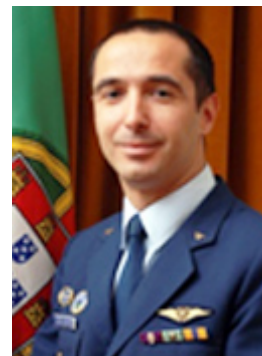# Towards a holistic view of warfare

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It's the end of war as we know it! Future trends indicate that the global strategic environment is changing. Those changes drive the future of warfare. The thesis that technological advances may make war unnecessary, faster and safer reflects the techno-centric American way of war.[1] In fact, it creates a military asymmetry which leads to a different approach to warfare. However, the question is not how technologically advanced a society is, but what it does with that technology. This research is an effort to understand emerging new patterns of conflict and warfare. The analysis of evolving patterns of warfare gives military and civilian leaders the understanding about how future adversaries may think and act, allowing for effective strategic planning. Using the past as a prologue, this paper will argue that future warfare's characteristics will be a fusion between the American way of war and the adversary's increasingly innovative trinity of means, methods and actors. As a corollary, warfare will further expand beyond the traditional military domain. This essay will first establish the opportunity and the motive, by exploring the context for future warfare and exposing the continuities of the American way of war. Then, it will address the increasing importance of information, the holistic methods, and the role of super empowered individuals, leading to the expansion of warfare domains.

Before starting the discussion about future warfare, we must borrow some assumptions from the past. First, there is more to war than warfare.[2] War, as politic object, expresses a state of conflict, which encompasses the use of all instruments of national power, where military power is just one available tool. Second, viewing warfare from its binary perspective, objective and subjective, Clausewitz describes a historical trend about warfare.[3] The objective nature of warfare, which includes violence, friction, danger, exertion, chance, and uncertainty, is unchangeable. Conversely, the subjective character, its grammar, such as doctrine, technology, or people, changes along with the context. Finally, Clausewitz also reminds us about the importance of context by stating that every age has its own form of warfare, its own limiting conditions, and preconceptions.[4] In order to unveil the future form of warfare, let's first have a glimpse of tomorrow's context.

The release of the study *Global Trends 2025* by the US National Intelligence Council helps shedding some light about future trends.[5] The major assumption in this report is that the emergence of a multipolar future brings dramatic changes to the international system. Greater diffusion of authority and power could occur, creating a global governance deficit.[6] This is also the opinion of several authors which assert the shift on US hegemony.[7] Not necessarily due to American decline but rather due to the rise of other powers. Another finding looks upon globalization as the pervasive meta-trend which will continue to ensure the diffusion and affordability of technology. **This trend of technological diffusion, both in proliferation and reduced cost, will allow the spread of "warfare on the cheap", ensuring that any nation, sizable organization, or even a super empowered individual can increase its warfare effectiveness.**

Furthermore, Thomas Friedman's synthesis of the future as "hot, flat, and crowded", reveals the combined trends of global warming, the rise of the middle classes, and rapid population growth.[8] His analysis shows a strong possibility that the future might bring a dangerous combination of geopolitical rivalry and environmental crisis. Likewise, the access to resources might pose a renewed emphasis on geography and geopolitics. This combination of physical pressures and rapid change of social, cultural, technological and geopolitical change adds greater uncertainty to the future.[9] Hence, the speed and scale of change exacerbates its complexity.

In hindsight, 2007 exposed the fragmentation of armed violence, the diversification of armed actors, and the blurring of boundaries between categories of violence and between their actors were among the predominant trends in armed conflicts.[10] Considering this context, and acknowledging the preeminence of the US in the future international system, then investigating the traits of America's approach to combat will facilitate the understanding of its future behavior, and also expose some of the continuities which can be exploited by future adversaries.

The quest for decisive battles, relying on a maneuver and firepower approach with emphasis on technology has been the hallmark of the American way of war. The seminal work of Russell Weigley establishes the historical patterns of the American way of war as defaulting to a strategy of annihilation, which seeks to overthrow the enemy's military power mainly through conventional battles.[11] Recent conflicts have highlighted the promises of technology thru increased lethality, precision, and global reach allowing the US to fight wars with fewer casualties. Viewing warfare exclusively in terms of technology may hide the fact that technology does not change the essence of war.[12] Although technological advances introduce asymmetries on the battlefield, these advantages have always been temporary and rapidly equalized, either by new technologies or fighting tactics. For example, shifting the battlefield to complex environments, such as urban or jungle hinders the effectiveness of technology.

The improved precision and lethality of the American way of war created the expectations for a casualty-free warfare. Furthermore and greatly enhanced by the "CNN

syndrome", it revealed an increasing risk-averse society. Some may see this as a weakness worth exploiting. Nonetheless, this casualty sensitivity must be seen in context. Whenever society perceives that vital interests are at risk it will be more permissive to casualties. Historical examples of World War II and the initial response after September 11, 2001 support this claim. Nevertheless, **the expectation for a quick and decisive victory, although seldom real, is an image that many** Americans want and expect.

Finally, the American way of war reflects a symptomatic military approach that concentrates on winning battles instead of wars.[13] Wielding military power autonomously from other instruments of power is a consequence of different spheres of responsibility, one for diplomacy and one for combat.[14] Furthermore, browsing through history provides an image of a willful forgetfulness syndrome, which tends to universally apply the successes of the American way of war, disregarding the context, while forgetting lessons learned from defeat. There were several moments in history where a willful amnesia erased the lessons learned from small wars and insurgencies. That was the case of the Vietnam War where the lessons learned were ignored and deliberately forgotten. According with John Nagl, although the US Army was well aware of the deficiencies in counterinsurgency warfare, "it has failed to form a consensus on the lessons of Vietnam".[15] Colin Gray explains this behavior by the fact that any society "will not excel in the performance of unfamiliar and profoundly unwelcome strategic missions".[16] This expresses the frustration with limited wars, particularly counterinsurgent wars, which do not pose a vital threat to the American national interests. Whenever the interests are not vital then there is no public support to continue spending "blood and treasure". These lessons are painfully expressed in recent conflicts, revealing some of the US weaknesses when confronted with unconventional methods of warfare. For example, the public support for the Iraq war is not overwhelming, and the current financial crisis will increase the threshold for further conflicts.

The previous discussion has provided **both the motive and the opportunity for future challengers of the US. Now the question is how will they do it?** The history of warfare has an enduring cycle which alternates between conventional and unconventional, confrontation and dislocation.[17] The trend of US's overwhelming military power deters an adversary direct approach. Hence, if the US wages war on the premise of lower risks, then the best counter strategy should be the willingness to take risks. That is, establishing a risk threshold which is publicly and politically unacceptable for the US. This indirect approach can be achieved via a dislocation strategy, which Liddell Hart defines as, "concentration of strength against weakness",[18] **leveraging globalization and technological diffusion to affect US's weaknesses**.

Sun Tzu asserts that, "to subdue the enemy without fighting is the acme of skill".[19] However, considering the Chinese perspective, conflict may actually be preferred in some occasions. Further research shows that the idealized vision of subduing the enemy without battle is not, according to Ian Johnston, the prevailing theme of the Chinese strategic culture. He argues that there is a Chinese historical inclination for a grand strategy of "absolute flexibility", revealing a preference for offensive violence over static

defense.[20] For Andrew Scobell, the "cult of defense" underlines the Chinese strategic culture within a concept of "active defense", which emphasizes a defensive posture, but actually blurs the distinction between offence and defense.[21]

This study envisions future warfare as a fusion of characteristics, where the US approach, as the dominant player, will be confronted with multi-dimensional, asymmetric attacks, spanning social, political, and economic domains. However, the central operational motivation will shift from destroying enemy forces to shaping the effects in public opinion. Although this approach may be wielded by any contender, it is especially effective when used by non-state actors and emerging peer competitors who are not bounded by the legal, moral, and institutional constrains of a liberal democracy.

Therefore, future will bring a shift in warfare function. While US objectives are "redefining war on our terms"[22] using technology and overwhelming military power to compel the adversary to submit one's will, other adversaries will use "all means, including armed force or non-armed force, military and non-military, lethal and non-lethal means to compel the enemy to accept one's interests".[23] This holistic approach to warfare considers both state and non-state actors seeking to reduce their military inferiority over stronger opponents, in particular the US. By promoting a "beyond the limits" confrontation, it orchestrates all the measures required to fight a stronger opponent. It is a synergic employment of unrestricted measures, but with limited objectives. Changing the emphasis from military to political, economical, information and cultural engagements, it blurs the distinction between war and peace. Moreover, it seeks to paralyze the adversary's combat effectiveness, by collapsing government organizations, and disrupting the normal flow of advanced societies. As an immediate consequence, the military-technical dimension of war is no longer the most important one. Rather, warfare has expanded to include the fields of diplomacy, economics, finance, cybernetics, media, and information. This comprehensive vision of war leads to asymmetric tactics aimed at destroying the Western state's center of gravity: its liberal values.[24]

The fragility and interdependence of the world economy, the vulnerabilities of critical infrastructures, and the growing dependency on the internet expands future warfare into non-lethal and non-military domains. Nonetheless, force projection can be achieved through methods such as trade embargoes, currency devaluation, cyber attacks, and hostile takeovers from sovereign wealth funds. Through the use of non-lethal force it is possible to spread disruption and panic, such as the case of the anthrax threat in Washington DC.[25] The World Trade Center and the Pentagon attacks unleashed the lethal potential of such methods.

This apparent lack of coherence and integration of such methods will be overcome, allowing in the future an orchestrated employment of unrestricted methods to achieve limited objectives. Various state and non-state actors are repeatedly probing in these domains. Even though there are no current explicit indications of the willingness of a nation-state to employ this strategy in an orchestrated manner, there have been several instances of individual actions utilizing these methods. For example, after the collision of a US surveillance plane and a Chinese fighter plane, several hackers defaced dozens of US military web sites.[26] Another event refers that pro-Russian computer hackers have

been blamed over the last few years for cyber attacks against Estonia and Georgia.[27] Moreover, the US National Defense Strategy acknowledges that "China is developing technologies to disrupt our traditional advantages. Examples include development of anti-satellite capabilities and cyber warfare".[28] As an evidence of this, in 2007, China successfully used a missile to destroy an orbiting satellite.

Hence, the importance of information will increase, as an enabler, a weapon, and a target. The improved surveillance and targeting capabilities, the media manipulation, and the disruption of networks are all faces of the same dimension. For example, it is difficult to imagine how the US forces would operate without GPS or communications. Additionally, the cited example of the cyber attacks against Estonia shows how disturbing and effective they can be.[29]

This approach to warfare is neither new, nor identical to past strategies. What is new and different today is the global reach of adversaries, enabled by advanced information technology. Although actors, motivations, and technologies have existed in past wars, the current and future advances in science and technology will continuously empower a new breed of fighters, relying on the impact that the few can have on the many. What seems certain is the tendency of increasing destructiveness in smaller units, growing the possibility for disruption of society, using weapons of mass effects, either kinetic or non-kinetic. Moreover, the operational usefulness of super empowered individuals, such as hackers, terrorists, or financiers, could reinforce the powerful linkage between the tactical and strategic levels of war. Hence, state actors will definitely lose the monopoly over the catastrophic use of violence, and the growing civilianization of war will increasingly blur the distinction between war and peace.

This holistic view addresses "old" forms of combat in a dangerous "new" ways. Consequently, the fundamental question for future strategists is finding the appropriate balance between "old" and "new" ways to counter this form of warfare. The study of warfare theories and how warfare effects the organizations, technologies, and employment of forces helps understanding the way adversaries think, and act, allowing the development of an effective counter strategy. Such studies about the nature and character of future warfare are increasingly forging the intellectual foundations of tomorrow's warfighters and decision-makers.

In conclusion, why should future warfare be different from the past? Because context matters! The next decade will accentuate the interaction of globalization and technology diffusion which will impact warfare's diversity, affordability, and effectiveness. However, technology will not change the nature of war. Chance and uncertainty will be present while two belligerents inflict punishment into each other. But the way to inflict punishment has been changing and it will change the character of warfare.[30] While the nature of future warfare will remain the same, it will reveal the fusion of US's warfighting characteristics with a more innovative adversary's trinity of means, methods, and actors. On one hand, the decisiveness of the military instrument; the centrality of technology; the casualty aversion; and the tendency to wage war as an autonomous

endeavor. On the other hand, the growing importance of information, the holistic methods, and the super empowered individuals will finally push warfare to different domains, redefining perhaps its function...

In the future, it is the ability to impose will, not the level of violence, which will eventually lead to a better peace.

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1 MILLET, Stephen - Tomorrow's Conflicts, pp. 42-46.

2 HART, Liddell - Strategy, pp. 335-336.

3 CLAUSEWITZ, Carl Von - On War, p. 85.

4 Ibid., p. 593.

5 Global Trends 2025 is the fourth report prepared by the National Intelligence Council that takes a long-term view of the future, with the objective to provide US policymakers with a view of how world developments could evolve, identifying opportunities and potentially negative developments that might warrant policy action. **National Intelligence Council - Global Trends 2025 Report.**

6 "Because of the emergence of new global players, increasingly ineffective institutions, growth in regional blocs, advanced communications technologies, and enhanced strength of nonstate actors and networks". Ibid., p. 81.

7 The rise of China, European Union, Brazil, Russia, and India will increase the clashes over states interests. For further discussion see ZAKARIA, Fareed - The Post-American World; KHANNA, Parag - The Second World.

8 FRIEDMAN, Thomas - Hot, Flat and Crowded.

9 US National Defense Strategy, p. 4.

10 SIPRI Yearbook 2008 Summary, p. 4. "For the fourth consecutive year no interstate conflict was recorded in 2007. Only three major armed conflicts were fought between states during the entire period 1998-2007: Eritrea-Ethiopia (1998-2000); India-Pakistan (1998-2003); and Iraq versus the USA and its allies (2003). The remaining 30 major armed conflicts recorded for this period were all fought within states". Ibid., p. 5.

11 WEIGLEY, Russell - American Way of War, p. xxii.

12 YARGER, Harry - Strategic Theory for the 21st Century: The Little Book on Big Strategy, p. 58.

13 For arguments supporting Echevarria's thesis, exposed in Toward an American Way of War, see GRAY, Colin - The American Way of War, p. 34, and HOFFMAN, Frank - Conflict in the 21st Century, p. 24.

14 ECHEVARRIA, Antulio - Toward an American Way of War, p. vi.

15 NAGL, John - Learning to Eat Soup with a Knife, p. 205.

16 GRAY, Colin - op. cit., p. 35.
17 LEONHARD, Robert - From Operational Art to Grand Strategy, p. 217.
18 HART, Liddell - op. cit., p. 347.
19 TZU, Sun - The Art of War, p. 77.
20 JOHNSTON, Ian - Cultural Realism, p. 30.
21 SCOBELL, Andrew - China's Use of Military Force, p. 193.
22 BUSH, George - President Bush Outlines Progress in Operation Iraqi Freedom.
23 LIANG, Qiao and XIANGSUI, Wang - Unrestricted Warfare, p. 7.
24 RICKLI, Jean-Marc - The Impact of Globalization on the Changing Nature of War, p. 5.
25 Beginning in late September of 2001, several letters containing anthrax spores were mailed to several news stations and to US Senators, killing five people and infecting 17 others.
26 HARRIS, Shane - China's Cyber-Militia.
27 KIRK, Jeremy - Estonia, Poland Help Georgia Fight Cyber Attacks.
28 US National Defense Strategy, p. 22.
29 In April 2007, Estonia suffered, what can be described as the first cyber war, where several cyber attacks paralyzed the functions of the government, leading to riots and disruption of the society.
30 BOOT, Max - War Made New, p. 471.