THEORETICAL IMPLICATIONS FOR INFORM AND INFLUENCE ACTIVITIES

A Monograph

by

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ABSTRACT

THEORETICAL IMPLICATIONS FOR INFORM AND INFLUENCE ACTIVITIES, by LTC Scott K. Thomson, 63 pages.

Army leaders are generally dissatisfied with the results of the employment of information related capabilities such as public affairs and military information support operations. Recent efforts to improve results have all focused internally and include: organizational changes at the national level related to strategic communication; a doctrinal reorganization of information operations into inform and influence activities and cyber-electromagnetic activities at the Army level; renaming psychological operations as military information support operations; and the possible inclusion into doctrine of a 7th warfighting function focused on the human domain.

While some of these changes are useful, they miss the fact that much of the failure of the Army's communications campaigns is due to the failure to use scientifically based processes. Inform and influence activities doctrine must include a foundation in complexity theory, mass communication theory, social psychology theory, and possibly others. This monograph concludes with recommendations to improve the Army's ability to employ information related capabilities.

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ACRONYMS

CEMA	Cyber Electromagnetic Activities
CA	Civil Affairs
DOD	Department of Defense
DSB	Defense Science Board
IIA	Inform and Influence Activities
ΙΟ	Information Operations
IRC	Information-related Capability
JUSPAO	Joint United States Public Affairs Office
MISO	Military Information Support Operations
OODA	Observe-Orient-Decide-Act
PSYOP	Psychological Operations
PA	Public Affairs
SC	Strategic Communication
USG	United States Government

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INTRODUCTION

The cognitive hardware that we share is universal, but the ability to harness it is not intuitive. It does not follow that each of us has an innate, intuitive command of persuasion, simply because we are human....

-Kelton Rhoads

In 2009, Admiral Mike Mullen, then Chairman of the Joint Chiefs of Staff, argued that it was "time to take a harder look at 'strategic communication." He levied criticism that it had "become a thing instead of a process, an abstract thought instead of a way of thinking."¹ Was he correct, and if so, what should that process be? In other words, does doctrine enable commanders to employ information-related capabilities (IRCs) skillfully to achieve their goals of informing selected audiences, while influencing others?² These are difficult tasks to accomplish, so they deserve scrutiny.

The Army recognizes that a "distinguishing characteristic" of its operations is "the presence of humans in large numbers."³ It knows that lethal tactical action alone is insufficient to

³Department of the Army, Army Doctrinal Publication 1, The Army (Washington, DC:

¹Mike Mullen, "From the Chairman - Strategic Communication: Getting Back to Basics," Joint Chiefs of Staff, http://www.jcs.mil/newsarticle.aspx?ID=142 (accessed 28 March 2013).

²Department of Defense, *Joint Publication 3-13, Information Operations* (Washington, DC: Government Printing Office, 2012), iii. Information-related capabilities (IRCs) is a new doctrinal term introduced by this latest version of JP 3-13, Information Operations, and are defined as "tools, techniques, or activities employed within a dimension of the information environment, which can be used to achieve a specific end(s)." A similar definition is in the newest version of *Field Manual 3-13, Inform and Influence Activities*, which defines IRCs as "capabilities, techniques, or activities employing information to effect any of the three dimensions within the information environment to generate an end(s)." Department of the Army, *Field Manual 3-13, Inform and Influence Activities* (Washington, DC: Government Printing Office, 2013), 1-1. Doctrine writers have not yet incorporated the term information-related capabilities into either *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms* or *Army Doctrine Reference Publication 1-02, Operational Terms and Military Symbols*.

achieve lasting strategic aims. "Managing populations before, during, and after all phases of the campaign normally determines [the Army's] success or failure."⁴ The importance of "inform and influence activities continues to increase,"⁵ but, "American leaders fear that [the United States] is losing the propaganda war to a weaker and backward enemy."⁶

Army Doctrinal Reference Publication 3-0, Unified Land Operations defines Inform and Influence Activities (IIA) as "the integration of designated information-related capabilities in order to synchronize themes, messages, and actions with operations to inform United States and global audiences, influence foreign audiences, and affect adversary and enemy decisionmaking [sic]." IIA are the Army's contribution to the communication efforts to which Admiral Mullen referred. "As a primary staff task under mission command," according to *ADRP 3-0*, "conduct inform and influence activities aids the commander to inform domestic and friendly audiences. It enables the commander to develop and maintain relationships with partners and influence adversary and enemy decisionmaking [sic] to gain an operational advantage."⁷

Following this definition and its associated doctrine, one may understand the means and ends of IIA, but still be largely ignorant of the ways that link the two. As indicated in the epigraph, the ability to influence others is not intuitive. Communication and persuasion

Government Printing Office, 2012), 1-1.

⁴Department of the Army, Army Doctrinal Publication 1, The Army, 1-1.

⁵Ibid., 1-2.

⁶Patrick Porter, *Military Orientalism: Eastern War Through Western Eyes* (New York: Columbia University Press, 2009), 7. See also, J. Michael Waller, *Fighting the War of Ideas like a Real War: Messages to Defeat the Terrorists* (Washington, DC: The Institute of World Politics Press), 13-16. According to Waller, "we are fighting a propaganda war that we can and must win." Waller, 13.

⁷Department of the Army, *Army Doctrinal Reference Publication 3-0, Operations* (Washington, DC: Government Printing Office, 2012), 3-3.

methodologies matter, as does the science that informs them. Robert T. Hastings, Jr., former Undersecretary of Defense for Public Affairs, observes that throughout their education, maneuver officers receive education in their supporting arms and capabilities, but that professional military education does not afford the same importance to communication-related capabilities.⁸ Jarol B. Manheim, a communications scholar, describes inform and influence campaigns as being "based on a sophisticated knowledge of underlying attributes and tendencies of people and institutions which is to say, based on the science of individual, organizational, and governmental decisionmaking—and of the uses and effects of communication as a means of influencing them." He observes that they must be "centralized, highly structured, systematic, and carefully managed" to be effective. Moreover, Manheim argues, a communication campaign that fails to incorporate theories of informational effects and behavior "into its strategy and tactics" is "consigning itself to disadvantage."⁹

Clearly, the US Army cannot afford to accept such a consignment. The defense establishment has expended considerable effort to improve its use of IRCs, but these efforts have essentially neglected the integration of theoretically informed processes into its training and

⁸Rumi Nielson-Green, "Fighting the Information War but Losing Credibility: What Can We Do?" *Military Review* (July-August 2011): 13.

⁹Jarol B. Manheim, *Strategy in Information and Influence Campaigns: How policy advocates, social movements, insurgent groups, corporations, governments and others get what they want* (New York: Routledge, 2011), ix and 17. Other authors corroborate this view. See Glen M. Broom, Scott M. Cutlip, and Allen H. Center, *Effective Public Relations*, 10th ed. (Upper Saddle River: Pearson Education, 2009), 341 and 354; Kelton Rhoads, "The Culture Variable in the Influence Equation," in *Routledge Handbook of Public Diplomacy*, eds. Nancy Snow and Philip M. Taylor, 166 – 186 (New York: Routledge, 2009), 182. Dr. Rhoads has frequently taught blocks of instruction on social psychology at the John F. Kennedy Special Warfare Center and School. See http://www.workingpsychology.com/author.html (accessed 6 March 2013). Broom et al., define communication strategy as "the overall concept, approach, or general plan for the program designed to achieve a goal," and tactics as belonging "to the operational level: the actual events, media, and methods used to implement the strategy." Broom et al., 302.

doctrine.¹⁰ The literature to support such an effort is widely available. The US Army should follow the suit of the British military and seek to incorporate scientific principles into its IIA doctrine.¹¹ This monograph argues that despite recent efforts to improve its ability to conduct IIA, the Army has failed to incorporate available science fully into its communication doctrine. Furthermore, since the research and processes already exist, this would be a low-cost, high-payoff effort.

IIA has two lines of effort: an inform line of effort, and an influence line of effort. In essence, both use information, but the former is doctrinally absent any explicit attempt to change behavior, while the latter focuses on behavior modification.¹² These are essentially two ends of the same spectrum where the communicator's expectations of the audiences form gradients

¹¹Lee Rowland and Steve Tatham, *Strategic Communication & Influence Operations: Do We Really Get It?* (Shrivenham: Defence Academy of the United Kingdom, 2008), 1.

¹²Department of the Army, *Field Manual 3-13, Inform and Influence Activities*, 2-1 - 2-2. In practical terms, public affairs (PA) is the primary IRC under the inform line of effort, and military information support operations (MISO) is the primary IRC under the influence line of effort. Commanders may use any capability that they desire to support these lines of effort subject to regulatory and legal constraints on propagandizing the American people.

¹⁰Andrew Garfield, "The U.S. Counter-propaganda Failure in Iraq," *Middle East Quarterly* (Fall 2007): 23 – 32; Todd C. Helmus, Christopher Paul, and Russell W. Glenn, *Enlisting Madison Avenue: The Marketing Approach to Earning Popular Support in Theaters of Operation* (Santa Monica: RAND Corporation, 2007), iii – iv; Eric V. Larson et al., *Foundations of Effective Influence Operations: A Framework for Enhancing Army Capabilities* (Santa Monica: RAND Corporation, 2009), xi; Christopher Paul, Colin P. Clarke, and Beth Grille, *Victory has a Thousand Fathers: Detailed Counterinsurgency Case Studies* (Santa Monica: RAND Corporation, 2010), iii – iv; Christopher Paul, Colin P. Clarke, and Beth Grille, *Victory has a Thousand Fathers: Sources of Success in Counterinsurgency* (Santa Monica: RAND Corporation, 2010), iii – iv; and xx. These are but a few examples. The number of articles and publications exploring the ability of the US to inform and influence various audiences illustrates both the complexity of the undertaking and the dissatisfaction with which Army leaders have viewed the results of such activities. The last reference provides ample historical evidence that there is "strong support" that "strategic communication" is a factor of success in counterinsurgencies. One can assume that it is no less important in conventional war.

between the extremes.¹³ An important difference is that for the inform line of effort, public affairs (PA) officers typically measure their results by the quality and quantity of stories in the press. A large number of favorable stories presented in the media equals success, regardless of the cognitive and behavioral effects on the target audiences. Psychological operations (PSYOP) officers, acting primarily under the influence line of effort, are concerned with what people do as the only practical measure of effectiveness of their efforts.¹⁴ Polemics related to the practice of propaganda aside, PA officers work in the realm of perceptions, and it is an acceptable logical leap to acknowledge that commanders have some expectation of behavior in the form of "support." One of their primary concerns is persuading domestic and international audiences to provide commanders the time and resources to achieve national strategic aims. As such, the ability to execute both the inform and influence lines of effort successfully rests on the same procedural and scientific foundations. Only legal and ethical boundaries differ.¹⁵

What is not an acceptable logical leap is for a communicator to assume that a message sent is a message received, or that received messages equate to a desired behavioral or attitude change in a specific audience. The discussions below reveal that human perceptions and resultant behaviors are laden with complexities. Unfortunately, the primary doctrine used by planners does

¹³Manheim, 20.

¹⁴The name change from PSYOP to MISO (discussed below) has complicated the acronyms associated with PSYOP and MISO. PSYOP is a career management field. Military information support (MIS) refers to units. MISO refers to the function performed by PSYOP personnel. See Department of the Army, *FM 3-53, Military Information Support Operations*, iv.

¹⁵In fact, if one compares the public relations process outlined in Broom, et al., 306, to the 7-phase psychological operations process in Department of the Army, *Field Manual 3-05.301*, *Psychological Operations Tactics, Techniques, and Procedures* (Washington, DC: Government Printing Office, 2007), viii-x, they will see that the communication processes are essentially identical. However, PA doctrine provides only a rough outline of the process, omitting many important details. See Department of the Army, *Field Manual 3-61.1, Public Affairs Tactics, Techniques, and Procedures* (Washington, DC: Government Printing Office, 2000), 5-4 – 5-8.

not lead them to the most efficient and effective routes to desired behavior. Officers routinely speak in terms of strategic communication, information operations, narrative, battle of ideas, inform and influence activities, and so forth. This language is revealing because it is ambiguous. For example, the introduction of *Center for Army Lessons Learned Newsletter 07-06, Media is the Battlefield*, twice refers to public affairs as a component of information operations (IO), which was only doctrinally correct from 1996 – 2003.¹⁶ This newsletter predated the IIA construct, but officers are as likely to use this logic now as they were then. Public affairs have since become part of IIA at the Army level, but are still only a related IRC at the joint level. Admittedly, this is anecdotal evidence, but this generic understanding of IRCs—where they fit into doctrine, how to use them to influence, and what the ethics and legalities surrounding them are—is pervasive in the force.

If IIA "should be associated with every military operation across the entire range of military operations," and if this is "especially the case in circumstances where the focus of operations is on gaining and maintaining support of the relevant [populations]," then doctrine must be conspicuous about how to do this.¹⁷ The general language in doctrine fails to describe the requisite knowledge and skills—in terms of conditions, processes, and time—required to change perceptions, attitudes, and behavior in specified audiences. Rather, it focuses on "themes and messages," and it just does not "seem reasonable that [commanders] should have to be 'hunter

¹⁶Center for Army Lessons Learned, CALL Newsletter No. 07-04, Media is the Battlefield (Washington, DC: Government Printing Office, 2006), 1 - 2. This is not a slight on the author of the introduction, but an observation that this misunderstanding is widespread. Most officers do not understand these capabilities well, yet they must incorporate them into plans and operations. Officers poorly educated in IIA may have unrealistic expectations of its capabilities and employment, and may even open themselves to legal or ethical pitfalls.

¹⁷United States Joint Forces Command, *Commander's Handbook for Strategic Communication and Communication Strategy, Version 3.0* (Washington, DC: Government Printing Office, 2010), "Message to the Joint Warfighters" (front matter, np).

gatherers' of strategic thinking [about IIA,] but should instead have resources readily on tap" to help them succeed.¹⁸ Doctrine must incorporate applied communication and persuasion theory to fill this mandate.

In support of this argument, this monograph first explores recent efforts to improve the Army's use of information. If these efforts are any indication of institutional thinking, then resources, organizations, and terminology interest the Army more than sound theory. Such administrative efforts are important, but insufficient. Next, it explores three types of theory: complexity theory, communication theory, and social psychology theory. Complexity theory seems to provide the best hope of some scientific understanding of aggregated societal behavior via its representations of complex adaptive systems, and is growing in importance in the field of sociology. At its heart, complexity theory is about people. Logically, a better understanding of the dynamics of social behavior should help commanders understand how to best leverage IIA. Following this discussion is an exploration of communication theory, which helps provide a qualitative understanding of the difficulties in delivering messages through select media. Thirdly, this monograph explores social psychology, "a relatively young science that emphasizes influence, persuasion, and compliance from a scientific perspective."¹⁹ Even though this treatment of theory is brief, it is sufficient to illustrate the room for improvement in IIA doctrine, education, and application.

¹⁸Department of the Army, *Army Tactics, Techniques, and Procedures No. 5-0.1, Commander and Staff Officer Guide* (Washington, DC: Government Printing Office, 2011), 4-11; Rowland and Tatham, 1. The direction in doctrine that commanders "develop initial themes and messages" is misleading because both PA and MISO officers are subject to restrictive guidance issued from the Department of Defense. Rather, doctrine should direct planners to review approved MISO programs and PA guidance. A review of the approved guidance would allow planners to decide whether they needed to seek modification to suit the needs of their operations.

¹⁹Kelton Rhoads, "Working Psychology," https://www.workingpsychology.com (accessed 03 March 2013).

HISTORICAL EFFORTS TO IMPROVE THE USE OF COMMUNICATION

Readers may gain a better perspective via a review of past attempts to improve the use of communication. This review is important because it encapsulates institutional thinking about communication, including IIA. The history of these efforts is also the history of absent efforts in this regard. Over the past decade, both the Department of Defense (DOD) and the Army have expended considerable energy attempting to improve their ability to use communication in pursuit of influence and public support. This longitudinal survey shows that, in many ways, activity has masqueraded as progress. Among other developments, the military has implemented changes in terminology, doctrine, and staff structures, with the hopes of achieving better social influence. Since 2001, the Army has witnessed numerous changes to this end:

- 1. The birth and subsequent death of strategic communication (SC)
- 2. A split within Army doctrine of information operations (IO) capabilities into IIA and cyber electromagnetic activities (CEMA)
- 3. A name change from PSYOP to military information support activities (MISO)
- The current emergence of a new warfighting function focused on "the human aspects of conflict and war."²⁰

Both the Department of Defense (DOD) and the Army have looked toward these changes to improve the ability of the US to influence foreign audiences. Below is a summary of these changes, providing evidence that perhaps these efforts have been somewhat quixotic, and that the Army's energy could have been better spent researching the science of communication and persuasion processes.

²⁰Department of the Army, *TRADOC Pamphlet 525-3-0, The U.S. Army Capstone Concept* (Washington, DC: Government Printing Office, 2012), 15 – 16. General Robert Cone, commander of the Army's Training and Doctrine Command, highlighted this emerging warfighting function to the Command and General Staff College during a presentation on 08 April 2013.

Strategic Communication

At the national and joint levels, leaders turned to the concept of SC as a way to improve support among of international and domestic audiences through better-coordinated narratives.²¹ The use of mediated communications to affect public opinion is certainly not new, but the DOD has placed a renewed emphasis on it in the 21st century's rapidly moving information environment. Historians and communication scholars have documented governmental efforts over the past century to improve national-level communication in times of conflict.²² They show that these efforts were often successful, though short-lived. Unified structures and processes tend to influence audiences more effectively, but they also violate public norms of ethical communication.²³

Surrounded by controversy, the United States Government (USG) and its subordinate service and agency efforts at shaping public opinion have followed an obvious pattern that parallels cyclical defense build-ups during war and the reductions that follow. The Committee on Public Information, known as the Creel Committee, is perhaps the most famous of these organizations. Though it served an overseas purpose of degrading enemy morale, the Creel

²²Robert T. Davis, II, *Occasional Paper 31: The US Army and the Media in the 20th Century* (Fort Leavenworth: Combat Studies Institute Press, 2009). There are many sources on this topic, but this paper is a fine synopsis.

²³Ibid., iii. In his paper, Davis uses "The phrase "information management"...to suggest a host of interrelated terms to include censorship, information operations, information warfare, propaganda, public affairs, public information, psychological operations, psychological warfare, and strategic communications." This is essentially the same as the Army's current IIA construct. Davis, 1.

²¹Joint doctrine defines strategic communication as "focused United States Government efforts to understand and engage key audiences to create, strengthen, or preserve conditions favorable for the advancement of United States Government interests, policies, and objectives through the use of coordinated programs, plans, themes, messages, and products synchronized with the actions of all instruments of national power." Department of Defense, *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: Government Printing Office, 2010), 299.

Committee is famous primarily for its very questionable employment of propaganda to influence domestic support of entry into World War I.²⁴ The USG used a similar organization, The Office of War Information, for similar purposes during World War II. Though the office did not survive past the war, one of its subsidiary efforts, the Voice of America, is still in use today.²⁵ Again in Vietnam, the USG created a unified organization to apply the informational element of national power, this time named the Joint United States Public Affairs Office (JUSPAO), which was responsible for both psychological warfare (PSYWAR was the term in use at the time) and public affairs. The JUSPAO survived the majority of the war, from 1966 until 1975.²⁶ Perhaps spurred by anti-war sentiment, journalists and others questioned the credibility of the JUSPAO because of their view that it made no true distinction between information and influence.²⁷

The United States Information Agency was an outgrowth of the Voice of America and worked with the JUSPAO during the Vietnam War. It handled the lion's share of international information programs from 1953 until President Clinton moved its functions to the Department of State in 1999. The United States Information Agency was one of the nation's primary tools of influence during the Cold War and beyond.²⁸ However, the USG and DOD still largely seemed to

²⁶United States National Archives and Records Center, "United States Information Agency Records Disposition," http://www.archives.gov/records-mgmt/rcs/schedules/departments/department-of-state/rg-0306/n1-306-87-003_sf115.pdf (accessed 10 January 2013).

²⁷Kodosky, xix and 188 – 190.

²⁸United States Information Agency, "United States Information Agency Overview," United States Information Agency, http://dosfan.lib.uic.edu/usia/usiahome/overview.pdf (accessed 10 January 2013). For an interesting insider's view of the propaganda battles between the US and USSR, see Alvin A. Snyder, *Warriors of Disinformation: American Propaganda*,

 $^{^{24}}$ Alan Axelrod, *Selling the Great War: The Making of American Propaganda* (New York: Palgrave Macmillan, 2009), x – xi and 190 – 191.

²⁵Robert J. Kodosky, *Psychological Operations American Style: The Joint United States Public Affairs Office, Vietnam and Beyond* (Lanham: Lexington Books, 2007), 61 – 66.

focus on consolidating their information activities in pursuit of effectiveness, and controversy still surrounded such efforts. One such example is the Office of Strategic Influence established by the Bush administration in the wake of the 9/11 attacks, but which failed to survive even six months before being disbanded due to political pressure.²⁹ The similarity to the controversies surrounding the Creel Committee, the Office of War Information, and JUSPAO is striking. While the activities undertaken by the Office of Strategic Influence still survive in various governmental offices, some doubt the effectiveness of diluting information and influence activities into different organizations.³⁰

This list of efforts is incomplete, but it shows an established pattern of USG reliance on organizational changes to address issues of how best to effect perceptions and behaviors. While organizational effectiveness and efficiency are quite important, one must consider two facts. First, the Congress and national media have a right to question how the USG uses information in pursuit of strategic aims, and they are quick to do so, especially during unpopular wars. Culturally, the American electorate and many of their elected representatives see overly effective government communication apparatuses focused in any way on domestic opinion as a violation of trust and freedom of speech. This creates a permanent tension between the public perception of ethics and the USG view of effectiveness. Such tension is arguably in the national interest, as it serves to shorten or prevent wars of limited aims and value. Second, bureaucrats and military leaders are constrained in their ability to question current strategy by virtue of the fact that they

Soviet Lies, and the Winning of the Cold War, an Insider's Account (New York: Arcade Publishing, 1995).

²⁹Susan L. Gough, "The Evolution of Strategic Influence," Strategy Research Project, United States Army War College (Washington, D.C.: Government Printing Office, 2003), 30 – 31.

 30 Ibid., 31 - 37.

serve the administrations that implement successive national strategies. Logically, they have little recourse but to try to persuade foreign—and often domestic—audiences of the goodness of American aims through better use of information rather than through better policy. The first point is a truism, while the USG has implied the second point through its own research process and findings.

For example, since 2000 the Defense Science Board (DSB) has published five separate studies exploring the ways that DOD could improve its communication with foreign and domestic audiences and one on "human dynamics." The DSB published the first of these studies in 2000. It was an equipment acquisition study focused on PSYOP dissemination capabilities, though the authors expanded their recommendations to include organizational issues and PSYOP-relevant intelligence.³¹

Dovetailing off this study, DOD and the Department of State co-sponsored a follow-on study published in 2001 that advocated for better policy that would allow coordination of messaging—again primarily an organizational solution, though the DSB advocated for strategy that eventually materialized in many ways. Here, the DSB essentially began to advocate a view that message reach, speed, and synchronization hampered influence efforts. The authors argued that "information is a strategic resource—less understood, but no less important to national security than political, military, and economic power. In the information age, influence and power go to those who can disseminate credible information in ways that will mobilize publics to support interests, goals, and objectives. What is required is a coherent approach...."³² The study

³¹Defense Science Board, *Report of the Defense Science Board on Task Force The Creation and Dissemination of All Forms of Information in Support of Psychological Operations (PSYOP) in Time of Military Conflict* (Washington, DC: Government Printing Office, 2000), 2 – 5.

³²Defense Science Board, *Report of the Defense Science Board Task Force on Managed Information Dissemination* (Washington, DC: Government Printing Office, 2001), 5 – 7.

accurately lamented that USG commitment to the importance of dissemination since the mid-20th century was "episodic."³³

The DSB published their third study in 2004. This one marked an evolution in the process of developing communication capabilities. This was the first study in which the term "strategic communication" entered the lexicon, acknowledging the importance of the effects of communication. It also took a nuanced view by concluding that communication only partially contributes to the information used by audiences, and that policy and actions are perhaps more important.³⁴ This study sounded the need for coordinated communication even more loudly than the previous one, and made a more forceful plea for new bureaucracy. An indicator of the importance with which the DSB viewed the subject is its statement that "strategic communication and other 21st century instruments of statecraft require changes different in kind but similar in scale to the National Security Act of 1947 and the Goldwater-Nichols Act of 1986." Other recommendations included the foundation of a RAND-like think tank devoted to SC, the need to establish an apparatus to listen to and better understand international audiences, and the need to include SC guidance in all military orders.³⁵

The DSB published the fourth study in 2008. In typical fashion, it still advocated for requisite Department of State and DOD bureaucracies and funding, seeking ways to ensure a single USG voice. However, this study acknowledged the need to develop the capabilities to analyze nodes of influence within networks, to translate and analyze foreign media, and to understand information flows. While much validity exists in the recommendations of these four

³³Defense Science Board, Managed Information Dissemination, 9.

³⁴Admiral Mullen made the same observation in 2009. See Mullen, http://www.jcs.mil/newsarticle.aspx?ID=142 (accessed 28 March 2013).

³⁵Defense Science Board, *Report of the Defense Science Board Task Force on Strategic Communication* (Washington, DC: Government Printing Office, 2004), 4 and 6-9.

studies, this one in particular begins to hint at first principles. That is, *how does information influence behavior*?³⁶

In fact, the DSB's final study related to this monograph was the 2009 publication titled *Understanding Human Dynamics*. In an interesting twist on previous studies, this study moved away from a strictly informational view to a more behavioral one. Here, the DSB's recommendations included a combination of technological solutions, intelligence, network modeling, and an increase in "human dynamics advisors."³⁷ Human dynamics, the study explained, are "the actions and interactions of personal, interpersonal, and social/contextual factors and their effects on behavioral outcomes."³⁸ The report expanded on this definition by saying that "Human dynamics are influenced by factors such as economics, religion, politics, and culture."³⁹ This study again provided some valuable insight and recommendations, but failed to explore significantly the first principles of human behavior and the correlated, emergent societal-level behaviors. It did mention the availability of software that commanders could use to model the transmission of information within networks, a capability that deserves greater publicity and fielding, as well as continual refinement.⁴⁰ This report, though, strongly implies that culture is the primary determinant of behavior.

³⁸Ibid., vii.

³⁹Ibid.

³⁶Defense Science Board, *Strategic Communication* (2004), x.

³⁷Defense Science Board, *Report of the Defense Science Board Task Force on Understanding Human Dynamics* (Washington, DC: Government Printing Office, 2009), x – xiv.

⁴⁰Ibid., 53. For details related technical (including computational) efforts, see Department of Defense, *Science and Technology for Communication and Persuasion Abroad: Gap Analysis and Survey* (Washington, DC: Government Printing Office, 2012), 15-28; and Department of Defense, *Strategic Communication Science and Technology Plan: Current Activities, Capability Gaps, and Areas for Further Investment* (Washington, DC: Government Printing Office, 2009), 23 – 32.

Kelton Rhoads, a social psychologist who has frequently taught at the US Army's Special Warfare Center and School, disputes this "primacy-of-culture approach."⁴¹ His findings are that culture is indeed important, but it is a "moderator" to the basic, common behavior of human beings.⁴² He looks instead toward social psychology to control the commonalities of behavior, to cultural psychology to explain the moderating variables, and to clinical psychology to refine behavioral understanding at the individual level.⁴³ This contrasts with the implications of the 2009 DSB study, which missed the universals of human behavior and ignored its basics, which social psychology literature describes and complexity science aggregates (a view that is gaining prominence in sociology).⁴⁴

Rhoads' analysis has tremendous utility for doctrine and training for two reasons. First, one must understand the universal principles of behavior to persuade people effectively. Doctrine and training can codify such principles, and thus be of enduring value to the force. Second, there is no way to reliably predict where the Army will fight next, so maintaining sufficient cultural expertise within the force is an expensive prospect that may not be cost-efficient. Rhoads does not neglect the need for cultural acuity, though. "Universal influence tactics enjoy the advantages of broad application, quantifiable track records, and speedy deployment," Rhoads explains. Nevertheless, he moderates his statement by warning, "when approaching a culture, of which one

⁴²Ibid., 170.

⁴³Rhoads, *Cultural Variable*, 171 – 172.

⁴⁴Charles Kadushin, Understanding Social Networks: Theories, Concepts, and Findings (Oxford: Oxford University Press, 2012); R. Keith Sawyer, Social Emergence: Societies as Complex Systems (Cambridge: Cambridge University Press, 2005). Complexity science is also finding its way into psychology. See Stephen J. Guastello, Matthijs Koopmans, and David Pincus, eds., Chaos and Complexity in Psychology: The Theory of Nonlinear Dynamical Systems (Cambridge: Cambridge University Press, 2009).

⁴¹Rhoads, *Culture Variable*, 167.

has little knowledge or mutual history, it is of course important to locate or develop cultural expertise."⁴⁵

Two major implications emerge from the above studies. First, the discussions about SC characterized prevailing institutional thought about the solutions to perception management and behavioral outcomes. They assumed too much about the links between communication, attitudes, and behaviors. Even if Army communicators had used theoretically sound processes, the outcomes may not have differed. As Rhoads argued, "we cannot expect the most brilliantly conceived and delivered message to neutralize a fundamentally disliked product or policy."⁴⁶ Second, these and other studies show an over-reliance on the effects of synchronization and bureaucratic reorganization and authorities. What difference does a unified message make if the intended audience views it as incredible? Can any level of synchronization sell a uniformly unpopular message? How persuasive can a homogeneous message be in a heterogeneous human network? This is not to discount the recommendations of these studies—many of these recommendations were valuable—but to simply observe that the problem is more complex than the DSB's rendered solutions.

In any event, the DOD rescinded the term SC in late 2012. The memorandum directing this action, published by the Assistant to the Secretary of Defense for Public Affairs, explained that SC "resulted in confusion and inefficiencies." The concept of SC had resulted in bloated bureaucracies and DOD later acknowledged that it was primarily a PA function in the first place, and thus, unnecessary. In its place, DOD introduced the term "communication synchronization,"

⁴⁵Rhoads, *Cultural Variable*, 181.

⁴⁶Ibid., 183.

and acknowledged it as an enduring and necessary function for which commanders had always been responsible.⁴⁷

Information Operations

The Army's doctrinal concept of IO evolved in a manner reminiscent to that of SC. Christopher Lowe traces this development in his School of Advanced Military Studies monograph titled "*From 'Battle' to 'Battle of Ideas': The Meaning and Misunderstanding of Information Operations.*" He explains that the Army's first conception of IO emerged in 1979—a technical capability known as command and control communication countermeasures. This was an answer to the Soviet's development of radio-electronic combat—also a technical capability intended to exploit the vulnerabilities of automated systems and radio communications.

Desert Storm and operations in the Balkans significantly changed the concept of IO. The former showed the potential effectiveness of communication, with highly publicized mass surrenders of Iraqi soldiers facilitated by PSYOP messaging, coupled with the "CNN effect" of live broadcast coverage of operations. The latter immersed the Army in the first significant population-centric operation since the Vietnam War. Thus, in 1993, these two events produced a logic that the technical and the human capabilities belonged together under a rubric of effecting human decisions through direct and indirect methods. Doctrine combined these under the label of command and control warfare. The name changes were less important than the shift in focus from platforms to people.⁴⁸ Even though doctrine never explicitly communicated this particular logic,

⁴⁷George E. Little, "MEMORANDUM FOR COMMANDERS OF THE COMBATANT COMMANDS, SUBJECT: Communications Synchronization - A Local Coordination Process," Foreign Policy, 28 November 2012,

http://www.foreignpolicy.com/files/fp_uploaded_documents/121206_brooksmemo.pdf.pdf (accessed 03 March 2013).

⁴⁸Christopher W. Lowe, *From 'Battle' to 'Battle of Ideas': The Meaning and Misunderstanding of Information Operations* (SAMS Monograph, School of Advanced Military

it still became dominant within the force, as demonstrated by the subsequent conceptual evolution.⁴⁹

In 1996, the Army introduced the IO concept with the publication of FM 100-6,

Information Operations. That manual defined IO as:

Continuous military operations within the [military information environment] that enable, enhance, and protect the friendly force's ability to collect, process, and act on information to achieve an advantage across the full range of military operations; IO include interacting with the [global information environment] and exploiting or denying an adversary's information and decision capabilities. ⁵⁰

This new construct included command and control warfare, PA, and Civil Affairs (CA).⁵¹

command and control warfare was a joint concept defined as "the integrated use of operations

security (OPSEC), military deception, psychological operations (PSYOP), electronic warfare

(EW), and physical destruction, mutually supported by intelligence, to deny information to,

influence, degrade, or destroy adversary C2 [command and control] capabilities, while protecting

friendly C2 capabilities against such actions."⁵² This was an intentionally broad approach,

acknowledging the importance of information to all types of military operations.

Studies, 2010), ii.

⁵⁰Department of the Army, *Field Manual 100-6, Information Operations* (Washington, DC: Government Printing Office, 1996), 2-3.

⁵¹Ibid., 2-4. The 1993 inclusion of PSYOP coupled with the 1996 inclusion of PA and CA demonstrate the shift from technical primacy to human primacy. For some of the practical implications of this shift, see Boyd, "Army IO is PSYOP: Influencing More with Less."

⁵²Ibid., 3-2.

⁴⁹Curtis D. Boyd, "Army IO is PSYOP: Influencing More with Less," *Military Review* (May-June, 2007): 69. Boyd's observation is that "IO has been widely adopted as a euphemism or PSYOP. Consequently, the term "IO" is now commonly and erroneously used to discuss activities that are, by doctrine, PSYOP." Boyd commanded the 4th Psychological Operations Group.

In 2003, the Army aligned its concept to match joint doctrine, and defined IO as "the employment of the core capabilities of electronic warfare, computer network operations, psychological operations, military deception, and operations security, in concert with specified supporting and related capabilities, to affect or defend information and information systems, and to influence decisionmaking [sic]."⁵³

IO was an important contribution to doctrine, but this approach also introduced some unfortunate ambiguities. A common tactical dictum states that "he who defends everywhere is strong nowhere." This concept suffered from a similar logic. By adopting an intentionally broad construct, the Army missed some key distinctions necessary for skillful employment of IO. The first issue is that it conflated the use of information—communication—with the physical transmission of information—*communications*. The single "s" makes a significant difference, as communication is "information necessarily connected to meaning."⁵⁴ Computers and radios are physical systems. As such, IO became such a fuzzy concept that engendered imprecise thinking. A planner referring to IO could be referring to any of the core or supporting capabilities, but rarely referred to all of them. More often than not, the popular use of IO referred to one core capability—PSYOP—and one supporting capability—PA. In any event, the manual failed to capture the nuances of information and influence processes.

The month following the publication of the DSB's final study on SC, the Army released its newest version of *Field Manual 3-0, Operations*. This version rescinded the terms offensive

⁵³Department of the Army, *Field Manual 3-13, Information Operations Tactics, Techniques, and Procedures* (2003), iii.

⁵⁴Antoine Bousquet, *The Scientific Way of Warfare: Order and Chaos on the Battlefields of Modernity* (New York: Columbia University Press, 2009), 102. Though not delineated in doctrine, the important distinction between capabilities (signal, MISO, PA, etc.) and processes (using information for influence) is lost in the language. Doctrine leaves planners to make the distinction based on their personal paradigms.

information operations and defensive information operations, but not the term *information operations*, per se.⁵⁵ (Though not explicitly stated, this is likely because "information operations" remains a valid joint term.)⁵⁶ Doctrine replaced these terms with a new term: "information engagement."⁵⁷ Information engagement was one of five new "Army Information Tasks." This construct appears as a tacit recognition that different uses of information have their own particular logic, skills, and staff functions (see figure 1).

The Army made its last significant change to IO in 2011 by rescinding the Army information tasks, to include IE, and reorganizing the tasks into IIA and CEMA lines of effort (see figures 2 and 3).⁵⁸ This reorganization showed no great leaps in logic, but perhaps provided more clarity as to the purpose of capabilities resident in the lines of effort. For the first time since 1993, the groupings were clear enough to convey separate purposes, and the labels more or less communicated what those purposes were. One purpose was to affect people directly; the other was to affect people through the electronic systems they used. Some observers may argue that this is a semantic difference, but in practice, it is rather important. Now, when one refers to IIA in the way they may have generically referred to IO in the past, at least others understand that the

⁵⁷Department of the Army, *Field Manual 3-0, Operations* (2008), D-5.

⁵⁵Department of the Army, *Field Manual 3-0, Operations* (Washington, DC: Government Printing Office, 2008), D-5 – D-6; Department of the Army, "Doctrine Update, 2-12." *United States Army Combined Arms Center.* 03 April 2012. http://usacac.army.mil/cac2/Doctrine2015/Repository/Army%20Doctrine%20Update%202-12.pdf (accessed 03 November 2012).

⁵⁶Department of Defense, *Joint Publication 3-13, Information Operations* (Washington, DC: Government Printing Office, 2012).

⁵⁸Department of the Army, *Field Manual 3-0, Operations, Change 1* (Washington, DC: Government Printing Office, 2011), viii and 6-15 – 6-23. Operations security moved to the protection warfighting function. Ibid., 4-12.

speaker is explicitly referring to communication and persuasion-related capabilities, distinct from the technical capabilities of CEMA.⁵⁹

Task	Information Engagement	Command and Control Warfare	Information Protection	Operations Security	Military Deception
Intended Effects	Inform and educate internal and external publics Influence the behavior of target audiences	Degrade, disrupt, destroy, and exploit enemy command and control	Protect friendly computer networks and communication means	Deny vital intelligence on friendly forces to hostile collection	Confuse enemy decision- makers
Capabilities	Leader and Soldier engagement Public affairs Psychological operations Combat camera Strategic Communication and Defense Support to Public Diplomacy	Physical attack Electronic attack Electronic warfare support Computer network attack Computer network exploitation	Information assurance Computer network defense Electronic protection	Operations security Physical security Counterintel- ligence	Military deception

Figure 1. Army Information Tasks.⁶⁰

Military Information Support Operations

In April 2011, the Army completed its reorganization of IIA related activities (as they currently stand) when it officially changed the name of PSYOP to MISO in accordance with a Department of Defense directive published the previous December.⁶¹ The logic behind this move simplistically held that PSYOP was a pejorative term, related in people's minds primarily to deception and lies, and since the primary activity of PSYOP was actually the conveyance of information, a name change was in order.⁶² However, the new definition of MISO is identical to the previous definition of PSYOP, with the exception of one acronym—MISO. MISO are:

⁵⁹Boyd, 69.

⁶⁰Department of the Army, *Field Manual 3-0, Operations* (2008), 7-3.

⁶¹Department of the Army, *Field Manual 3-53, Military Information Support Operations* (Washington, DC: Government Printing Office, 2013), iv.

⁶²Alfred Paddock, Jr., "Legitimizing Army Psychological Operations," *Joint Force Quarterly*, no. 56 (1st Quarter 2010): 89; Boyd, 69.

Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and *ultimately the behavior* [emphasis added] of foreign governments, organizations, groups, and individuals. The purpose of MISO is to induce and reinforce foreign *attitudes and behavior* [emphasis added] favorable to the originator's objectives.⁶³

The name change misses the essential point. The Army would do well to realize that the purpose of MISO, according to their definition, is not to communicate. It is to change behavior. Communication is but one available weapon in the arsenal of persuaders. In effect, the name change missed a fundamental problem—the ability to influence—and focused on a symptomatic one—the ability to communicate. The new name communicates to commanders a logic that confuses the task of communicating with the purpose of influencing via the capability recently known as PSYOP.⁶⁴

⁶³Department of the Army, *Field Manual 3-53, Military Information Support Operations,* glossary-9

⁶⁴In many ways, this hearkens back to the World War II, Korea, and Vietnam eras, when the Army called PSYOP companies "Leaflet and Loudspeaker" companies. The name "Leaflet and Loudspeaker" implies that the Army does not consider talent or expertise in persuasion as important. Rather, the name implies that simple communication likely leads directly to behavioral change. If that is the case, the Army can gain more responsive, equally effective, and much cheaper support by simply issuing high-speed printers and loudspeakers to maneuver units. However, the Army obviously expects more of its professional communicators and at some level is aware that influence is difficult. The name is important because it frames expectations.

Inform	Influence
Task: Conduct inform activities.	Task: Conduct influence activities.
Purpose: To provide information to domestic and foreign audiences to accurately describe operations.	Purpose: To effectively change attitudes, beliefs, and ultimately behavior of foreign friendly, neutral, adversary and enemy audiences to support operations.
Public Affairs - Advisor with a statutory responsibility to factually and accurately inform various publics (domestic and foreign) without intent to propagandize or change behavior. Serves as the principal advisor to the commander for media engagement and conduct of media operations. Plans and executes Soldier and community outreach (foreign and domestic).	Military Deception - Actions executed to deliberately mislead adversary military decisionmakers as to friendl military capabilities, intentions, and operations, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission.
Military Information Support Operations - Operations t audiences to influence their emotions, motives, objectiv governments, organizations, groups, and individuals.	
Soldier and Leader Engagement - Interactions by Soldi build relationships with key actors and audiences to enco	

Figure 2. IIA Lines of Effort⁶⁵



Figure 3. CEMA Lines of Effort⁶⁶

⁶⁵Department of the Army, *Field Manual 3-0, Operations, Change 1* (2011), 6-16. This figure has been removed from current doctrine, though the construct has remained constant.

⁶⁶Department of the Army, *Field Manual 3-0, Operations, Change 1* (2011), 6-20. Current doctrine omits this figure, though it retains the construct.

The history of national efforts to gain an enduring strategic advantage through communication produces some interesting insights. First, funding, organization, and authorities are important, but ultimately create only the conduits to engage foreign audiences, doing little to refine the Army's ability to influence behavior. Their impact has more to do with internal efficiency rather than external effectiveness. Second, the national-level recommendations have implications for the operational artist. Many of the changes at the USG level have filtered down in an only slightly mutated form into Joint and Army doctrine. The Army, through its training and doctrine, could influence the direction of national efforts and greatly influence the nation's strategic outcomes. Finally, the Army has remained strangely silent concerning the science of persuasion. Only one of the above mentioned DSB studies even hints at the need to apply social science to improve the effectiveness of persuasion and communication efforts.

DOCTRINE, THEORY, AND THE 7TH WARFIGHTING FUNCTION

Not surprisingly, IRC-relevant doctrine shows little evidence of scientific considerations. A robust body of scientific literature exists that could inform how communication is used in operational art, though doctrine writers seem to have all but ignored it. A primary example is the near-total neglect of scientific persuasion processes included in the recently published *FM 3-13*, *Inform and Influence Activities* (see figure 4, which shows the closest example of persuasion processes included in the manual). This manual shows no theory and describes no theoretically based processes.⁶⁷ Instead, it focuses on the military decision-making process and targeting. The

⁶⁷Department of the Army, *Field Manual 3-13, Inform and Influence Activities*, References 1-1 – 1-2. Of particular note is that there are no references for further study on complex social systems, mass media, journalism, psychology, or any other foundational discipline. Precedence exists for including recommended reading in field manuals. *FM 3-13* does list *FM 3-05.30, Psychological Operations* (2005) as a reference, but *FM 3-53, Military Information Support Operations* (2013) superseded this PSYOP manual in 2013. Of course, neither of these manuals discusses the process of influence. Only *FM 3-05.301, Psychological Operations Tactics, Techniques, and Procedures* (2007) uses a theoretical foundation. *FM 3-13*

military decision-making process, as currently written, is inadequate as a basis for planning communication campaigns, which have special considerations. Targeting conceals a particular danger. It can lead to a focus on new daily or weekly messages with little forethought or coordination with other IIA efforts. Staffs can use targeting to assess and adjust a longitudinally planned and scientifically based influence campaign. They cannot use it as a substitute for campaign planning.⁶⁸



Figure 4. Message development process from FM 3-13, Inform and Influence Activities.⁶⁹

does not reference FM 3-05.301.

⁶⁸The Cynefin Framework specifies that leaders must "act, sense, respond," in chaotic environments. Planning IIA through a targeting process presents a very real danger of using this cycle. Rather, since the primary goal of IIA is to modify complex adaptive systems, leaders must "probe, sense, respond." In this way, they can adjust planned campaigns based on emergent patterns. By relying on a planned process, commanders gain the secondary benefit of not needing to be as intimately involved in the process as suggested in doctrine under the concept of mission command. David J. Snowden and Mary E. Boone, "A Leader's Framework for Decision Making," *Harvard Business Review* 85, no. 11 (2007): 74-75.

⁶⁹Department of the Army, *Field Manual 3-13, Inform and Influence Activities*, 1-5. Procedurally, this manual also discusses the military decision-making process, targeting, synchronization, authorizations, measures of performance, and measures of effectiveness. The capstone MISO manual is equally deficient. See *Field Manual 3-53, Military Information Support Activities*. The information in these manuals is important, but insufficient for successful IIA. A survey of doctrine and educational texts reveals that only one ancillary and one solid example of the inclusion of theory in Army texts. The first exception is not doctrine, though it is important because it is an instructional text used to educate senior leaders attending the US Army War College on the use of IIA and the attendant IRCs. The *Information Operations Primer* mentions John Boyd's OODA loop in several places, though its reference is stereotypically shallow.⁷⁰ In summarizing Air Force IO doctrine, the text reads, "Influence operations are focused on affecting the perceptions and behaviors of leaders, groups, or entire populations. The means of influencing can be physical, informational, or both. The cognitive domain is composed of separate minds and personalities and is influenced by societal norms, thus the cognitive domain is neither homogeneous nor continuous."⁷¹ This nod to complexity contrasts with the rest of the section on Air Force IO doctrine which uses verbiage that refers to "OODA loops" as something that exist outside of Boyd's model, rather than simply discussing behavior, which is at the heart of Boyd's efforts.⁷² The same document also mentions Berlo's model of communication, which is a source-message-channel-receiver model far too simple to be any more useful than pointing out "known unknowns" in the communication process.⁷³

⁷⁰US Army War College, *Information Operations Primer: Fundamentals of Information Operations*, AY2012 ed. (Washington, DC: Government Printing Office, 2011), 3 and 90-92.

⁷¹US Army War College, 91. Though this passage is from a review of Air Force IO doctrine, it resides within the text of an Army school, and is thus used primarily to educate Army leaders. It is relevant to this discussion because it helps frame the senior Army leadership's thinking about IIA.

⁷²This is discussed in more depth below.

⁷³US Army War College, 4. "Known unknowns" is attributed to former Secretary of Defense Donald Rumsfeld. See http://www.slate.com/articles/news and politics/low concept/2003/04/the poetry of dh rumsfe

ld.single.html (accessed 23 February 2013).

The significance of this is twofold. First, the fact that these examples reside within an Army text is proof that the Army is aware that there is something more to influence than themes and messages, yet its treatment of theory is shallow. Second, officers that work within the IRCs (PA, IO, and PSYOP) report to maneuver officers of a higher rank. If this represents the depth of the education that the maneuver officer receives on IRCs, there will usually be a gap between his expectations of IRCs and the expectations of those who manage the processes for him. The rank differential may inhibit reconciliation during operations. Commanders and planners require a depth of knowledge sufficient to discuss planning for and employment of IRCs in realistic, efficient, and effective ways. The purpose of doctrine and education is to provide this knowledge.

The second and most significant exception to the Army's pattern of ignoring theory is *FM 3-05.301, Psychological Operations Process Tactics, Techniques, and Procedures,* which primarily describes the 7-phase PSYOP process. In fact, this information is significant in its understanding of complexity and persuasion processes and techniques. The baseline process includes:

- 1. Planning
- 2. Target audience analysis
- 3. Series development
- 4. Product development and design
- 5. Approval
- 6. Production, distribution, and dissemination
- 7. Evaluation⁷⁴

⁷⁴Department of the Army, *Field Manual 3-05.301, Psychological Operations Tactics, Techniques, and Procedures, viii-x.*

The planning process begins with a systems analysis using a version of center of gravity analysis coupled with the use of the CARVER (criticality, accessibility, recuperability, vulnerability, effect, recognizability) methodology to prioritize targets.⁷⁵ These methods used during the planning step evaluate the larger cognitive and informational environment in such a way as to account for the characteristics described by complexity theory.

Most telling is the target audience analysis process. This process segments portions of the social system, and evaluates the reasons behind current collective behavior and the possibilities of changing these behaviors. Rather than using intuition to guide communication and actions, MISO planners use this analytical process to not only understand the culture of the audiences, but their reasoning, media usage patterns, causes and effects of behavior, barriers to behavior, and so forth.⁷⁶ This analysis allows planners to use designated influence tactics and principles.⁷⁷ These

⁷⁵Department of the Army, *Field Manual 3-05.301*, 1-11 – 1-25.

⁷⁶Department of the Army, *Field Manual 3-05.301*, *Psychological Operations Tactics*, Techniques, and Procedures, 2-1 – 2-32. The Army trains MISO and CA units to gather information from populations and conduct analysis for the same purposes served by the Human Terrain Teams. The Army has fielded these anthropology teams in recent years to help units bridge cultural misunderstandings. However, a number of factors probably affected the ability of the MISO units to conduct this task, not the least of which is the fact that the force has about onefourth of the numbers of these units needed to support long-term counter-insurgency or stability operations. For example, force planners can and should allocate and entire military information support company to a brigade during stability operations, but in practice, a company is usually allocated to a division, while each brigade gets a military information support detachment. This is adequate for combined arms maneuver, but not for wide area security in densely populated areas. Ignorance of the capabilities and responsibilities of CA and military information support forces likely created the perception of a missing niche capability. Ben Connable, "All Our Eggs in a Broken Basket: How the Human Terrain System is Undermining Sustainable Military Cultural Competence," Military Review (March-April 2009): 57 - 64; Department of the Army, Field Manual 3-53, Military Information Support Operations, 3-3; Department of the Army, Human Terrain System, 22 February 2013, http://humanterrainsystem.army.mil/index.html (accessed 10 March 2013).

⁷⁷Department of the Army, *Field Manual 3-05.301, Psychological Operations Tactics, Techniques, and Procedures,* 2-26 – 2-28. Many of these tactics trace their historical roots to research conducted on propaganda during the interwar period.

include noted social psychologist Robert Cialdini's persuasion principles detailed in his book, *Influence: Science and Practice*.⁷⁸

However, a number of factors diminish the usefulness of is FM 3-05.301, Psychological Operations Process Tactics, Techniques, and Procedures. For example, MISO is legally a special operations activity, but military information support units now routinely support conventional units during stability operations.⁷⁹ However, most conventional maneuver officers receive no formal education on its proper employment—perhaps because it is a special operations activity and so may give little credence to the need to plan long-term communication campaigns. They are likely unaware that this doctrine even exists. The name change from PSYOP to MISO further complicates the issue because of the focus on communication rather than persuasion. As well, rank structure can keep PSYOP officers from educating the commander and staff on proper employment of MISO. A MISO detachment, led by a captain, typically supports a maneuver brigade. This captain must interact with field grade officers who may have little interest in knowing what is involved in conducting a successful persuasion campaign. The power imbalance hinders discussion and dialogue. The MISO officer (a captain) is aware of the doctrine and its supporting theory, but the maneuver commander (a colonel) may not be predisposed to discuss it with him.⁸⁰ These factors all combine to create a sort of complex obstacle for the proper employment of MISO.

With the exception of *FM 3-05.301*, the closest doctrine turns to theory is a simple model of the "information environment." Both *Joint Publication 3-13, Information Operations* and *FM*

⁷⁸Robert B. Cialdini, *Influence: Science and Practice*, 5th ed. (Boston: Pearson Education, 2009).

⁷⁹Department of the Army, *Army Doctrinal Reference Publication 3-05, Special Operations* (Washington, DC: Government Printing Office, 2012), 1-2.

⁸⁰This example uses a brigade combat team is used for illustration.
3-13, Inform and Influence Activities describe the information environment as being composed of physical, informational, and cognitive dimensions (figure 5).⁸¹ As the physical dimension is a given constant, the latter two deserve scrutiny and are the subjects of the following sections. The informational dimension is associated with how information flows within a system, and the cognitive dimension is associated with how people use information to guide behavior.



Figure 5. Information Environment.⁸²

Field Manual 3-24, Counterinsurgency, routinely discusses the importance of IO (now

IIA and CEMA). It is a telling indicator of how poorly the force understands IO. The manual

refers liberally to IO throughout, an acknowledgement to the importance of the use of information

within social systems, but without an accompanying analysis on its nuances and complexities.⁸³

⁸¹Department of Defense, *Joint Publication 3-13, Information Operations* (Washington, D.C.: Government Printing Office, 2006), I-1 – I-6. Department of the Army, *FM 3-13, Inform and Influence Activities*, 2-3.

⁸²Department of the Army, FM 3-13, Inform and Influence Activities, 2-3.

⁸³Department of the Army, *Field Manual 3-24, Counterinsurgency* (Washington, D.C.: Government Printing Office, 2006).

To be sure, it is also an acknowledgment of the imprecise use of the term "IO" and the failure of the Army to educate leaders properly about this increasingly important capability.⁸⁴ In the manual, IO probably referred to what is now IIA, but not necessarily. In places, it could have referred to technical capabilities such as EW or OPSEC, though the distinction never surfaces.

These are but two examples. The pattern holds throughout joint and Army doctrine—an acknowledgement of the increasing priority commanders must give to the use of information and communication when attempting to "inform and influence" others and the absence of a useful accompanying theoretical model, a condition compounded by being a low priority for professional military education.

Doctrine writers should therefore consider revisiting the basic principles of systems characteristics and behavior, the use of information within the systems, and the most basic element within those systems—human behavior. Linking these elements should serve to generate an applied model that improves the ability of Army forces to conduct IIA. Several questions serve to illuminate the need for an interdisciplinary solution. First, what exactly is a social system, and how can one influence it? Second, how does information flow, and can IIA planners influence peoples reception of it? Finally, how does persuasion work on the individual level?⁸⁵ Academics traditionally study these questions in isolation, but they are intrinsically linked facets of the same

⁸⁴James J. Schneider and Lawrence L. Izzo made a similar observation with reference to the use Clausewitz's "center of gravity" concept in doctrine and by practitioners. They argued that "If it is indeed the "key to all operational design," as FM 100-5 claims, the soldiers are going to have to start using the term correctly and with uniform understanding." James J. Schneider and Lawrence L. Izzo, "Clausewitz's Elusive Center of Gravity," *Parameters* (September 1987): 46.

⁸⁵The logical implication is not only that group behavior is aggregated from the individual level to the societal level, but that society exerts reciprocal pressures on individual behavior. Since study of systems and information flows already address the societal or group uses of information, the remaining question is the use of information at the individual level.

problem. The Army should look to rise above this mindset and delve more deeply in a more holistic view of persuasion.

Fortunately, the Army is in the midst of a change that provides opportunity to do just that. In 2012, TRADOC released its newest version of *The U.S. Army Capstone Concept*, a publication meant to guide future doctrine and operating concepts.⁸⁶ The authors of this publication acknowledge the complex nature of the operational environment, and the role played by an increased "tempo of human interactions" in increasing this complexity. Indeed, they acknowledge that "these changes make gaining control of the environment and the adversary more difficult to achieve."⁸⁷ The authors communicate as part of the concept's central idea that "Army forces are uniquely capable of exerting enduring *changes in the behaviors of populations* [emphasis added] to attain decision for combatant commanders."⁸⁸ TRADOC acknowledges that

Current doctrine does not adequately address the moral, cognitive, social, and physical aspects of human populations in conflict. Since the purpose of military action is to affect the behavior of human groups in the operational environment toward a defined objective, the Army must improve the doctrinal representation of the operational environment and account for the socio-economic, cognitive, and physical aspects of human activity. Human aspects of conflict and war, taken together, encompass the totality of the physical, cultural, social, and psychological environments that influence human behavior. The success of unified action depends upon the application of capabilities that influence the perceptions, understanding, and actions of relevant populations and [decision] makers.⁸⁹

TRADOC's proposed solution is to establish a new "warfighting function to capture the

tasks and systems that provide lethal and nonlethal capabilities to assess, shape, deter, and

⁸⁷Ibid., 6.

⁸⁸Ibid., 11.

⁸⁹Ibid., 15 – 16.

⁸⁶Department of the Army, *TRADOC Pamphlet 525-3-0, The U.S. Army Capstone Concept* (Washington, D.C.: Government Printing Office, 2012).

influence the decisions and behavior of a people, its security forces, and its government."⁹⁰ The *Capstone Concept* does not explicitly name this function.⁹¹ The Army has not yet described staff and procedural changes this new concept will engender in support operations.

THEORIES OF PERSUASION: COMPLEX ADAPTIVE SYSTEMS, MASS COMMUNICATION, AND SOCIAL PSYCHOLOGY

Limits in the Application of Social Science for Applied Information Doctrine

Exploration of theory within the fields of mass communication and social psychology is a daunting task. Researchers have produced a large number of competing theories, and none of them operates with perfect fidelity. However, many have gained prominence within their respective fields, and this provides a decent starting point. The social and psychological dimensions exceed the abilities of post-positivist researchers to define precisely. The "logic of causality" eludes researchers.⁹² Stanley J. Baran and Dennis K. Davis explain why this is so. Human behavior is both "complex" and "quite difficult to measure." Further, humans have a scientifically frustrating trait of being "self-reflexive."⁹³ In other words, humans are not simple

⁹³Ibid., 9-10.

⁹⁰Department of the Army, *TRADOC Pamphlet 525-3-0*, 16.

⁹¹For another discussion of this, see Glenn R. Thomas, "Special Operations as a Warfighting Function," *Special Warfare* (January-February 2011): 8-11. Lieutenant General Cleveland, commander of the United States Special Operations Command (USASOC), discussed this during presentations to students at the Command and General Staff College and the School of Advanced Military Studies on 13 March 2013. He recommended against calling the new warfighting function the "special operations warfighting function," because it has larger utility to the force. Referring to "IO," he acknowledged that there is "universal recognition that we are not very good at this." Personal notes.

⁹²Baran and Davis, 8.

receptors of information, but play an active role in how they interpret and respond to information, or they may be responding to internal vice external cues.⁹⁴

Paul Davidson Reynolds addresses similar obstacles scientists face in constructing more positive social science theories. He listed five obstacles to positive theories:

1. The "interrelated processes" of "social and human phenomena"

2. The difficulty of measurement, and thus the difficulty in using social theories in a

predictive way

- 3. The interaction of researchers in social phenomena changes the systems they measure
- 4. The ability of social scientists to remain objective
- 5. The problems related to ethics in human research.⁹⁵

Most social science fails to rise to the level of precision desired by Reynolds. In this regard, Frans P.B. Osinga argues, "parsimony is only occasionally appropriate" for the social sciences. He asserts that social science theories should "[assist] in deciding whether and how to employ a particular strategy by offering an abstract conceptual model....⁹⁶ In other words, that theory which does exist can aid in achieving some of the aims of science for which Reynolds advocates. Most importantly for doctrinal purposes are the ability to provide "a sense of understanding" and the ability to "control… events."⁹⁷ Osinga agrees, essentially arguing that useful social science theory is ultimately about "insight and questions, not answers."⁹⁸

⁹⁸Osinga, 12.

⁹⁴Baran and Davis, 10.

⁹⁵Paul Davidson Reynolds, *A Primer in Theory Construction* (Boston: Pearson Education, 2007), 165-167.

⁹⁶Frans P.B. Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd* (New York: Routledge, 2007), 11.

⁹⁷Reynolds, 2.

The complex nature of both the human mind and human societies render them quite difficult, if not impossible, to accurately model quantitatively. Rather, theories of communication and persuasion have an elusive, qualitative nature. Researchers who rely strictly on mathematical models tend to question the statistical validity of these models. One must guard against the desire to discount theories based on their qualitative nature; for example, Clausewitz's *On War* is primarily qualitative, yet it retains its importance to practitioners of war.⁹⁹ After all, "The purpose of theory is to untangle confusion by creating distinctions, but to do so in order to understand the whole better, not for the sake of pedantic analytical compartmentalization."¹⁰⁰ The tendency of social sciences to remain outside the boundaries of "normal science" simply does not render them useless.¹⁰¹ The more problematic limitation is perhaps the nature of the associated research that guides scientists to focus on either the macro (societal or systemic) or the micro (individual) levels of inquiry.¹⁰² The consequence of this narrow research focus is the absence an applied model or theory that qualitatively links the two. While existing theory may be somewhat imprecise, it can certainly improve the Army's communication and persuasion doctrine and practices.

⁹⁹Carl von Clausewitz, *On War*, eds. and trans. by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984).

¹⁰⁰Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War." *International Security* 17, no. 3 (Winter 1992-1993): 74.

¹⁰¹Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: The University of Chicago Press, 1996), 5.

¹⁰²Stanley J. Baran and Dennis K. Davis, *Mass Communication Theory: Foundations, Ferment, and Future*, 6th ed. (Boston: Wadsworth, 2012), 213.

Complexity Theory and Complex Adaptive Systems

Complex systems are "systems composed of many independent parts which are coupled in a non-linear fashion." Social networks, to include armies and civilian populations constitute a "special case" of complex systems that are referred to as "complex adaptive systems" (hereafter, simply "system(s)"). Theorists add the term "adaptive" because systems are "capable of changing and learning from experience," or what complexity theorists refer to as emergent behavior.¹⁰³

This observation is important to the commander's campaign design. Systems thinking lies at the heart of the Army design methodology.¹⁰⁴ The utility of systems thinking lies in the ability "to discern patterns in human affairs" to include "societies as a system."¹⁰⁵ There is no logical way to set the use of IIA and the rest of a campaign design apart in this sense. The commander and his staff design a campaign or operation and IIA must be inherent in that design. He ultimately aims his campaign at altering the behavior of a system. The transfer of information among components of the system is what gives rise to the collective behavior he seeks.¹⁰⁶ IIA is the commander's primary tool for communicating within the targeted system, effecting systemic behavior through individual behavioral modification. IIA is therefore inherent to achieving the commander's aims; designers must intuitively understand not only what they will communicate

 $^{^{103}}$ Bousquet, 174 – 175. An inherent feature of the particular type of complex adaptive systems discussed here is that they are social systems made up of people and groups of people. The terminology used by systems theorists can sometimes obscure this fact because much of their writing is aimed pursuits such as designing organizational frameworks. The individual behavioral component of systems is discussed below under the section on social psychology.

¹⁰⁴Department of the Army, *TRADOC Pamphlet 525-5-500, Commander's Appreciation and Campaign Design*, (Washington, DC: Government Printing Office, 2008), 5.

¹⁰⁵William J. Gregor, "Military Planning Systems and Stability Operations," *Prism* 1, no. 3 (June 2010): 105.

¹⁰⁶Bousquet, 178.

through IIA, but also how parts of the system (individuals and groups) will interpret and react to physical events on the battlefield.¹⁰⁷

To understand what this systemic reaction may be, commanders and planners must also understand the characteristics of systems, because these characteristics ultimately determine the emergent behavior. The primary characteristics are as follows:

- 1. Systems are neg-entropic and information-bonded
- 2. Systems are purposeful
- 3. Boundaries affect system behavior
- 4. Systems exhibit counter-intuitive behavior
- 5. Systems are multi-dimensional
- 6. Culture affects system behavior

This section provides a brief explanation of each of these, along with brief examples of

how planners could incorporate these considerations into IIA.¹⁰⁸

The first characteristic of systems is that they are neg-entropic and information-

bonded.¹⁰⁹ Mechanical systems differ from complex adaptive systems. Energy organizes

mechanical systems. They receive no external inputs, thus making them closed systems. As such,

the second law of thermodynamics describes the tendency of energy to escape from mechanical

¹⁰⁷Department of the Army, *TRADOC Pamphlet 525-5-500, Commander's Appreciation* and Campaign Design, 20. Department of the Army, *Army Doctrinal Publication 1, The Army*, 1-1-1-2.

¹⁰⁸Authors provide differing models for the characteristics of complex adaptive systems. The list here is a synthesis of several models, and attempts to capture those characteristics most useful to IIA planners.

¹⁰⁹Jamshid Gharajedaghi, *Systems Thinking: Managing Chaos and Complexity*, 2nd ed. (Burlington: Butterworth-Heinemann, 2006), 83 and 120 – 121.

systems, a move from order to disorder.¹¹⁰ Human systems use information rather than energy to organize, and operate in the opposite fashion, moving from disorder to order. Rather than exhibiting entropy, they exhibit negative entropy, or what some theorists call "neg-entropy." Systems retain information, and information is a "measure of order."¹¹¹ This information provides the system with an "internal image of what it wants to be." Importantly, this characteristic is what allows systems to be stable; what allows them to resist change "Unless their shared image is altered."¹¹² Neg-entropy and information relate closely to the concept of culture, discussed below. This use of information within a system is why scientists ultimately classify them as "information-bonded."¹¹³ Without shared information around which to organize, a system would cease to be complex, and would devolve into chaos exhibiting no order. The primacy of this characteristic establishes the theoretical importance for the commander of integrating IIA into his operational approach and of developing a nuanced understanding of the effects and uses of IIA.

The second characteristic of systems is that they are purposeful. Reason, emotion, and culture determine purpose. One may classify system behavior as reactive, responsive, or active. Observers can attribute reactive behavior wholly to an environmental event. They can only partially attribute responsive behavior to an environmental event. Active behavior requires no environmental event, being wholly attributable to the free will of the actor. These behaviors imply that systems can change both their structure and their function endogenously or exogenously (both are drivers for reframing campaign design).¹¹⁴ Observers who claim actors display irrational

¹¹⁰Bousquet, 69-70; Gharajedaghi, 83.

¹¹¹Bousquet, 105 – 106.

¹¹²Gharajedaghi, 121 – 122.

¹¹³Gharajedaghi, 83.

¹¹⁴Bar-Yam, 17; Department of the Army, TRADOC Pamphlet 525-5-500, Commander's

behavior may simply lack the depth of understanding necessary to develop the operational approach and the integrated IIA plan.

Planners must understand actor motives as well as how they can influence actor reasoning. Quality design efforts should help MISO planners produce improved target audience analysis. Though the target audience analysis process makes no mention of design, the understanding staffs produce through the Army design methodology inherently drives the process of target audience analysis.¹¹⁵ Target audiences represent discrete systemic subcomponents. Successful behavioral modification of key audiences can produce a positive influence on all systems within the area of operations.

PA planners have different considerations. They deal in aggregated systems (global audiences, domestic audiences, etc.), that have no discernible, unified reasoning, and no identifiable consistent behavioral patterns. The solutions to their strategic requirements are more opaque than those that MISO planners face.

In essence, inform activities are sender-centric and influence activities are receivercentric. Yaneer Bar-Yam alludes to this when he writes, "The solution to a problem has to be related to the type or structure of the particular problem."¹¹⁶ So while the inform and influence lines of effort may share similar foundational concepts and processes, their practical application varies widely, and commanders must understand the differences to be effective.

The third characteristic of systems is that boundaries affect system behavior. The first and most obvious reason for this is that perspective is important. How an observer defines a system—

Appreciation and Campaign Design, 17 – 18; Gharajadaghi, 33 – 38.

¹¹⁵Department of the Army, *Field Manual 3-05.301, Psychological Operations Tactics, Techniques, and Procedures*, 2-1 – 2-32.

¹¹⁶Yaneer Bar-Yam, *Making Things Work: Solving Complex Problems in a Complex World* (Cambridge: Knowledge Press, 2004), 15.

where he segments a particular portion of the system from the larger environment—frames the behavior he observes. Because systems are interdependent in nature, actions of other systems with which they interact affect them in similar ways to their own internal behavior¹¹⁷ Bar-Yam suggests that a key process for peace between competing groups is to separate them through clearly-defined boundaries.¹¹⁸ He observes that much of global conflict is because of unclear boundaries between competing social systems.¹¹⁹ Pat Pentland corroborates this view, arguing that two of the keys to disrupting adaptive systems are to "[close] the system off from its environment and [propel] it into equilibrium]," and to "eliminate feedback within the system."¹²⁰

More importantly for shaping thought about IIA is that redefined boundaries may allow for improved influence. "Social systems," writes Gharajedaghi, "…can be organized either by default or design."¹²¹ He singles out the importance of "managing interactions rather than actions."¹²² This is actually one of the more important dimensions of complexity one must consider. The interplay of lethal operations, CEMA, and IIA largely revolves around boundaries. Complex systems are typically open, with unclear boundaries.¹²³ Therefore, planners must consider creating the boundaries where it serves their ends. "It may be essential to apply military force to enable use of more effective tools of influence"—tools which could entail the

¹¹⁸Bar-Yam, 242.

¹¹⁹Bar-Yam, 249 – 254.

¹²⁰Pat Pentland, "From Center of Gravity Analysis and Chaos Theory," in *Coping with the Bounds: Speculation on Nonlinearity in Military Affairs*, by Tom Czerwinski, 261 – 274 (Washington, DC: Government Printing Office, 2003): 261.

¹²¹Gharajedaghi, 16.

¹²²Gharajedaghi, 47.

¹²³Bousquet, 181.

¹¹⁷Bar-Yam, 27 – 28, 76, 260, and 267.

electromagnetic spectrum or informational tools.¹²⁴ In any event, the goal is to change the "shared image" that drives "[patterns] of behavior."¹²⁵

Commanders prime systems for change by reorganizing their boundaries and interactions. During combined arms maneuver, fragmenting an opponent's closed system moves them away from centralized control, and thus causes disorganization.¹²⁶ During wide area security, imposing boundaries enables control not only of the flow of combatants and materiel; it also can control the flow of information. Since information is the source of organization, it forces a sort of entropy of unfavorable information. It allows the commander to gain a critical mass of sorts for the use of information to cause the system to reorganize in a manner favorable to his objectives. Finally, it simplifies the system to allow IIA planners to improve their target audience analysis, and thus improve their ability to alter behavior successfully.

The fourth characteristic of systems is that they exhibit counter-intuitive behavior. Gharajedaghi describes this as meaning "that actions intended to produce a desired outcome may...generate opposite results." To explain his meaning, he discusses assertions regarding the nature of cause and effect, the traditional basis of linear thinking. Observers of systems must understand that no clear temporal or constant relationship exists between these variables.¹²⁷ This

¹²⁶Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory* (London: Frank Cass Publishers, 2004), 17. Naveh argues that military systems are open systems. See Naveh, 5. See also Osinga, 124. Osinga asserts that John Boyd also viewed military systems as open systems. I disagree with this characterization because of their tendency toward centralized direction and control, rather than the use of external inputs. For the purposes of theorizing about IIA, it is useful to characterize systems in terms of their source of behavior. IIA planners could characterize a military that had successfully achieved self-directing behavior—for example, one using net-centric warfare—as an open system.

¹²⁷Gharajedaghi, 49.

¹²⁴Richard M. Swain, "Commander's Business: Learning to Practice Operational Design," *Joint Force Quarterly*, no. 53 (April 2009): 62.

¹²⁵Gharajedaghi, 125.

"constant conjunction," writes William J. Gregor, "is never met" in social systems.¹²⁸ There may be delays between observation of effects and their proximate causes. Cause and effect may exchange themselves within a system, with one becoming the other. Singular events "may have multiple effects." Finally, the relationship between an effect and its causes may morph over time, with observers seeing the same effect even though it adopts new causes. Since these assertions render "complexity beyond the reach of the analytical approach," IIA planners must rely on systems thinking to affect systems behavior successfully.¹²⁹

For the influence line of effort, measures of effectiveness must focus on behavior rather than on logical cause-and-effect linkages that are difficult to observe and isolate due to the nature of complex systems.¹³⁰ Behaviors are emergence in action, and "one can only measure their manifestations."¹³¹ The fact that humans only act partially in response to environmental stimuli further complicates the issue. Free will is difficult to quantify.

PA officers deal in a much more complex, aggregated environment than the more limited systems defined by an area of operations, and this compounds their challenge to achieve specified effects. PA officers also concern themselves with perceptions rather than behavior, so for them, cause-and-effect, along with being more difficult to discern in larger systems, is doctrinally irrelevant since manipulating the variables would be nearly impossible. It is also statutorily

¹³⁰Gregory Seese and Paul N. Smith, "Measuring PSYOP Effectiveness," *Special Warfare* 21, no. 6 (November-December 2008): 31. Cause-and-effect analysis is part of the target audience analysis process. However, the process does not include these observations. See Department of the Army, *Field Manual 3-05.301, Psychological Operations Tactics, Techniques, and Procedures*, 2-10 – 2-16.

¹²⁸Gregor, 106.

¹²⁹Gharajedaghi, 49.

¹³¹Gharajedaghi, 47.

prevented from being relevant, since PA officers are legally prevented from propagandizing. In effect, this is a dividing line of sorts between the inform and influence lines of effort.¹³²

The fifth characteristic of systems is that they are multi-dimensional. Gharajedaghi's model holds that multi-dimensional systems do not exist as well-defined "dichotomies." Behaviors exist along spectrums. Competitive behaviors and concerns can become complimentary in certain circumstances, leading to emergent behaviors.¹³³ Observers may be surprised to see actors who are normally in competition cooperating in order to compete with other actors on a higher level.

To clarify, systems possess a "plurality of function, structure, and process." Plurality of function, meaning that different participants of a systems have differing needs served by the system, only elevates the importance of target audience analysis for IIA planners. Plurality of structure "means that components and the relationships among them are multiple and variable." For example, a person may be a member of a business group, a religious group, a recreation club, a tribe, and so forth. The ways IIA planners define this will affect their approach, and it may lead to apparent analytical conflicts. Plurality of process means that a "state may be reached by any number of different processes in …systems" and that "similar initial conditions may lead to dissimilar end states."

Intuitive approaches to communication and behavior modification are likely to fail because of multi-dimensionality. IIA planners must rely on well-conceived processes based on sound scientific theory, such as the target audience analysis process. They must be willing to reframe their choice of target audiences and their communication campaign approaches. The

¹³²Department of the Army, Field Manual 3-13, Inform and Influence Activities, 1-2 – 1-3; Department of the Army, *Field Manual 46-1, Public Affairs Operations* (Washington, DC: Government Printing Office, 1997), 62.

¹³³Gharajedaghi, 38 - 43.

concept of multi-dimensionality presents a very real obstacle to planners. While they must rely on well-conceived campaign planning, they must remain patient, observant, and creative in their methodological applications.¹³⁴

The final characteristic of systems is that culture affects system behavior. Gharajedaghi defines culture as "a unified meaningful mental image" that "provides the necessary conditions for any meaningful communication."¹³⁵ He puts culture "at the center of the process of change," noting that it both presents "key obstacles," and "opportunities for development." Gharajedaghi's assertion that culture acts as a "default decision [system]" aligns well with the theory of planned behavior, discussed below.¹³⁶ However, this is a problematic aspect if one thinks of IIA as a unified process, rather than in terms of its subordinate capabilities. MISO planners can account for culture during target audience analysis; PA planners must either ignore most cultural implications or default to adherence to US norms.

The above explanation of systems characteristics already begins to build a case that theoretical knowledge is important for both communicators who plan IIA and the commanders who have the ultimate decision-making authority on those plans. The inform and influence lines of effort are typically directed toward qualitatively differentiated environments as described by complexity theory. While an understanding of the general nature of systems as presented by complexity theory can improve the application of IIA, it is also insufficient. An understanding of specific theories of both communication and social psychology helps to provide a more complete picture.

¹³⁴Gharajedaghi, 43 – 45.

¹³⁵Gharajedaghi, 84 – 85.

¹³⁶Gharajedaghi, 85.

Mass Communication Theory

Communication theory is applicable to both the inform and influence lines of effort, though it is perhaps more important to the former. This assertion is logical for a number of reasons. First, communication theory typically explores mass media effects, and as such, is general in nature. A particular logic holds between mass media, global audiences, and the more complex nature of such systems. Second, the Army neither may legally nor morally use physical force or CEMA to control the information domestic audiences or audiences within countries with which the US is not at war access. However, this restriction does not necessarily hold for MISO planners, who work nearly exclusively within foreign areas of operation.¹³⁷ In other words, MISO planners have more freedom to manipulate environmental variables, while PA planners must essentially accept existing variables. Finally, PA is the commander's primary tool for the inform line of effort, while other IRCs are ancillary. While commanders may not use PA to engage in "either censorship or propaganda," they still have a responsibility to "influence the presentation of information about the force by providing truthful, complete, and timely information that communicates the Army perspective."¹³⁸

The question mass communication theory must answer, then, is not how to shape behavior, but how people form perspectives. In other words, how are they informed, and under what circumstances? Understanding of media effects have changed over the past century. Media theorists already held negative views of mass media practices and effects at the turn of the twentieth century. The effectiveness of propaganda efforts during both world wars seemingly confirmed these views. Such views combined with emerging behaviorist psychological approaches to produce what scholars later labeled the "magic bullet theory." Residing in this

¹³⁷The one exception is when MIS forces provide defense support to civil authorities.

¹³⁸Department of the Army, *Field Manual 46-1*, *Public Affairs Operations*, 31 and 62.

theory was the notion that people were defenseless against the effects of propaganda.¹³⁹ This notion seems still to resonate today.

However, scholars developed this understanding in a "push media" environment, where audiences had little ability to provide feedback and had few media choices. Perhaps this parallels the media environment in some underdeveloped and autocratic countries of today. It also contrasts with that of modern societies that have "pull media" environments wherein audiences have expansive media choices.¹⁴⁰ Complexity theory helps explain this as well, since information itself provides the link between systems and is the source of organization. Push environments are possible only within systems with a low density of interrelations. In essence, these are semi-closed systems of sorts, less capable of emergent behavior.¹⁴¹

The inform line of effort is conducted primarily in an open, pull environment.¹⁴² The magic bullet theory is just "too simplistic" to be of much use.¹⁴³ In fact, its explanatory value started to unravel based in part on research conducted by the Army at the start of World War II on the mixed effects of its own *Why We Fight* film series.¹⁴⁴ Newer media theories show that pre-existing attitudes and beliefs cause a selective use of media by audiences. Individuals may choose

¹⁴²While all complex adaptive systems are technically open systems, their qualities can differ. For example, North Korea could qualify as a closed system due to the very tight border and media controls. Venezuela and Iran exhibit similar qualities.

¹⁴³Baran and Davis, 82. Note that magic bullet theory has "long since been abandoned by scholars and researchers," but that during the time it was en vogue because "*propaganda worked* – *and to a remarkable degree* [emphasis in the original]." See Melvin L. DeFleur, *Mass Communication Theories: Explaining Origins, Processes, and Effects* (Boston: Allyn & Bacon, 2010), 131 and 138. Complexity theory holds obvious explanatory value as to why propaganda would have been more effective during World War I than it is now.

¹⁴⁴DeFleur, 143 – 145.

 $^{^{139}}$ Baran and Davis, 28 - 29.

¹⁴⁰Baran and Davis, 269.

¹⁴¹Dolman, 116 – 118.

simply to not listen to counter-attitudinal messages, may choose to not remember the content presented, or may distort the meaning of messages. These effects are largely manifestations of cognitive dissonance theory and contribute to the theory of planned behavior.¹⁴⁵ The next section provides more detail.

So to return to the idea of what the inform line of effort should accomplish – influencing the media to present ideas that represent the Army's perspective – what else can planners draw from mass communication theory? Agenda setting, priming, and framing seem to hold the most explanatory value, and form a foundational triad of sorts in communication theory. Some researchers resist labeling these concepts theories, but that does not eliminate their pragmatic value as descriptors of media effects.¹⁴⁶

Agenda setting is "the idea that media don't tell people what to think, but what to think about."¹⁴⁷ People essentially assign a personal importance to news issues based on the importance assigned by the press.¹⁴⁸ However, these simple descriptions hide complexities. In accordance with the characteristics of systems theory, it is difficult to trace the origins of ideas. One can question the prominence of the media, the public, and policy-makers in determining who really controls agendas. The entry point of an idea may be anywhere within networks, may travel along feedback loops, may exhibit time delays, may eventually be subject to entropy, etc. As well, the importance of an issue assigned by media does not necessarily correlate with the importance audience

¹⁴⁵Baran and Davis, 154 – 157. DeFleur, 145.

¹⁴⁶Baran and Davis, 295.

¹⁴⁷Baran and Davis, 293.

¹⁴⁸DeFleur, 171.

interpretations.¹⁴⁹ On a practical level, the implication of agenda setting for IIA practitioners is that agenda setting is primarily about volume coverage of issues favorable to the Army's goals. It is also important to acknowledge that the DOD's principles of information prohibit PA from using some of the tactics used by political communication campaigns and other interest groups, but that MISO targeting audiences within an area of operations have no such restrictions.¹⁵⁰ While PA must be truthful in their communications, MISO does so simply to maintain the credibility that is so vital to their persuasion efforts. Nevertheless, MISO may also engage in covert communications, attributing communications to another party, or engaging in misinformation or disinformation efforts, though all such efforts have to remain classified.¹⁵¹

Framing refers to how media present an issue, as well as how audiences interpret such presentations—an effect that reception, experiences, and biases influence. It is essentially sense-making and schema-building.¹⁵² Importantly, there is often a wide gap between reality and the interpretation of stories by audiences.¹⁵³ This has different implications for both the inform and influence lines of effort. For example, a PA officer may need to ensure that the media accurately portray responsibly executed military operations in order to provide time to meet strategic goals,

¹⁵⁰Department of the Army, *Field Manual 46-1, Public Affairs Operations*, 62; Manheim, 58.

¹⁵¹Department of the Army, *Field Manual 3-53, Military Information Support Operations*, 2-4 – 2-5.

¹⁵²Baran and Davis, 297.

¹⁵³DeFleur, 345 – 347. The description here refers to research conducted on perceptions formed during General MacArthur's homecoming parade in 1953.

¹⁴⁹Baran and Davis, 293 – 298; DeFleur159 – 171; Gerald M. Kosicki, "The Media Priming Effect: News Media and Considerations Affecting Political Judgments," in *The Persuasion Handbook: Developments in Theory and Practice*, ed. James Price Dillard and Michael Pfau (Thousand Oaks: Sage Publications, 2002), 63 – 65.

while a MISO officer may plan operations to manipulate reality in the mind of enemy combatants or to inoculate audiences against terrorist propaganda.

Priming refers to a heuristic effect by which certain ideas gain salience in the minds of an audience. People often rely on heuristics to form opinions and to guide behavior. They are typically not able to use all available information to evaluate issues, and so must rely on those that they have retained. Priming defines the weight assigned to aspects of an issue—it creates a mental anchor by which people evaluate issues. Some researchers consider priming a subset of agenda setting theory.¹⁵⁴

These theories all combine to help the commander understand what his IIA efforts should achieve, tempered by legal and ethical considerations. He must be able to promote his viewpoint in the media, he wants them to present and define issues in a way favorable to strategic purposes, and people must evaluate these definitions in a way that provides him time to achieve his strategic goals. Constraints against propagandizing the American people provide an ethical yoke on these goals. This is admittedly a complicated issue, as people label communication as propaganda (using the pejorative definition of the term) largely based on their opposition to the information presented. Communication goals are not as simple as doctrine seems to suggest by its theoretical silence. Jarol B. Manheim explains that communication planners must consider these factors when constructing a communication strategy. He writes that

All of the classes of effects...can be seen to have one thing in common—they are means to an end. Gratification effects tie the members of an audience to media use *per se*, which is to say, render them relatively more available to the campaign for purposes of persuasion. Knowledge gain establishes or alters the base of information that audience members will bring to bear on a given issue. Agenda setting influences the rise and fall of specific issues...in the public mind. And framing effects help to shape the evaluations and preferences associated with those issues or objects that are prominently in mind at any given moment. Ultimately... because we are interested not in abstract notions of how and why people can be influenced through communication, but rather in practical notions

¹⁵⁴Baran and Davis, 295 – 296; Kosicki, 64 – 78.

of how best to accomplish that to advance a specific campaign objective, we need to go a step further—from the means to the ends, where the ends are effective persuasion, either in the form of attitude change or, more likely, behavior change.¹⁵⁵

With the exception of MISO doctrine as noted above, no doctrine explains how to develop a communication campaign based on sound theory. Like any other effective campaign, the art should draw heavily from the science.

Social Psychology Theory

As Manheim wrote, the goal of communication campaigns is behavior change in target audiences. Linking back to the previous discussion on systems, "Diffusion does not occur unless some people learn or adopt a new artifact, behavior, or idea. Underlying any theory of diffusion therefore is some schema, either implicit or specific, of how people learn or decide to do something."¹⁵⁶ Individuals with these similar schemas begin to cluster, and thus the phenomena of emergence takes hold.¹⁵⁷ Social psychology describes how attitudes and behaviors function at the individual level, including societal influence.¹⁵⁸

The theory of planned behavior and cognitive dissonance theory help demonstrate the importance of social psychology to IIA. These theories enjoy wide acceptance in social psychology literature, and provide profound explanatory power of human behavior. For example,

¹⁵⁷DeFleur, 229; Kadushin, 75.

¹⁵⁸Kadushin, 56. Kadushin argues that one must "understand social networks 'as if people mattered'," and that psychology is "a topic surprisingly ignored by many social network analysts." See also Sawyer, 142 – 143. Sawyer argues that "An empirical emphasis on individual actions in small groups necessarily neglects the broader, larger-scale influences studied by macrosociology. The process orientation inevitably focuses on human action to the neglect of social-structural factors." He advocates that to resolve this duality, social scientists must "reject strong inseparability and accept analytic dualism."

¹⁵⁵Manheim, 63.

¹⁵⁶Kadushin, 139.

these theories are consistent with and provide structure and specificity to variables such as culture, information, and environment that John Boyd incorporated into his observe-orient-decide-act model (OODA loops) and those Gharajedaghi used in his socio-cultural model.¹⁵⁹ Knowledge of social systems is incomplete without some explanation of human cognitive processes.

The theory of planned behavior "has an excellent track record in predicting behavior," and researchers consider it to "provide a superior model."¹⁶⁰ This theory assumes that intention is a proxy for actual control of a given behavior, and that intention is an aggregate of behavioral, normative, and control beliefs. Behavioral beliefs are composed of a combination of a person's belief of what outcome a given behavior will produce and their positive or negative valuation of that outcome. Normative beliefs are composed of a combination of a person's perception of how important, relevant others may judge the behavior and their "perceived social pressure" to perform the behavior in question. Finally, control beliefs are composed of a combination of factors a person believes may impede their ability to perform the behavior and their evaluation of the power of these factors. These three factors correlate positively with the intention of an individual to perform a given behavior. However, actual control over the behavior is an important caveat as to whether a person performs said behavior (figure 6).¹⁶¹ This has strong implications for military application of behavioral interventions. This explains, for example, the need for security during counter-insurgency operations and the debilitating effects on civilians of armed

¹⁵⁹Gharajedaghi, 83 – 103 and 121 – 124; Osinga, 231.

¹⁶⁰Daniel J. O'Keefe, *Persuasion: Theory & Research*, 2nd ed. (Thousand Oaks: Sage Publications, 2002), 116; Richard M. Perloff, *The Dynamics of Persuasion: Communication and Attitudes in the 21st Century*, 4th ed. (New York: Routledge, 2010), 99.

¹⁶¹Icek Ajzen, "TPB Diagram," *UMASS Amherst* (2013), http://people.umass.edu/aizen/tpb.html (accessed 04 March 2013).

parties competing for control. Commanders can manipulate the variables of this theory during influence campaigns to alter the behavior of target audiences. The necessity for commanders to coordinate the actions of their units closely with their communication strategies is apparent. This theory, in particular, is strongly reminiscent of the "orientation" portion of Boyd's OODA loop (figure 7).



Figure 6. Theory of planned behavior diagram.¹⁶²



Figure 7. John Boyd's OODA loop.¹⁶³

¹⁶²Adapted from Ajzen, http://people.umass.edu/aizen/tpb.html (accessed 04 March 2013). Copyright © Icek Ajzen, 2006; open permission for non-commercial use.

¹⁶³Osinga, 231. Osinga's explanations of Boyd's research and findings demonstrate quite convincingly that Boyd's theory, whether he intended it or not, holds true whether discussing individual psychology, social psychology, or complex adaptive systems. Simplifying his "OODA loops" to a simple descriptor of how fast one makes decisions or whether a commander keeps his

Cognitive dissonance theory explains the need for people to see themselves as consistent. When a person holds incongruent beliefs, or beliefs that are incongruent with their actions, they take mental or physical actions to reconcile the differences due to the psychological discomfort of inconsistent positions.¹⁶⁴ Planners should understand that people often change beliefs to align with behaviors, but only to the degree that they are unable to somehow justify their actions as involuntary. Knowledge of the intricacies of "induced compliance" strategies is very important when force is the primary tool of persuasion.¹⁶⁵ As an example of the power of this theory in practice, the Chinese in fact manipulated this principle quite skillfully during the Korean War to gain some degree of collaboration by nearly all of their American prisoners of war.¹⁶⁶ This theory also explains why people select messages that are consistent with their beliefs in today's pull media environment and why "information campaigns frequently fail to change attitudes."¹⁶⁷

IMPLICATIONS

The implications of theory for doctrine and practice are profound and obvious. *FM 3-05.301, Psychological Operations Tactics, Techniques, and Procedures*, is the Army's sole doctrinal acknowledgment of the need to use scientifically based influence and communication processes. The fact that the Army has looked everywhere except here for solutions to its poor record of using IIA is proof that the majority of officers were unaware that they had fairly good solutions at hand all along. This exception aside, none of the Army's IIA doctrine gives any hint

calm in battle robs the model of its real utility.

¹⁶⁴O'Keefe, 77.

¹⁶⁵Cialdini, 51 – 96; O'Keefe, 88 – 90; Perloff, 238.

¹⁶⁶Cialdini, 66 – 69.

¹⁶⁷O'Keefe, 84 – 88; Anthony Pratkanis and Elliot Aronson, *Age of Propaganda: The Everyday Use and Abuse of Persuasion*, rev. ed. (New York: Holt Paperbacks, 2001), 282.

of the absolute importance of understanding the nuances of communication and especially of persuasion. Recent efforts to improve communication ignore two basic facts—persuasion is difficult, and intuition is a poor substitute for theoretically informed practice. Manheim encapsulates the crux of this argument when he writes:

The attack on the target or its interests that is embodied in an information and influence campaign is often dominated by campaign communications—framing, messaging, distribution, channel effects, and the like. But as we have seen, these efforts are broadly interdisciplinary in character, ranging well beyond polemics to generate pressure for change—an observation that increases in validity the further one moves along the continuum of objectives from information toward influence.¹⁶⁸

He goes on to argue that influence efforts incorporate more than psychology; they require knowledge of economics, sociology, "legal, regulatory, diplomatic, and even, in some circumstances, military pressures as well. A truly comprehensive campaign is a veritable cornucopia of confrontation." He is supported by the observations on complexity theory when he concludes that "campaigns are, fundamentally, communication phenomena. For all of these actions—diverse as they may be—are, in the end, designed to communicate a single message from the protagonist to the target: You must change your ways."¹⁶⁹

Planners must consider IIA early in the campaign or operational planning processes, and to be effective, they must have doctrine that encapsulates much more than formulating "themes and messages." Doctrine writers and planners must fully integrate the processes of maneuver, communication, and persuasion. While consistency, authorities, resourcing, and other issues simplify and enable the process of conducting IIA, none of them solves the fact that the sciences applicable to persuasion are largely absent from doctrine and practice. IIA require "purposeful management of such information to achieve a stated objective based on a sophisticated

¹⁶⁸Manheim, 150.

¹⁶⁹Manheim, 150 – 151.

knowledge of underlying attributes and tendencies of people and institutions—which is to say, based on the science of...decision-making—and of the uses and effects of communication as a means of influencing them."¹⁷⁰

No one discipline provides a complete or holistic picture of how to use information for either strategic or tactical effect, but a combination of complexity theory, mass communication theory, and social psychology seems to cover the gaps. Generic ideas of narrative control are adequate to facilitate discussion, but are quite deficient for the purposes of operational art. Failure to incorporate theory into IIA doctrine adequately, and to educate the force-at-large about the logic of communications campaigns, risks the Army's ability to utilize fully the potential of IIA.

RECOMMENDATIONS

First: that the Army acknowledges that the majority of military campaigns are in fact attempts to modify systemic behavior, and that the acronym IIA currently captures only the communication aspects of persuasion. With this in mind, doctrine must inextricably bind the planning processes of IIA and operations. The Army, assisted by academic experts, should conduct a deliberate review of doctrine to ensure it adequately incorporates scientific principles into IIA doctrine. The military decision-making process must also acknowledge the requirements of a skillfully conducted inform and influence campaign. All actions on the battlefield communicate and persuade. Therefore, the G7 officer (inform and influence activities) must be seen by commanders as a primary integrator of capabilities on par with the operations officer (G3). The G7 must help guide the staff toward behaviorally driven outcomes rather than simply guiding communication efforts.

¹⁷⁰Manheim, ix.

Second: more explicitly acknowledge the scientific foundations of IIA in doctrine, and prominently feature theoretically driven communication and persuasion processes in both common Army doctrine and IIA doctrine. A possible solution would be for doctrine writers to place the common theory and processes into *FM 3-13, Inform and Influence Activities*, which is applicable to multiple disciplines and is more likely to be used as a reference by planners than subordinate doctrine. PA and MISO doctrine could then expand on branch-specific procedures and considerations in their respective manuals. *ADRP 5-0, The Operations Process* and *ATTP 5-0.1, Commander and Staff Officer Guide* must explicitly acknowledge that theoretically driven processes exist and are critical to successful communication and persuasion efforts. In many ways, these two manuals are the linchpin that links both the Army planning efforts as well as officer professional military education. A simple change to these manuals, acknowledging the difficulties and processes involved in IIA, would very quickly reduce the tension that often exists between what commanders expect and what communicators can reasonably achieve unless commanders allow them to execute longitudinal campaigns.

Third: incorporate IIA education into all PME courses from pre-commissioning through War College. Much of the difficulty in successfully operating in the information environment is likely attributable to the fact that it requires specialized knowledge that most commanders do not possess. Maneuver commanders are action-oriented. They will and should direct operations, but their education shapes them, and that education currently provides almost no useful illumination of IRCs.

Fourth: establish the 7th warfighting function in doctrine. Link IIA and the new warfighting function, along with other related functions such as civil affairs, in a single staff section under the purview of an officer properly trained in persuasion the other disciplines he must coordinate. Fundamentally, civil affairs, select CEMA capabilities, and military deception are all IIA activities that focus on behavioral modification. It is worth reconsidering whether the

PA officer should in fact be included in this section or whether he or she should retain the traditional position as a special staff officer. Cogent arguments exist for both positions.

Fifth: focus IIA doctrine and practice on planned, longitudinal campaigns. The G7 must balance this with an explicitly acknowledged process and staff subsection to handle crisis communications. Good inform and influence campaigns require a deliberate effort, but warfare is unpredictable. Specifying a difference between planned and crisis communications gives commanders maximum adaptability.

Sixth: expand the educational requirements and opportunities for PA and MISO personnel. The current qualification courses do not rely very heavily on the sciences related to communication or persuasion. The better educated these personnel are in the quite difficult arts of communication and persuasion, the better they can incorporate science into practice, and the better they can advise commanders.

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