Influence and Psychological Operations within the Context of Wargames: Focus on Brazil

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Abstract

The presence of influence operations in wargames constitutes this article's central core, covering aspects pertaining to the information environment as well as to cognitive / psychological operations. To this end, tactical, operational and strategic levels are addressed.

On top of bibliographical research, this piece is also the result of an exclusive interview with Navy Captain Alexandre Tito Xavier (Ret. / Brazilian Armed Forces). This way, the article particularly highlights Brazil's current situation, as concerns wargames in general, and, specifically, in relation to the use of psychological operations.

Keywords: Brazil; cognitive / psychological operations; influence operations; information operations; wargames.

Introduction

This article is the result of bibliographical research and of an exclusive interview with Navy Captain Alexandre Tito Xavier* (Ret. / Brazilian Armed Forces). He is a distinguished expert and pioneer, in Brazil, in the sphere of wargames, with a wealth of experience in the field of Intelligence (*Quem Sou*), relative to whom the following aspects are noteworthy, among others (*Alexandre Tito Xavier*):

-from 2021 to the present – Defense Ministry researcher (Brazil)

-from 2020 to the present – Wargames Center instructor at the Naval Warfare School (Brazil)

-2018-2020 – Deputy Director of the Navy Technological Center (São Paulo, Brazil)

-2015-2017 – Commander of the Rio de Janeiro Naval Base (Brazil)

This article is developed around wargames concerning which there is no single commonly accepted definition (*Wargaming Handbook* August 2017, p. 5). Thus being the case, as part of this work, a wargame is considered to be a model where people make decisions, in a synthetic environment marked by conflict or competition, and where they become aware of the consequences of their decisions, and they can react according to such changes (Perla September 19, 2022). This definition comprises two keywords: people and decisions (Perla September 19, 2022).

An essential aspect of warfare involves decision-making in an adversarial environment, facing stress, danger, unpredictability and uncertainty (Work, Selva December 8, 2015). The efficacy of wargames basically goes by way of including human players who make decisions relative to their best actions, considering their circumstances and what the adversary's reaction is expected to be (Work, Selva December 8, 2015). On top of hostile actors, wargames should also include every 'oppositional' factor that creates resistance to a plan (*Wargaming Handbook* August 2017, p. 5). Wargames consist of the following elements: aims and objectives; setting and scenario; players / decisions; simulation; rules, procedures and adjudications; data and sources; supporting personnel and subject matter experts; analysis (*Wargaming Handbook* August 2017, pp. 7-8).

Wargames are suitable for investigating their players' decision-making processes, those aspects which they feel determined their decisions and the way such processes are interrelated (Perla September 19, 2022). The game unfolds in these players' minds (Perla September 19, 2022). At their essence, wargames are regarded as acts of communication that take place, in a structured manner, among experts (Vatne, et alii September 19, 2022).

As part of wargames, this article particularly focuses on some aspects that are integrated in information operations, namely cognitive operations / influence operations (Panwar 2024, p. 4). In this sphere, psychological operations (Psyops) will also be highlighted (Panwar 2024, p. 4). With regard to the kinds of warfare at issue, there is a certain conceptual uncertainty, due to a number of reasons, such as the difficulty in placing said spheres in airtight compartments.

In a democratic society, decision makers should be aware that they find themselves in an environment that neutral, friendly and hostile (civilian and military) actors seek to shape (*German Wargaming Center*). All said actors are bent on wielding influence (*German Wargaming Center*). In reality, as part of a military conflict or even in periods deemed to be peacetime, military operations can be conducted comprising several kinds of targets, such as the

following: individual (military and political decision makers); groups; vast swaths of a country's population. All of these targets, in principle, can be directly or indirectly influenced through various means (e.g. interpersonal communication and media). All this can be present in wargames. Within the sphere of wargames, influence operations constitute the centerpiece of this article. In the current context, influence means the ability to produce an effect on one's character or behavior or the effect per se (*Influence Wargaming Handbook* 2023, p. 123). (This definition can be found in the *Oxford Learner's Dictionaries* (*Influence*)).

There are various kinds of wargames, such as the following: computer-supported exercises; scenario exercises; tabletop map exercises (*Wargaming*). Wargames can be found at tactical, operational and strategic levels (*Wargaming*). At all these levels, decision-making is a pivotal aspect. It should be added that tactical, operational and strategic levels are not fully separate (*Doctrine for the Armed Forces of the United States* July 12, 2017, p. I-7). In the current global environment, said levels are interconnected in complex ways (Perla, Markowitz 2009, p. 1). In this regard, experts even speak of multi-level gaming (Perla, Markowitz 2009, p. 1). This is a topic for which NATO, for example, has shown interest (Dobias, Nelson 2023).

At the strategic level of decision-making, the objectives of the conflict and the end state are determined (Perla, Markowitz 2009, p. 14). At the tactical level of conflict, opposing forces interact directly (Perla, Markowitz 2009, p. 14). Here, we have what is known as the engine of change (Perla, Markowitz 2009, p. 14). The operational level, which is above the tactical one and below the strategic one, links the goals of change to the engine of change (Perla, Markowitz 2009, p. 14). The operational level is where decision makers evaluate the changes that have occurred, while determining which means can contribute to the tactical outcome and how all this can contribute toward bringing about the changes specified by strategists (Perla, Markowitz 2009, p. 14).

Wargames are currently viewed as instruments of considerable importance, in both the military and civilian spheres, namely as concerns policymakers (*The Crucial Role of Wargaming in Defence* November 17, 2023). Wargames are part of the curricular structures of various civilian and military universities (Bae December 16, 2020) as well as Professional Military Education (PME) programs (Walters 2021). This type of games is a proven credible method for developing leadership, in the military domain, from tactical to strategic levels, at a relatively low cost, compared to exercises involving hundreds or thousands of troops (Arias, Klay December, 2017, p. 7).

Monk (October 7, 2024) maintains that military organizations should heighten their interest in strategic-level wargames whose participants comprise not only military personnel, but also other persons, with key functions, such as intelligence service professionals, diplomats and economic policymakers. In said game type, players are called upon to make decisions which, while overcoming battlefield maneuvers to a great extent, cover the following, inter alia: shaping

international perceptions; negotiating alliances; and managing economic sanctions (Monk October 7, 2024.

Wargames and the Information Environment

Essentially, military information power amounts to the ability to exert one's own will or influence over an adversary, by generating, preserving, denying or projecting information (Reese August 2020, p. 32). In the United States (U.S.), the Defense Department has paid ever closer attention to the information environment, with the same taking place in competitor countries such as China and Russia, most notably the latter (Paul, et alii 2020, p. x). The importance of the information environment in warfare should justify its prominence in wargames (Paul, et alii 2020, p. 27).

Wargames, for instance, as part of the U.S. Marine Corps, need to cover a variety of information-related capabilities, inter alia, the following: civil-military operations; cyber operations; defense support to public diplomacy; intelligence; military deception (Paul, et alii 2020, p. xi). Also regarding Marine Corps wargames, we should point out mechanisms that enable integrating effects of operations in the information environment on noncombatant populations (Paul, et alii 2020, p. xi). Among others, we see the following operations in the information environment functions: influence foreign target audiences; deceive foreign target audiences; inform domestic and international audiences (Chawk April 2020, p. 10).

Wargaming operations in the information environment endow the Marine Corps with a holistic perspective of the information environment (Paul, et alii 2020, p. 11). This, despite being relevant for the war's physical sphere, is chiefly related to the mental and morale spheres (Paul, et alii 2020, p. 27). These two latter spheres are predominantly present in the information environment and, thus, are influenced through operations therein (Paul, et alii 2020, p. 39).

The three previously mentioned spheres are, to a greater or lesser extent, present in wargames; however, the most important one is morale (Paul, et alii 2020, p. 35). To be able to learn the impact of operations in the information environment through wargames, we need to take into account the three spheres: especially, unlike physical movement and combat, actions should enable producing non-physical effects (Paul, et alii 2020, p. 35).

While information warfare can be regarded as a subpart of operations in the information environment, it takes place in periods of competition, without being an armed conflict, as well as during warfare, with the aim of dominating the information environment within a given space and time (Theohary November 29, 2024). Currently, in our society, practically everyone is part of the digital information environment (Havel March, 20, 2023). Within the context of the digital age, information warfare is of concern to several experts who warn of malicious actors tampering

with public opinion, through the media, and of their destabilizing governments, among other reasons for concern (Saari, et alii June 2024, p. 439).

To offset information influence activities, suitably trained and educated communicators need to be in place (Saari, et alii June 2024, p. 439). For instance, in January 2024, 27 Finnish officials from various ministries and agencies took part in an information warfare exercise (Saari, et alii June 2024, p. 439).

For those studying the fields of Defense and Security, planning information operations, as part of wargames, improves learning (Emmel May 2020, p. 60). Also by way of example of what can be achieved in wargames, in order to thwart adversarial narratives, teams use social media to reach certain target audiences while adapting to changes occurring in the information environment (Emmel May 2020, pp. 60-61). Specifically, in 2019, a wargame was conducted at the National Defense Academy (Riga, Latvia), in which training, projecting and receiving narratives were looked at, to create resilience against malign influence (David, DeRosa January 16, 2020).

Wargames can also serve to delve into the way States use lawfare in the information space, acting below the threshold of an armed conflict, with a view to obtaining some advantages (Emmel May 2020, p. 61). (According to Starling (February 2022), the gray zone amounts to a set of activities, inter alia influence operations, which occur between peace and war. These activities can be carried out by both state and non-state actors (Starling February 2022). Specifically, there are gray zone wargames that encompass information actions (Pettyjohn, Wasser 2019, pp. 3 / 49)).

Influence in Wargames

The purpose of the German Wargaming Center is to understand influence and come up with ways for democratic societies to become more resilient vis-à-vis hostile or harmful influence (*German Wargaming Center*). Foreign influence on democratic societies constitutes the basis for military and non-military coercive campaigns, with an impact on the attitudes and behaviors of various audiences (*German Wargaming Center*).

Nick Joad, Director of Science and Technology / United Kingdom (UK) Ministry of Defence, believes that, with regard to many activities in the fields of Defense and Security, human behavior is of significant importance (*Influence Wargaming Handbook* 2023, p. iii). This expert stresses that operational success goes by way of influencing the perceptions, attitudes and behaviors of a variety of audiences (*Influence Wargaming Handbook* 2023, p. iii). Joad asserts that we are witnessing a rapid change in the character of warfare, due to the evolving technological progress and the dissemination of information (*Influence Wargaming*

Handbook 2023, p. iii).

Concerning military operations, the information environment is the most accelerated of all the environments (Katolin, George April 2020, p. 85). According to NATO, the information environment, on top of the information per se, also includes individuals, organizations and systems that receive, process and issue information as well as the cognitive, physical and virtual space where all this unfolds. (*Influence Wargaming Handbook* 2023, p. 124) The information environment has means at its disposal that can produce lethal or non-lethal effects (Reese August 2020, p. 36).

Nick Joad considers that the UK's adversaries and competitors seek to weaken political cohesion as well as social and economic resilience, through information-centered activities that aim to affect audiences' beliefs, attitudes and behaviors on a global scale (*Influence Wargaming Handbook* 2023, p. iii).

Wargaming is especially appropriate for investigating influence; still, to bring this about and prevent certain risks, everything has to be conducted correctly (*Influence Wargaming Handbook* 2023, pp. v-vi).

Regarding the UK Defence Doctrine, acknowledgment of audiences' importance is linked to the inclusion of integrated action (*Influence Wargaming Handbook* 2023, p. 1). Such action amounts to orchestrating military activities in every operational domain, geared to audiences, in sync with non-military activities, to influence the attitudes and behaviors of certain audiences, in order to attain positive results (*Influence Wargaming Handbook* 2023, p. 1).

Influence is achieved by creating effects in every dimension of the information environment (*Influence Wargaming Handbook* 2023, p. 1). The effects of influence cover and relate, among themselves, operations' tactical, operational and strategic levels (Influence Wargaming Handbook 2023, p. 4). It should be underscored that the activities that bring about influence and behavioral effects are more extensive than solely kinetic military operations (*Influence Wargaming Handbook* 2023, p. 7).

Compared to conventional wargaming, influence wargaming goes by way of different factors, such as the following: attitudes; behaviors; non-negotiable beliefs and cultures; motivations in decision-making; governance; national constraints; permissions and policies; the media's inroads-making capability; information and disinformation (*Influence Wargaming Handbook* 2023, p. 16). It is not feasible to include all of the aforementioned factors in a wargame, which is why a wargame needs to focus only on those deemed vital for attaining certain aims and objectives (*Influence Wargaming Handbook* 2023, p. 16).

In influence wargames, each party will likely comprise players that have never interacted before and which come from diverse domains, as can occur with military personnel, diplomats, social influencers and finance ministers (*Influence Wargaming Handbook* 2023, p. 27). Although influence wargames can occur within a war context, most unfold over extended periods of constant rivalry interspersed with conflicts (*Influence Wargaming Handbook* 2023, p. 28).

In influence warfare, it's particularly important to know audience perspectives, as obtaining credible data regarding this is not easy (*Influence Wargaming Handbook 2023*, p. 33). With regard to what is at issue, even if databases are in place, attitudes and behaviors can change rapidly, making it difficult to assess the impact of actions undertaken in the wargame (*Influence Wargaming Handbook* 2023, p. 33).

A wide range of actors can take part in influence wargames, with activities that blur the differences between tactical, operational and strategic levels (*Influence Wargaming Handbook* 2023, p. 37). It should be pointed out that, in influence wargames, a single individual or entity can affect entire economies or audiences, as well as the effectiveness of an enemy brigade, for example, through disinformation (*Influence Wargaming Handbook* 2023, p. 37).

There is uncertainty in the field of communication, to the extent there is no absolute guarantee that the effects produced by the messages with the intended audience amount to what the emitting party desires (*Influence Wargaming Handbook* 2023, p. 39). To create intended effects in influence wargames, players can have several legal or illegal means at their disposal, such as changing public opinion through disinformation, as well as hacking and deep-faking social media accounts through software piracy (*Influence Wargaming Handbook* 2023, p. 41). The effects can be produced in the short, medium or long term.

Cognitive / Psychological Operations

Even though this is not a new phenomenon, given that it was somehow addressed some 2,500 years ago (Kuo March 26, 2007, p. 5) in China by Sun Tzu (Panwar 2024, p. 1), cognitive warfare is considered an emerging concept in military and academic spheres (Deppe, Schaal November 1, 2024). NATO, among other organizations, reflects on the impact of the aforementioned type of warfare in wargames (*Allied Command Transformation Develops the Cognitive Warfare Concept to Combat Disinformation and Defend Against "Cognitive Warfare"* July 3, 2024).

Currently, there is conceptual uncertainty regarding cognitive warfare (Deppe, Schaal November 1, 2024). However, this kind of warfare can be envisaged as a strategic approach to conflicts without resorting to physical violence, in order to change perceptions and to influence thought

processes (Putter December 15, 2024). As part of this, there is a weaponization of content taken in by people (Putter December 15, 2024). The purpose of cognitive warfare is to shape adversaries' behaviors and, to such end, to set certain cognitive elements as goals (for instance: attitudes, beliefs and understandings) (Putter December 15, 2024). Cognitive warfare operates in the spheres of society and politics, making use of psychological tactics, with the aim of attaining strategic objectives (Putter December 15, 2024).

In the military domain, cognitive operations include various capabilities, such as the following: Psyops; Public Information (in order to influence domestic and foreign audiences); civil-military operations (for the purpose of having influence over the civilian populace) (Panwar 2024, pp. 3-4). Cognitive warfare can be waged through the media, in general, including social media (Cao, et alii May 20, 2021).

According to Schrijver (November 3, 2024), Psyops can be understood as activities which, in times of conflict, use communication methods as well as other means; in relation to certain target audiences, this is to influence perceptions, attitudes and behaviors so as to attain certain political and military objectives. Psyops, which may include targets such as enemy forces and civilian populations, among other audiences, can weaken the enemy's will or enhance backing from allies (Schrijver November 3, 2024).

In the late 20th century, with regard to the U.S. Armed Forces, there were those who advised making Psyops part of computer-assisted wargames and simulations (Goldstein, Findley September 1996, p. 46). Currently, and in reality, Psyops are present in wargames that contribute toward training the U.S. Army Special Operations Forces (Plotkin, Plotkin December 2021, p. v).

Psyop players examine relevant populations, create and send messages to certain targets, for the purpose of favorably modifying their behavior (Plotkin, Plotkin December 2021, p. 20). Headquartered at the University of Maryland (U.S.) is a company specializing in political-military gaming that aims, among several aspects, to assess the impact of Psyops (*Customized Wargames. Expert Access*).

In the 21st century, India's capability in the sphere of wargames is strengthened by integrating Psyops (Jain May 8, 2024). This provides troops with instruments that are vital for them to understand and face opposing propaganda and manipulation operations (Jain May 8, 2024).

Perspective of Navy Captain Tito Xavier concerning Brazil

In an exclusive interview for this piece, Navy Captain Tito Xavier asserts that Brazil's Defense Ministry, under which the Armed Forces operate, has recently assigned greater importance to

wargames; this can be seen in the considerable rise in the number of analytic wargames carried out. To this end, the interviewee underscored the fact that the Navy has pioneered organizing the first course on wargames, as part of the Defense Ministry. As regards said course, this officer recalls that he was one of the instructors and creators, together with Commander William, head of the Brazilian Navy War Games Center / School of Naval Warfare, which has contributed toward heightening the importance of this methodology in the Naval Forces. As noted by Navy Captain Tito Xavier, this course has raised interest among various sectors of Brazil's Defense. From this expert's standpoint, the wargame concept needs to be standardized in the Brazilian Armed Forces, since there are lines of thought that differ among them, thus hampering interoperability.

The interviewee considers that, in his country, with regard to wargames, Psyops are increasingly important, despite currently being limited at tactical and operational levels. (This officer adds that conditions are right for conducting wargames at higher decision-making levels.

1. Progress (Progresso): one of the words appearing on Brazil's flag and which can also apply to wargames

Navy Captain Tito Xavier points out that, within Brazil's context, Psyops are present in educational wargames, consolidating knowledge of the joint planning process among Brazil's Armed Forces, as well as in analytic wargames, analyzing certain operation or strategy plans.

This interviewee provides the example of Psyop-simulating wargames that attempt to influence a target audience's opinion so that said audience is for or against a given party made up of players, while seeking to weaken the opposing party's will to fight. Relative to the type of games under analysis, he stresses the role of intelligence services, by advising in selecting opponents' profile

as well as in picking out an audience that is sought to be influenced.

Navy Captain Tito Xavier believes that operational success increases when influence can be wielded over the perceptions, attitudes and behaviors of certain target audiences. This expert adds that, in the world we currently live in, opponents seek to affect political cohesion while diminishing the target country's economic and social resilience. He maintains that government representatives should take part in political wargames, in order to make the simulation more realistic. This officer further states that, since wargames are simulations of actual, hypothetical and, at times, fictitious situations, it would be wise to consider updated geopolitical / geostrategic aspects, with the purpose of providing the game with greater authenticity and legitimacy while endowing players with greater immersion / engagement, as concerns the presented scenario.

The interviewee bemoans the fact that political decision makers in Brazil, in practically every sphere, including Security, Defense and Foreign Relations, are unaware that the methodology of wargames is important and effective for analyzing complex problems, strategies and policies of areas which they head. Still, this officer is convinced that this situation will be changed in the medium term.

This interviewee asserts that Brazil's academic community could lend its contribution toward creating/designing wargames while improving their results; however, this topic is still in its very early stages at Brazilian universities. According to Navy Captain Tito Xavier, this difficulty has been mitigated by the contribution from the School of Naval Warfare's Scenario Simulation Laboratory; still, the way this expert sees it, much remains to be done. In this regard, he further points out that he created Brazil's first and, at the time of this interview, the only wargame course for people outside the remit of the Defense Ministry, as he has been lecturing to military and civilian security forces personnel. As noted by the interviewee, interest in this topic is growing in Brazil.

Conclusion

At present, wargames in general are the subject of interest in both the military and civilian spheres. Specifically, the currently growing importance of cognitive / influence operations and Psyops, as part of information warfare, is reflected in wargames, at tactical, operational and strategic levels. In reality, within the context of either peace or war, the aforementioned types of operations can comprise various targets, such as individuals (military and political decision makers), groups and vast swaths of a country's population. To such end, several means can be used, most notably traditional media and, nowadays, social media, to keep up with technological progress. All of these instruments serve to disseminate messages duly formulated by competent professionals, with multidisciplinary and interdisciplinary teams often being desirably necessary. All this should be present in influence wargames. In these, chiefly at strategic level, not only

military personnel should take part, but also civilians, inter alia, diplomats, (counter)intelligence services professionals and certain government members. Wargames can serve to simulate how to influence foreign decision makers and how to protect domestic decision makers from international influences, within contexts involving competition or armed conflict.

Brazil's Armed Forces keep up with the international trend of increasingly valuing not only wargames in general, most notably the Navy's pioneering, but also, specifically, the presence of information / psychological operations in wargames. This latter aspect is mainly seen at tactical and operational levels, but not so much at a higher decision-making level, even though conditions are now favorable for this to take place.

In Brazil, we need to make decision makers increasingly aware of the importance and efficacy of the methodology of wargames, in relation to the analysis of complex problems, strategies and policies, namely in the spheres of Foreign Relations, Defense and Security. This situation can improve in the medium term.

Although this has yet to occur, as one would hope, Brazil's academic community could contribute toward developing wargames, for starters, for instance, by taking part in creating/designing them. In this regard, we need to underscore the role of the School of Naval Warfare's Scenario Simulation Laboratory.

All of this and much more should be accompanied by an in-depth reflection on the relationship between simulation and reality.

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Interview

*This interview was conducted, via email, on February 9, 2025

Photo by: Jorge Marinho