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# Perspectives and Interpretations around Wargaming from Sun Tzu and Clausewitz's vision

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**Abstract:** This article aims to explain wargaming in direct relation to the understanding of the different perspectives and interpretations surrounding the simulation of complex crisis or conflict situations, based on multi-domain and multi-systems. These simulations are framed by rules, procedures and the handling of large volumes of data (big data). It is essential to better understand these situations from different perspectives, assuming probable biases.

**Keywords:** Wargaming, perspectives, interpretations, probabilities, visions, operational thinking, prospectives, regressive progressions in war, nonlinear war.

### 1. INTRODUCTION

This article seeks to explain wargaming in their direct relation to the understanding of the different perspectives and interpretations around the simulation of complex crisis or conflict situations. This is based on the conduct of multidomain operations (JODA-Joint All Domain Operations) and multi-systems, which are framed by rules, procedures and the handling of large volumes of data (big data). It is necessary to better understand these situations from heterogeneous perspectives, assuming probable unconscious biases and improving structured, especially critical, thinking, to make decisions with greater acuity and speed, in irregular and asymmetrical wars. In addition, it is important to understand them to assess risk and mitigation, to promote the innovation and creativity of operational art, communication, teamwork, as well as the generation of lessons learned of the same problem from different perspectives and in unconventional ways, to find new solutions, avoiding solving today's problems using yesterday's solutions.

Understanding that wargaming is repetitive simulations of different outcomes based on systematic regressive progressions, it is possible to test, assess, redefine, redesign, and improve theoretical frameworks, plans, processes, certain patterns, and erratic actions. It can also mitigate the uncertainty of the future through the analytic prediction of "future moves" that adapt to one's own reality, associated with probabilities, without discarding chance. It is also possible to develop and work on the necessary skills of participants, "wargamers", in the different levels of war: strategic, operational and tactical, depending on the purpose of wargaming<sup>1</sup>.

This article will begin with Sun Tzu and Clausewitz's vision reaching today's vision. The second argument will relate to the mistranslation from German and misinterpretation in English of the concept Schwerpunkt. Then, the inevitable efficient processing of data and information will be explained to avoid misinterpretations in the OODA cycle. Finally, not only do biases occur qualitatively, but there are also quantitative biases, which are present in wargaming.

### 2. DEVELOPMENT

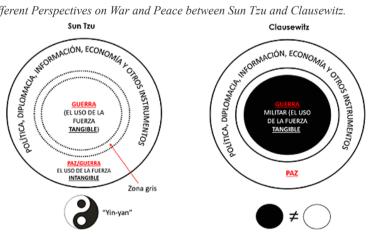
We will begin by analyzing the different perspectives between East and West of two great military thinkers and strategists, Sun Tzu and Carl von Clausewitz, in relation to the art of war, understanding its environment and culture, among other factors, in such a way as to comprehend their perspective in direct relation to their

<sup>&</sup>lt;sup>1</sup> Mujica Caballero, M. (2023). Juegos de Guerra: una poderosa herramienta prospectiva, analítica y didáctica [Wargaming. A powerful prospective, amalytical and didactic tool]. Revista De La Escuela Superior De Guerra Naval [The Peruvian Naval War College's Review], 20(2), 26-43. It was recovered from https://revista.esup.edu.pe/RESUP/article/view/160

space and time. The translation of their works without a complete understanding of the subject and without knowing their culture can lead to translations with misinterpretations.

From Sun Tzu's perspective in his masterpiece "The Art of War", the idea of war prevails as the last resort, and it should be used only when absolutely necessary. He proposes that the art of war lies in achieving victory without fighting, using the other Instruments of National Power (DIME/MIDFIELD<sup>2</sup>) in a rational, flexible and adaptive manner, and changing strategy according to circumstances. This makes the line between war and peace very ambiguous and blur. To understand the use of tangible and intangible force (kinetic and nonkinetic warfare) and the current use of the so-called hybrid warfare in the grey zone, represented by the "ying-yang" duality (dark-bright), two complementary forces in permanent symbiosis are described, associated with the "tao" for the self-sustainability of both forces in equilibrium (war/peace). Consequently, Mao Tse-Tung wrote in his "Red Book" that: "Politics is war without bloodshed while war is politics with bloodshed" (Tse-Tung, 1967, pág. 58). On the contrary, Clausewitz states that: "War is the continuation of policy by other means," thus war is an unavoidable tool of the rational or irrational political actor, inescapable for resolving conflicts when diplomatic means fails, and it is additionally related to the so-called "Thucydides Trap". In this sense, the previously explained concept can be seen in Figure 1.

FIGURE 1 Different Perspectives on War and Peace between Sun Tzu and Clausewitz.



Source: Master of war, USNWC, Michael Handel, 2001. Author's adapttion

<sup>&</sup>lt;sup>2</sup> Diplomatic, Informational, Military, and Economic means. /Military, Informational, Diplomatic, Financial, Intelligence, Economic, Law, Development.

Similarly, in the 21st century, we have seen a trend towards blurring the lines between war and peace. Wars are currently no longer declared and, once initiated, they develop in erratic ways typical of the dynamism of globalization, framed by different concepts: Major Operation, Conflict, Foreign Military Assistance, among others, according to one's own interpretation of the situation, increasing ambiguity. These arguments can be correlated with the concepts explained by Professor Beatrice Heuser in her book "The Evolution of Strategy," in which she argues about the Western obsession with categorization and compartmentalization in relation to the problems of differentiating "war" (nature), "warfare" (character) and peace. In this regard, Figure 2 shows the possible applicable types of warfare (character), which vary by author.

FIGURE 2: Applicable types of warfare (character)

Type of instrument	Source
Conventional warfare  Irregular warfare	Hoffman's original definition of hybrid warfare
Terrorism	
Criminality (large-scale)	
Information warfare	Mattis and Hoffman's 2005 definition of the 'four block war'
Nuclear warfare	Liang and Xiangsui's military forms of warfare in Unrestricted Warfare (1999)
Bio/chemical warfare	
Ecological warfare	
Space warfare	
Electronic warfare	
Concussion warfare	
Network warfare	Liang and Xiangsui's trans-military forms of warfare in Unrestricted Warfare (1999)
Intelligence warfare	
Cyber warfare	The UK's Future Force Concept (2017)
Urban warfare	
Unmanned warfare	

Source: U. S. National Defense University Press

British analyst Sean Monaghan correctly illustrates it in his article: "Countering Hybrid Warfare, So What for the Future Joint Force?" published in the U. S. National Defense University Press in relation to a hybrid warfare scenario. Therefore, "just as water retains no constant shape, so in warfare there

are no constant conditions" (Sun Tzu), so greater intuition and perspective is required for the interpretation of complex situations.

Warfare have undergone the changes of modern technology, triggering atypical forms of their evolution, such as the use of drones (swarming), cognitive warfare, mosaic warfare and cyberwarfare. In other words, while we are seeing a relative reduction of "warfare" (quantified only in the number of casualties), they are currently expressed in other concepts, proper to different interpretations. Likewise, despite today's greater economic interdependence and a better understanding of its impact on Gross Domestic Product (GDP), it does not signify a peace akin to that of Westphalia or to a so-called "perpetual peace" as presented by Immanuel Kant in his book "Perpetual Peace." We could talk about a reduction in the use of a tangible and shock force, but not an intangible force materialized in an increase in political, economic, technological confrontations and information warfare, not necessarily with non-kinetic effects. <sup>4</sup>These issues require acute critical thinking by "wargamers" to be able to see beyond the supposedly obvious.

Another clear example of the distortion of perspectives and interpretations around wargaming begins with the mistranslation from German and misinterpretation in English of the term *Schwerpunkt*, as Professor Milan Vego argued:

"The term from which the center of gravity concept has been extrapolated, *Schwerpunkt*, really means weight (or focus) of effort. In reassessing center of gravity as an underpinning of doctrine, it is important to observe that the original *Schwerpunkt* concept is actually closer in meaning to what the U.S. military now calls the sector of main effort and the point of main attack (defense). Although the original Clausewitzian rendering of *Schwerpunkt* could, like the center of gravity, encompass both physical and human elements, it is less complicated to identify, but not necessarily to apply, than the U.S. concept of a center of gravity or centers of gravity. In contrast to the modern application of the concept of center of gravity, Clausewitz's *Schwerpunkt* dealt almost exclusively with the strategic level of war." (Vego, 2007, pág. 101)

Thus, we can know how the Germans understood and employed this concept at the time from a perspective probably more consistent with Clausewitz's strategic conception.

<sup>&</sup>lt;sup>3</sup> Term coined by DARPA, defined as the use of multiple specialized task elements that work together but autonomously, creating a dispersed pattern in the combat area.

<sup>&</sup>lt;sup>4</sup> Unrestricted Warfare, Col. Qiao Liang & Col. Wang Xiangsui,2015.

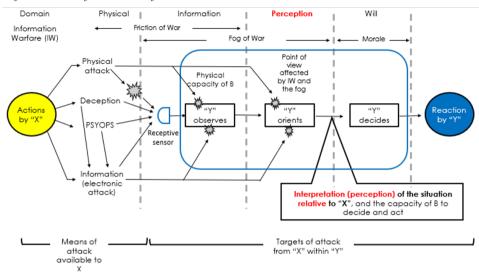
Additionally, when referring to Clausewitz's statement: "The first and the most far-reaching act of judgment that the statesman and commander have to make is to establish by that test the kind of war (character) on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature" (Howard & Peter, 1984, pág. 89), the changing character of war currently causes wargaming to develop mechanisms and guidelines to be judicious in the analysis and interpretation of situations, as well as the efficient processing of information related to Data Science, Artificial Intelligence and Big Data. In the context of Information Warfare (IW), it is about maintaining the capacity of the force itself to collect, process, and act on data and information to achieve an advantage across the spectrum of military operations. Likewise, the adversary's data and information are denied, which generates deception and deceit; managing to disrupt and manipulate his perception, observation and orientation in the "OODA" cycle, as well as his reflexive control, which reduces his ability to make decisions. Therefore, one should not have the "perfect information" during wargaming, it goes against the fog and friction inherent in the nature of war, generating dynamics and interferences in plans since the true intention of the adversary is unknown. Giving "wargamers" perfect information removes fog, friction and the real possibility of innovating stratagems; stifling the creativity of operational art and the fundamental process of the "Kill-chain" (search, fix, track, and assess).

As can be seen in Figure 3, the interpretation (perception) of "Y" in relation to the understanding of the tactical situation from their perspective, is a factor of information measured in terms of sensory and intuition. The decisions made are determined by the interpretation (perception) of the tactical situation in terms of Information Warfare attacks of "X" on "Y". This has a direct influence on his ability to orient and decide his actions (in this case on the reaction of "Y")<sup>5</sup> in a distortion of reality, increasing chaos in the adversary, in which such decision, in Clausewitzian terms, may be affected by a wrong action or by subduing the adversary's will to fight (morale).

<sup>&</sup>lt;sup>5</sup> Information Warfare Principles and Operations, Edward Waltz,1998, pág.6

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FIGURE 3
Information Warfare Actions of "X" on "Y".



Source: Information Warfare Principles and Operations, Edward Waltz, 1998. Author's adaptation.

Similarly, not only do biases occur qualitatively, but there are also quantitative biases, which are present in wargaming, as shown in the book "Naval Operations Analysis". In this case, we can mention what happens in the Lanchester equations (linear, quadratic and mixed) to assess the Relative Combat Power (RCP). Raw data loading can have three different scenarios and interpretations from various probabilistic perspectives, so it requires the skill of the analyst to properly process the data. The distribution of this data is not necessarily linear or uniform, without clearly identifying the central trend, generating possible statistical biases by excluding relevant variables, scattering of data or bias of the observer in the interpretation of raw data, without a standard deviation in gauss bell. The analysis of data and information must be more thorough, as we must be aware that new technological advances will compress space and time, as well as new methods regarding the use of forces will emerge.

### In fact:

"The US Department of Defense relies on wargaming for both analytical and operational outcomes. Wargames offer a low-cost, low-risk way to educate warfighters on tactics, strategies, and operational concepts to prime their thinking for future battlefields." (Bae, 2022, pág. 30)

Therefore, it generates competencies linked to the tolerance of dealing with uncertainty or scarcity of data and information; greater reflection and understanding of situational awareness; greater skepticism, questioning and developing different perspectives and interpretations of repetitive events typical of wargaming, where observation from a different perspective may vary the interpretation, allowing to mitigate possible ramifications of the proposed Own Courses of Action (Multiple Courses of Action with Multiple Branches).

Similarly, innovative methods were adapted to reconfigure various kinetic and non-kinetic capabilities to achieve tactical, campaign and strategic objectives. In addition, there is a reduction of unconscious biases resulting from an extensive sum of mental operations that take place below the situational awareness threshold, in the perception of elements and events with respect to operational factors: force, space and time, as well as the deep understanding of the situation and prospective scenarios.

## In that regard:

"We need to do three things. First, accept what is happening rather than pretend it is not happening. Second, understand the tactics being used. Third, act intelligently and consistently to defend States, values and interests from this insidious form of conflict." (Bob Seely & Alya Shandra, 2018)." (Bob Seely & Alya Shandra, 2018).

Thus, it is understood that the nature of war is unique and particular; you must know your adversary and yourself to be able to foresee how your opponent might deviate your perspective and interpretation from the rational conduct of war.

### 3. CONCLUSIONS

Wargaming allow you to explore and understand complex situations from multiple perspectives, helping participants overcome unconscious biases and improve decision-making through structured and adaptive thinking.

The changing nature of warfare, influenced by technology and globalization, has led to continuous evolution and adaptation of wargaming, which now include aspects related to hybrid warfare, challenging conventional definitions of conflict.

Wargaming require the analysis of big data, artificial intelligence and data science (mathematical modeling) to improve the ability to predict and adapt to divergent futures, reducing uncertainty and optimizing decision making. It is also expected that, in a few years, the evolution of artificial intelligence can credibly emulate certain patterns and behaviors of recognized classical and contemporary strategists.

A detailed observation of wargaming from different perspectives can vary the interpretation, allowing to mitigate possible ramifications of the Own Courses of Action proposed according to the interpretation.

"Wargamers" develop critical skills such as situational awareness, uncertainty tolerance and multidimensional analysis, which are fundamental at different levels of warfare. Being necessary a multi-agency General Staff, giving solutions with different perspectives, according to the determination of its scope.

Wargaming is a transcendental educational tool for the preparation and adaptation of "wargamers" to dynamic situations, where change is the only constant.

"Understanding Better and Deciding Faster, Harnessing the Power and Potential of Wargaming"

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