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# **Cognitive Warfare: The Future of Cognitive Dominance**

First NATO scientific meeting on Cognitive Warfare (France) – 21 June 2021.

Symposium organized by the Innovation Hub of NATO-ACT and ENSC,  
with the support of the French Armed Forces Deputy Chief of Defence,  
the NATO Science and Technology Organization / Collaboration  
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Scientific Editors

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## Chapter 11 – COGNITIVE WARFARE: COMPLEXITY AND SIMPLICITY

John Whiteaker<sup>1</sup>, Cadet Sam Konen<sup>2</sup>

*“For the Psychological Operations practitioner, a “new” third operational dimension is adding complexity to an already over complicated field.”*

For the Psychological Operations practitioner, a “new” third operational dimension is adding complexity to an already over complicated field. “Behind NATO’s ‘Cognitive Warfare’: ‘Battle for Your Brain’ Waged by Western Militaries” (Norton, 2021) sums up the issue nicely in its title “waged by Western militaries.” The current idea of Western and Eastern military diverges and divulges the true reason some are better than others in the understanding and operationalization of Cognitive Warfare. For many, Cognitive Warfare is not its own complex dimension, it is the only dimension that is then played out in the original five physical domains and is manifested in cyber and physical actions or products. Historically, the United States has multiple examples of successful cognitive-focused teams and operations. This paper suggests that learning from the lessons of our past and developing a constructive way forward will allow for the full utilization of units already established to conduct Cognitive Warfare.

### 11.1 INTRODUCTION

The United States’ history of Psychological, Cognitive and Information operations, or warfare, began in the earliest days of our history. Military leaders of the past accepted and came to use the concept of “All warfare is based on deception. Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when we are near, we must make the enemy believe we are far away; when far away, we must make him believe we are near” (Tzu, 1910). All warfare or competition, whichever term is appropriate for the time, revolves around the created perception of one’s forces. Time has moved past the feints, cavalry charging an enemy’s flank and progressed to identifying forces by collection of publicly available information or attempting to work through the ever-growing information environment to influence a target audience. The U.S. historically has cultivated personnel trained to conduct cognitive-focused operations. This was a task originally performed by the Office of Strategic Services (OSS), which was divided into the Central Intelligence Agency (CIA), United States Information Agency (USIA), and Psychological Warfare. Psychological Warfare has now been diluted down to the smallest regiment in the U.S. Army, Psychological Operations.

### 11.2 BACKGROUND

On 12 November 1943, the Psychological Warfare Branch (PWB) conducted operations through three functional teams during the Sicilian Campaign. Combat Teams (Reconnaissance), Occupational (Dissemination) teams, and Base (Permanent) teams made up one of the formations used during World War II. An underlying key to these teams was the personnel within them.

*Combat teams were made up of three to five men, mixed military and civilian. One was attached to the 7th (American) Army under John Whittaker of Morale Operations, civilian, with one British and one American officer; and one attached to the 8th (British) Army under Lt. Col. McFarlane of PWB with a British and American Officer (Oechsner, 1943, para. 2).*

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The true joint nature of this multi-nation, mixed military and civilian teams allowed for a more actionable force with the ability to create a long-term plan. The varied experiences of these teams allowed for different perspectives to be applied to a problem. The memorandum outlines lessons learned by these teams and very much like today revolved around the need for improved coordination with G2 (intelligence units) and “Civilian Administration Authorities.” The Civilian Administration Authorities can be compared to local government authorities and Civil Affairs teams of today. Also emphasized was the importance of understanding cultural and information related nuances to positively influence populations, and reliable communication.

Morale Operations (MO), another forgotten term for cognitive, psychological, and information operations, is outlined as such within the OSS Morale Operations Field Manual (1943).

*Definitions: The term MORALE OPERATIONS as considered in this Manual includes all measures of subversion other than physical used to create confusion and division, and to undermine the morale and the political unity of the enemy through any means operation within or purporting to operate within enemy countries and enemy occupied or controlled countries, and from bases within other areas, including neutral areas, where action or counteraction may be effective against the enemy.*

Section IV of the field manual addresses the largest hindrance to the effecting of human decision-making operations: coordination. The calculation and coordination of the cognitive effects at all levels of planning is integral to success.

*a. Morale operations will be most effective when they are planned as part of common campaigns conducted by various underground services and integrated closely with actual or planned military operations and Allied strategy. (OSS, 1943)*

The decentralization of forces has been a continuing process since the end of World War II. This further partitioning complicates the complex nature of creating cognitive impacts in a planned manner. As suggested in historical reviews of operations, the need is for improved communication and coordination not the creation of continuing doctrinal changes that only affect the practitioner negatively. An improved feedback loop could provide further insight into what future doctrine is required. The loop would require recently forward personnel integrated in the policy and doctrine process. Currently, there is little to no interaction with Special Operations Forces from the officer level and below with policy and strategic decision makers above.

### **11.3 CURRENT**

America’s ability to wage psychological warfare and dominate the information space mostly relies on a small regiment of active-duty Army personnel. The joint nature involves technological assistance from both the Navy and the Air Force, as well as a small Marine Corps contingent focused on information operations. Every branch is trying to institute some form of information and influence focused unit. However, since the end of OSS, PSYOPs is primarily focused on this mission. PSYOP currently has as a ten-day selection process that each candidate must pass, as well as a “43-week official qualification course (PSYOP Operations Specialist Course), where one learns the core skills of being PSYOPS Soldiers, including basic speaking and listening proficiency in a foreign language, military intelligence, advanced interpersonal communication, adaptive leadership, cultural analysis, and advanced social media and marketing.” (U.S. Army, 2020). This quote highlights the issues that surround the world of PSYOP, as even the Army’s website outlining the process a candidate must attend contains an alternate name than what is used to define the course that must be completed to become a PSYOP soldier. Upon completion of the Psychological Operations Qualification Course (POQC) the soldier will be assigned to either a regionally aligned battalion, tactical company or a production and dissemination battalion.

Psychological Operations has passed through multiple names but for this piece, Psychological Operations (PSYOP) is the noun and Military Information Support Operations (MISO) is the verb usage of today’s force. Currently, there are around two thousand active-duty PSYOP personnel. The purpose of MISO is to

“establish and reinforce foreign perceptions of U.S. military, political, economic power, and resolve. In conflict, MISO as a force multiplier that can degrade the enemy’s relative combat power, reduce civilian interference, minimize collateral damage, and maximize the local populace’s support for operations.” (Joint Chiefs of Staff, 2010). The levels of war PSYOP is meant to act upon are defined as; “Joint MISO support policy and commanders’ objectives from strategic to tactical levels.” Military leadership and local key communicators are examples of TA engaged at the operational and tactical levels that can affect the accomplishment of a strategic objective (Joint Chiefs of Staff, 2010). These definitions are pulled from Joint Publications written by the Joint Chiefs of Staff and also CJCSI 3110.05F and DODI 3607.02, which also outline MISO as to be conducted by PSYOP forces.

PSYOP is one of the Information Related Capabilities (IRC) that the U.S. military must conduct for Information Operations (IO).

*(2) IRC specialists can include, but are not limited to, personnel from the EW (electronic warfare), cyberspace operations (CO), military information support operations (MISO), civil-military operations (CMO), military deception (MILDEC), intelligence, and public affairs (PA) communities. They provide valuable linkage between the planners within an IO staff and those communities that provide IRCs to facilitate seamless integration with the Joint Force Commander’s objectives. (Joint Chiefs of Staff, 2012).*

Today, as counter terrorism operations wind down and forces transition to Great Power Competition, the use of irregular warfare comes to the forefront of U.S. military operations. U.S. Special Operations Forces, which includes Air Force Special Operations Command (AFSOC), Marine Special Operations Command (MARSOC), Naval Special Warfare Command (WARCOM), United States Army Special Operations Command (USASOC), and Joint Special Operations Command (JSOC)), has fundamentally been on the edge of both these operational use cases. However, the information environment has always been amongst the core competencies of the PSYOP force. Despite the disparity in manpower and funding between the rest of USASOC and the PSYOP regiment, they hold the task to persuade, change, and influence through all mediums in which target audiences receive information.

*Irregular warfare (IW) is defined as a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations. When MISO occurs in IW, their role usually is much greater than during major operations and campaigns. MISO are key supporting operations to each contextual application of indirect approaches to executing IW. The ideological and political factors associated with IW create a fertile field for MISO. (Joint Chiefs of Staff, 2010).*

To truly assess the disconnect between the actions of the PSYOP regiment, doctrinal guidance, and the understanding by senior leaders of how psychological focused operations past, current, and future are to be used, simply ask a military member to describe PSYOP, MISO, Cognitive Warfare, or Information Operations.

An added restraint is the traditional way the military views seniority, expertise, and rank. In the past, experience matched rank as a service member progressed. Now, when dealing with IRCs often junior soldiers have more knowledge and expertise on the subject. This will continue to be a true fundamental issue among Cyber, IRCs, and other tech related fields.

## **11.4 FUTURE**

The need for a collective understanding among senior leaders across the U.S. and International partners is necessary to begin the coordination and synchronization of the IRCs, not just MISO. If the addition of “Cognitive Warfare” as a discipline develops the sort of coordination across the force, then that is where it must start. A constant among IO practitioners is the need to educate their own command on the ability and need for proper funding, manning, and training. The addition of a fresh look at the human dimension could provide the basis for shifting the mindset of senior leaders.

The need for an organization solely focused on the information realm and a centralized approach is required not just in the U.S. but throughout international partners as well. However, the synchronization will never be successful if the information realm is not taken seriously, and we continue prioritizing other areas.

Technology's role in the cognitive and information space is one of the largest gaps we currently have between adversaries and our partners. Without a true reassessment and reorganization of priorities, the gap will continue to grow. We now live in a world where a digital model can mimic not just physical attributes but also cognitive/human attributes. Digital twins could be developed to assist in the planning and understanding of our forces. Publicly Available Information (PAI), and Open-Source Intelligence (OSINT) provides more usable information than ever before. Our forces regularly provide information to private industry, foreign actors, and the public that when properly aggregated, and visualized allows for the largest operational security issues imaginable.

## 11.5 CONCLUSION

With the growing Information Environment, target audiences are living in an over-saturated world. This requires a truly cognitive, psychological centered approach to persuade, change, and influence. As the inability to trust information resources continues to grow, the need to understand the mental drivers that lead to the how of providing the information that has the trust of a target audience becomes more important. The history of global competition and conflict are not far off base from the struggles we currently face. The continued coordination of information from past, present, and future require addressing true gaps rather than perceived doctrinal needs. Also, there are current forces at the forefront of this working environment that should be addressed rather than recreation of efforts. As time will continue, units looking to maintain relevancy or establish their own IO-focused effort will continuously re-create a wheel that began over 70 years ago. Doctrine written in 2012 provides a framework for Joint Task Forces focused on IO, personnel are doing so now, yet we continuously look to re-define operations focused on human behavior. First, we must educate our own leaders on the current capabilities and then allow subject matter experts to guide their field.

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<b>14. Abstract</b>  This document, published by the NATO-CSO, brings together articles related to the presentations given during the first Symposium on Cognitive Warfare, held in Bordeaux, France, in June 2021, on the initiative of the NATO-ACT Innovation Hub and the Bordeaux-based ENSC, with the support of the French Armed Forces Joint Staff, the NATO-STO-CSO, and the Region Nouvelle Aquitaine. This first Symposium reflected on human cognition, its strengths and weaknesses, its collaborative organization for military decision-making, its relation with and dependence on digital technology, and its social and political dimensions within the context of fierce international competition. The Supreme Allied Commander for Transformation (SACT) and the French Armed Forces Vice-Chief of Defence expressed their views on the topic. This first Symposium was the starting point of a series of meetings and workshops further exploring the subject, on the initiative of NATO CSO and ACT.			