, organizational and type change of participants (Hammes, 2008), since they are conflicts where the idea of direct confrontation is not the main objective, since discouraging the enemy in terms of a persistent struggle is among its fundamental characteristics.

Some scholars of the subject criticize the theory of fourth-generation warfare, as is the case of McKenzie (1993), in his article "Elegant Irrelevance: Fourth Generation Warfare", where He considers that despite the use of terms belonging to qualitative dialectics, the theory of war of the fourth generation is not clear what the dialectical method between the four generations is, because "when examined against the facts, its reasoning seems more idiosyncratic than dialectical. However, Lind (2003) is clear that his theory does not affirm the prevalence of a profound change in the tactics of war, since the question now is not summarized to the use or not of new technologies, but to know who will be fighting and why. Thus, in the context of the globalized scenario, where for many the strength of the nation is declining, one cannot escape the fact that new ways of fighting war, by indirect means, are a reality.

In this picture, although Clausewitz's theory retains its relevance, since the question of power as a form of imposing a will is not necessarily summarized to the State, the ideas of direct combat and final battle may not apply in all conflicts of today. In the fourth generation of the war, it is possible to find aspects closer to the tradition derived from Sun Tzu that specifically originate from the Western tradition. Remember that according to Sun Tzu (2010, p. 5) "the art of war is based on deception. So, when you can attack, you must appear incapable, and when the troops move, appear inactive."

Therefore, fourth-generation wars make the border between conflict and peace nebulous, especially because of the presence of non-State actors, such as insurgent groups, guerrillas, terrorists, among others. According to Hammes (2008), the insurgency in this type of war adopts an advanced form, since its attempt is to attack

the minds of the enemies responsible for making the fundamental decisions, since information is the means that allows to change the direction of the war. Thus, information is the key point in fourth-generation wars, which will use all the networks at their disposal, be they political, economic, social, or military, in order to achieve their objective.

The participants of these conflicts are classified by Hammes (2008) into three types, the reactive groups, whose objective is to protect their population, but do not have sufficient military power, the opportunistic groups, which arise in a vacuum, and being criminal, they like to accumulate wealth and power and, ideologically driven groups, which, according to the author, are the most dangerous, precisely because their type of approach does not place limits on actions throughout the conflict, this being the case, for example, of Al-Qaeda.

Even about the generations of wars, it is important to comment that for Hammes (2008), although the forms observed in the second and third generations persist in some conflicts today, the prevalence of the fourth generation, as a reality of the present days, it accommodates fifth-generation conflicts, in which both biotechnology and nanotechnology are gaining ground. These conflicts point to a reality of the postmodern world, where political, economic and social trends attribute great relevance to very powerful individuals, or groups also endowed with power, united around a cause, rather than a nation.

In this context, the problem of regulating new military technologies presents itself in a complex way, since its implications go beyond the purely legal sphere. It should be recalled here that peace through law is a proposal superimposed on what Aron (2002) calls the State of international law, whose contours differ from the idea of a universal State, which corresponds to power politics, to the extent that it results from the evolution of international law. But, according to the same author, the two situations imply the suppression of the essence of international politics, that is, of the rivalry between states, based on the duty to do justice for themselves.

The existence of a universal State has therefore never been recorded, essentially because of the power dynamics present in international relations, whereas the State of international law, despite its progress, cannot be said to be full, precisely because it implies the mitigation of State sovereignty. On this subject, when reviewing Krasner's work in García (2001, p. 210) he makes the following conclusions:

In relation to the crisis of state sovereignty, and from the point of view of the sociology of the state and international politics, Stephen D. Krasner has recently warned us about the implications of international legal sovereignty and Westphalian sovereignty. In their opinion, the analysis of international relations proves to them that the principles on which these two types of sovereignty are based are constantly violated; This results in an incoherent international system in which "organized hypocrisy" is the norm. Of course, this inter-State system, contradictory because it lacks a hierarchical distribution of authority, is inadequate to correct the defects of economic, cultural or social globalization.

Thus, and in accordance with the relevance of the author's point of view on sovereignty and international norms, especially when it comes to the defense of human rights, especially in the face of armed conflicts, it is important to remember that the context of wars, as already explained, no longer coincides closely with the idea of protection present in the terms intended for wars of human rights. So it is necessary to question the new security and defense problems unleashed by generations of conflict today.

According to the lesson of Bobbitt (2003), if it is true that the great world conflicts will dictate the legal paradigms of international relations, it is also correct to affirm, according to the same author, that the law is

used strategically by the Estates. In this way, compliance or not with the purpose of regulating new military technologies is linked to the perception of threats, which differs from state to state, according to geopolitical paths. As will be discussed later, countries such as the United States and China adopt different political positions than countries such as Brazil and Chile, for example, precisely because there is no coincidence in the perception of threats between them, nor in the context of war do they have the same needs.

Thus, the issues surrounding the adoption or otherwise of a certain international treaty are directly related to the extent of sovereign power building in the early stages of modern state formation. Thus, the deconstruction of this model, whether in the attempt to implement a universal state, or to give more space to international law, does not in itself guarantee the protection of the human being, since, being variable the threats, it can be precisely the safeguard of the force of sovereignty that will promote the Demanded protection, especially in the face of the mechanisms typical of the scenario of the fourth and fifth generation wars.

Thus, before moving on to the next topic, where the issue of the regulation of new military technologies will be addressed in greater depth, the words of Hammes (2008, p. 47) on the new dimension of wars serve as a conclusion of this section:

Changes in the political, economic, social and technical spheres are the key point to remember. They are allowing small groups to unite in a cause and use new technologies to challenge nation states. We cannot reverse these changes, nor stop the evolution of wars. We, the nation, and in particular our military forces, are not prepared to respond to such attacks. It is time to start thinking about how we should approach this next step in the conduct of war.

3.2. Considerations of New Technologies in the light of war

The nature of war has been transforming over time, adapting to the new needs mainly of Security and Defense, its genesis is due to differences that arise between parties concentrated in the search for power and defense of ideologies and influenced by various aspects that determine their direction, among which stand out, means, methods and strategies, increasingly strengthened by the massive and accelerated intervention of technology.

The definition of conventional weapons, also understood as means of combat, recognizes those that can be directed against a specific military objective and, therefore, that cancel out the risk of affecting the civilian population (Salmon, 2004). Such weapons are defined as having a character other than mass destruction. However, some discussions have led to restrictions by the International Red Cross (2010) on the use of certain types of conventional weapons in order to protect civilians against the effect of their indiscriminate use and prevent them from causing excessive injury to combatants. But, in addition, the International Red Cross in the 1980 Convention on Certain Conventional Weapons has defined a series of restrictions under the following two considerations: “(1) the prohibition of using weapons that have indiscriminate effects, and (2) the prohibition of using weapons that cause superfluous harm” (International Red Cross, 2002) (see Figure 1).

Figure 1: *Evolution of weapons*

Source. Obtained from Malinowski (2022)

On the other hand, new military technologies in the case of air and space operations are mainly associated with autonomous weapons systems. In this case, it is the type of weapon that ‘autonomously’, or reducing the degree of human intervention, has the ability to select, detect and attack military objectives (Farinella, 2021). For the International Red Cross, this type of weapon is also defined by systems with a certain autonomy in their critical functions to track, select, identify, etc. and attack: damage, destroy, neutralize, etcetera. Thus, the means of war have undoubtedly evolved adapting technological tools, seeking better results with the implementation of technology has influenced both effectiveness and efficiency where the means and methods of war have had to adapt, thus emerging an important development to the point of introducing artificial intelligence (AI), making them on the one hand more lethal and on the other less detectable (Hammes, 2018). What finally leads to relevant changes in operations, according to the United Nations (2020), undoubtedly the development of conflicts is changing with the implementation of technological advances, since both AI and machine learning play a fundamental role in this transformation even in the change of the nature of threats by different actors, whether state or not. However, the use of AI is increasing cyber, physical and biological attacks, making them more selective and anonymous. In the same sense, it facilitates them by minimizing and even eliminating the need for human intervention.

Thus thinking about the wars of the present, puts into debate the means used for security and defense essentially, which differ significantly from one State to another, and not only by the type of conflict or objective pursued, but by the capacity to produce, acquire and / or use them, thus becoming a critical factor in the framework of conflicts. Which indisputably, leads to analyze the position of different nations against the use of New Military Technologies (NTM).

Global debate on proponents of this framework often argue that AI technologies offer unprecedented opportunities in the defense context, while recognizing the challenges and risks associated with military uses of AI. The overarching narrative is that, since AI applications in military and weapons systems are here to stay, ways must be found to develop and use these technologies responsibly (Nadibaidze, 2023). It is clear that the development and implementation of artificial intelligence in the context of wars, makes it feasible to think about wars at a distance with a more abstract look, which translates into the possibility of increasing military actions, while allowing to reduce the risk of uncertainty, minimizing the number of personnel which also reduces the risk of loss of life, when entering the framework of digitalization.

Therefore, it is fundamental to stop at one of the aspects also changing with the introduction of these new technologies and more precisely with the introduction of systems with artificial intelligence and is concerning effective personnel, because in addition to the fact that it is clear that in number it is reduced, the importance of assuming new roles arises, which presents the imminent need for training and adaptation. Well, although according to Cukier (2018), the world is not yet ready to make the leap to vehicles controlled entirely with autonomous systems, advances with the implementation of AI demonstrate the opposite. Autonomous systems are replacing the military ones, which is interesting in the sense that there would be an absence in the loss of life.

Currently there is a variety of weapons with diverse capabilities such as real-time data collection or image detection through the use of tracking algorithms, for example, Dave and Dastin (2022) in Reuters have exposed that Ukraine has “Clearview AI”, a tool based on artificial intelligence that has the ability of facial recognition, in this way being a private database stores about two billion images, which allows the Government of this country to identify soldiers of the Russian army who are in Ukrainian territory. In the same direction, the company Camero -Tech, of Israeli origin, has developed a system for image capture based on 3D radar technology for military purposes, which allows detecting objects and people through walls (Betancourt, 2022).

Among the purposes of making use of NTM, as already explained, is to minimize the loss of lives in addition to optimizing resources, reducing costs, therefore massifying global networks and transcending borders which means a reconfiguration of the strategy, without a doubt this requires an assessment of the threats and therefore a review of the assumptions of military strategic thinking, a fact that is not alien to any State, and that finally leads to different positions being taken in this regard.

The absence of a possible agreement lies in the fact that, from a strategic perspective, the Autonomous weapons are a purpose in military matters aimed at defense and state security. On the one hand, they allow operations to be adapted without limitations on troops, since a system could control hundreds of autonomous weapons, which would be leading to the industrialization of armed conflict. As a result, autonomous weapons would substantially increase strategic options, reducing people’s exposure and opening up the possibility of undertaking riskier missions in an era of war (Nadibaidze, 2023).

However, it is a situation that is worrying according to Cummings (2018), because the lack of knowledge and control of these weapons, initially by the military and secondly by those who make decisions at the political level, can promote a massive boom in their development and use, which generates uncertainty in the war scenario taking into account that there are several possible weapons to use with different capacities, up to the possible replacement of the soldier by a robot, which could debate the tactical and humanitarian convenience of these being the ones to carry out the missions, due to the lack of decision-making when, for example, it is a complex scenario.. Thus, Queirolo (2019) states that there must be an important articulation between bureaucracy and industry in robotics and artificial intelligence programs to determine the most effective mechanisms in the application of automated and semi-automated weapons systems.

The United States has demonstrated its intention to continue preparing for a latent risk in this way to deal with the possible consequences of terrorist acts and hostile states (Graham, 2003). This type of weaponry has also been understood as one of the most important threats that the State would face. Russia’s position, in this regard, according to Haney (2020), is to continue with the development and research of artificial intelligence, for which it has made important investments with the aim of protecting sensitive information of the State minimizing the risks of possible attack or theft of this.

3.3. Positions on the occasion of the use of New Military Technologies

Within the framework of the debate whether the existing regulations in International Humanitarian Law are sufficient to regulate the use of new military technologies, each country shows its own position on the one hand Russia has demonstrated offensive and defensive vocation in its developments, having achieved institutional modifications to give way to the implementation of projects in AI, therefore it does not consider it necessary to make a distinction (Hagger, 2011). It is clear that human decision is always mediating for their use, thus, for this State the existing rules of International Humanitarian Law are sufficient. For its part, China was skeptical at first agreed with the application of restrictions and mentioned the ethical dilemmas it brings, however, later clarified that it is not opposed to development and production but to its use without regulations (Stephens, 2015).


In this context, the United States has already been concerned about the changes generated by the introduction of new information and telecommunication technologies as means and methods of war, since it is clear that they imminently influence the conduct of this (Bousquet, 2017). In this way, it begins to transform to face these new challenges, giving rise to the Revolution in Military Affairs (RMA), which is only logical to understand that new technologies with military purpose, have an important influence on the strategy which forces that also supply a transformation in doctrine, military training, operations and other factors that determine war (Mallick, 2020). Thus, it has tried to apply a neutral position against the regulation of new military technologies, which has been evidenced, with its security objectives where it seeks not to commit to treaties and other possible agreements, in this way not having restrictions for the development of this type of weapons.

With regard to the position of the Group of Eight Global Alliance against the Spread of Weapons and Materials of Mass Destruction, established in June 2002, sought to improve the security of weapons of mass destruction technologies in the former USSR, by obtaining material from weapons of mass destruction, employing former Soviet ship-owners, while improving export controls and strengthening border security (Fidler, 2004).

For its part, China has acceded to instruments of international law in this area by signing in recent decades a series of conventions aimed at limiting the use of weapons (Stephens, 2015) (Hollis, 2007). It has also shown awareness of the importance of signing these conventions as part of its commitment to International Humanitarian Law, specifically with regard to its accession to the Convention on Certain Conventional Weapons (Doswald-Beck, 1997). In fact, it was China that insisted on a distinction between just and unjust wars in the protocols subsequent to the Geneva Conventions of 1949 and has lately condemned the use of inhumane weapons and cruel methods. This particular position of China indicates military ethics as a reasonable way in the absence of rigorous restrictions on the use of this type of means and methods of warfare (Hollis, 2007).

The United Nations has served as a platform to discuss prohibitions or restrictions on the use of certain conventional weapons and the development of the Tallinn Manual that compiles more than 200 rules or guidelines, which establish how international law can be applied to cyber warfare (Denagamage, 2015). Table 1 lists countries' positions on the use of Lethal Autonomous Weapons Systems.

Table 1: Positions of different countries in the use of Lethal Systems (United Nations, 2022)

Country positions on the use of lethal autonomous weapons systems Convention on certain conventional weapons - United Nations	
Countries	Position
Joint commentary of Austria, Belgium, Brazil, Chile, Ireland, Germany, Luxembourg, Mexico, and New Zealand	Human responsibility for decisions on the use of weapons systems must be maintained as responsibility cannot be transferred to machines. This must be considered throughout Graham's entire cycle of the weapon system.
France 	Implement a national procedure to control the legality of the weapons systems they develop or acquire, including those based on emerging technologies in the area of law, in accordance with their international obligations, in particular under IHL
Israel 	They consider that current laws cover the operation of NTM and autonomous systems, even see a benefit in the development of these for the reduction of collateral damage.
Russia 	The State considers that the laws contemplated in the actions of its military forces are sufficiently robust and consistent with IHL for the use of any type of weapon. They do not recognize as such the category of Lethal Autonomous Weapons Systems
United Kingdom 	It does not consider a ban necessary, in fact, it proposes a multi-stage analytical framework for the use of weapons.
United States 	Research and development of autonomy-related technologies should not be restricted based on the logic that such technologies could be used for weapons systems. Moreover, while the use of technologies for the purpose of violating international law must be condemned, the use of technologies related to autonomy for defensive or other beneficial purposes must remain unhindered.

In this way, it is possible to initially verify that the development of new technologies is a reality in today's military context, although access to new generations of weapons is not passed uniformly around the world. In any case, in terms of benefits and losses, as noted above, technology by itself does not guarantee victory in the face of armed conflict. As Saint and Goncalves (2018) observe, weapons are only part of the context of war, since the performance in combat is the field of chance, according to the Clausewitzian trinity. However, it cannot be denied that, once modern armed conflicts include the fourth and fifth generation of wars, where direct confrontation is not the first tactic, new technologies come to prominence, since those who stop them can devise bolder defensive strategies.

On the other hand, as armed conflict in the present day is surrounded by a vast range of legal presuppositions, especially aimed at protecting human rights, questions about new technologies go beyond military

matters. Thus, as highlighted above, the regulation of the use of new technologies, although it has as a backdrop the geopolitical purposes of states, imposes relevant limitations derived from international law. More specifically on the use of AI, discussions about the way of regulation are of great importance, because as observed by Bedin et al (2021) the possibilities of errors related to the use of this type of technology are many, given the imprecision of the decision making based on a capacity not human. Thus, it turns out that it is necessary to question about the responsibility for the use of new technologies especially in the face of the possibility of serious violations of human rights. Finally, since this is a topic whose answers require reflections of various kinds, it is relevant to point out that the development and acquisition of new technologies, as tools inherent to security and defense, when they are alien to the need for preservation of the human being, end up contributing to the continuity of war as a cruel reality of the society of men (see Figure 2).

Figure 2: *NTM and its regulation. Source*



IV. Conclusions

Throughout the history of humanity there have been countless wars, which have not been unrelated to the implementation of technology, in fact, they have been adapting as it progresses, becoming increasingly more harmful. In this sense, it has not been configured as a lesson learned to understand that it is not the way, although it is a precept that not all countries have the same security and defense needs and this strictly addresses the realities of each State.

The development and use of autonomous weapons has been discussed in international arenas such as the United Nations, where the primary concern is to know if the current legislation is appropriate or sufficient in these new scenarios of development and use of New Military Technologies if on the contrary it is necessary to propose new forms of regulation, so far the positions are given in accordance with the need specific to each State.

The international scenario regarding the use of New Military Technologies, is led by three great powers, where their position for regulation differs from one to another, so while the United States has taken a neutral position, for Russia it is sufficient with the provisions of IHL and China although at first had a skeptical position supports its development with limitation in its use.

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