



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**BUILDING A VIRTUAL CULTURAL INTELLIGENCE
COMMUNITY**

by

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June 2007

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REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE June 2007	3. REPORT TYPE AND DATES COVERED Master's Thesis, Jan 2006 to Jun 2007	
4. TITLE AND SUBTITLE Building a Virtual Cultural Intelligence Community		5. FUNDING NUMBERS	
6. AUTHOR(S) Matthew A. Zahn, Wayne R. Lacey		8. PERFORMING ORGANIZATION REPORT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A		10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.			
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited		12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) The U.S. intelligence community is without peer in providing high-quality, detailed technical intelligence. Due to the intelligence community's efforts, the USG has a thorough understanding of its adversaries' activities. What we propose is to develop a means by which that same intelligence community can use cultural factors to answer the question "Why?" Although cultural intelligence plays a key role in many of America's political and military successes, the maintenance of a broad-based, detailed cultural intelligence capability has thus far proven elusive. With the advent of networked collaboration tools, the intelligence community now has the ability to deploy a virtual cultural intelligence community. Such a community, based on a wiki, would incur almost no monetary or bureaucratic overhead, and could be configured so that the loss of any single intelligence organization would have minimal negative effect on its mission.			
14. SUBJECT TERMS Cultural intelligence, cultural wiki, blog, virtual intelligence community, open source, counterinsurgency			15. NUMBER OF PAGES 91
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL

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ABSTRACT

The U.S. intelligence community is without peer in providing high-quality, detailed technical intelligence. Due to the intelligence community's efforts, the USG has a thorough understanding of its adversaries' activities. What we propose is to develop a means by which that same intelligence community can use cultural factors to answer the question "Why?" Although cultural intelligence plays a key role in many of America's political and military successes, the maintenance of a broad-based, detailed cultural intelligence capability has thus far proven elusive. With the advent of networked collaboration tools, the intelligence community now has the ability to deploy a virtual cultural intelligence community. Such a community, based on a wiki, would incur almost no monetary or bureaucratic overhead, and could be configured so that the loss of any single intelligence organization would have minimal negative effect on its mission.

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ACKNOWLEDGMENTS

Thoughts about this thesis began in the spring of 2006 in the “Anatomy of Intelligence” class conducted by Professor Robert O’Connell. In one of the seminars, Professor O’Connell challenged the students to identify a problem within the Intelligence Community and devise a tentative solution for it. It was this solution, the idea that using wikis to create a cultural intelligence community to fill a deficiency in the intelligence arena, that Professor O’Connell felt merited further study. Through his active encouragement and support, we began the foray into the world of cultural intelligence.

Professor O’Connell also shared our idea with Professor Dorothy Denning, who assessed the technical validity of the concept and felt that it could be done with current technologies. Professor Denning also agreed to be a part of this thesis and recommended we focus solely on the theoretical aspects of building a cultural intelligence community. Her belief that this thesis could provide a starting point for experts in the field of computer networks and that they could handle the technical aspects of implementing this virtual community allowed us to focus our energy on building a better argument for a virtual cultural intelligence capability.

We would also like to thank Professors John Arquilla, Pete Gustaitis, Erik Jansen, Nancy Roberts, Anna Simons, and Dave Tucker for their assistance and guidance in understanding culture, organizational theory, social networks, bureaucracies, and for serving as sounding boards for the ideas in this thesis. Professor Heather Gregg also served as a guide in the world of culture and, as our second reader, took up the unenviable task of finding the grammatical and logical holes in our argument and recommending corrections to those problems. It was, undoubtedly, the most difficult portion of this thesis.

Additionally, we would like to thank our families, friends, and peers for their support, assistance, and criticism during the thesis process.

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I. BUILDING A VIRTUAL CULTURAL INTELLIGENCE COMMUNITY

A. SCOPE

The purpose of this thesis is to determine if it is possible or feasible to create a “virtual” cultural intelligence community. This cultural information network would enable the Special Operations community to have an intelligence resource that is devoted to in-depth analysis of the cultural dimensions of various regions, and thus enable them to better fine-tune their operations. Additionally, it would serve as a means to maintain accurate and timely information on cultural issues relevant to U.S. conventional military forces and other government agencies.

B. METHODOLOGY

This thesis will follow four methodological steps. We will begin by conducting a review of current U.S. intelligence doctrine and show (1) The present structure does not conduct cultural intelligence in support of SOF and (2) Creating another bureaucracy is not the solution to building a responsive cultural intelligence community. We intend to report on the failure of U.S. intelligence and issues within the SF and PSYOP communities regarding cultural intelligence in order to highlight this lack of capability.

Second, we intend to show how modern technology, in the form of wikis and blogs, can be used to create a virtual cultural intelligence network. This will draw on literature on the formation of networks and the collective knowledge of groups to show how a cultural intelligence community can be formed in the virtual environment to address SOF needs.

Third, we will identify what communities can be tapped to provide the collective knowledge for the virtual cultural intelligence network to be functional and relevant. We will also address perceived security and connectivity issues in order to show that cultural intelligence can be handled as an open source intelligence (OSINT) issue.

Fourth, we will propose a model for implementing a virtual cultural intelligence network. We will do this by highlighting existing software and capabilities of wikis and blogs.

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II. INTELLIGENCE VERSUS CULTURAL INTELLIGENCE

A. EXISTING DOCTRINE

The U.S. Army's Intelligence field manual states clearly that the intelligence community should be “. . . performing intelligence readiness on a daily basis in order to meet the requirements for strategic responsiveness.”¹ In other words, intelligence operations should be conducted in such a manner that the right intelligence is available when commanders determine they need to execute an operation. Further, paragraph 1-116 of the document goes on to state that intelligence officers (G2/S2) should:

- Plan, train, and practice surging intelligence functions on likely or developing contingency crises.
- Establish formal or informal intelligence links, relationships, and networks to meet developing contingencies.²

These guidelines stand in direct contradiction to how the modern operations and intelligence cycles are typically conducted.

The modern intelligence cycle is demand driven. As described above in the reference from FM 2-0, and echoed by noted intelligence analyst Mark Lowenthal:

Some intelligence managers . . . would note, correctly, that one function of intelligence is to look ahead, to identify issues that are not high priority at present but may be so in the future. But, as important as this function is, it is difficult to get policy makers to focus on issues that are far off or only possibly significant. They are hard-pressed to work on issues demanding immediate attention.³

An intelligence consumer identifies a mission, then asks the intelligence community to provide data in support of the mission. This is problematic in that there may exist a paucity of intelligence data for certain areas, which leads to a number of further issues. The first is a time gap. The consumer needs to take action, but cannot until sufficient

¹ U.S. Department of the Army, *FM 2-0: Intelligence* (May 2004) (Washington, DC: Government Printing Office), 1-31.

² U.S. Department of the Army, *FM 2-0: Intelligence*, 1-32 – 1-33.

³ Mark M. Lowenthal, *Intelligence: From Secrets to Policy (Third Edition)* (Washington, DC: CQ Press, 2006), 56.

intelligence has been generated which supports his desired or projected course of action. In the time it takes to develop meaningful intelligence based on the original requirements, the situation may have changed significantly enough that the hastily-formed intelligence becomes invalid. A second problem is that a demand-driven cycle does not allow intelligence to suggest possible operations – rather, proposed operations demand intelligence that supports them. Thus, even if intelligence exists on an area of interest, demand-based operations will require still more intelligence to fill in the gaps. A third issue is that demand-based intelligence is frequently “desperation” intelligence, and as such it can result in mistakes. In their rush to provide “anything,” analysts may do just that. The process may involve cognitive filters, incomplete vetting of ideas, etc., all conducted in a time-constrained environment, but the result is error, oversight, and ultimately, greater potential for operational failure.

A look at the intelligence community prior to the fall of the Soviet Union provides an excellent illustration of the concept of a demand-driven cycle. Consumers clamored for more and more intelligence on the strength, momentum, and future of the Soviet Union – in essence, validation of their view of the Soviet threat to America and its allies.⁴ At the time, there were virtually no means by which analysts could casually converse or share detailed information about contrary trends that were, in retrospect, in ample evidence.⁵ Further, there was a great deal of investment (both monetary and psychological) in overhead collection technology and “enlightened democracy versus godless communism” mindset that supported the *status quo*.⁶ The psychological investment lent itself to support of the United States’ own technical systems. They were literally so awesome, expensive, and secret that their relevance was difficult to deny.

A supply-driven intelligence cycle – as recommended by FM 2-0 – may offer a partial solution to the intelligence gap. Given the opportunity to examine a broad range of topics of interest, analysts might pursue leads that do not necessarily contribute to consumer demands for intelligence. More to the point, the intelligence community could

⁴ Lowenthal, *Intelligence*, 222.

⁵ Lowenthal, *Intelligence*, 227.

⁶ Robert L. O’Connell, “Decadent Intelligence” (computer printout, Department of Defense Analysis, Naval Postgraduate School, Summer 1997), 2.

supply intelligence on topics of appropriate current interest simply because it is what they are looking at, as opposed to topics of directed study. A broad-based, collaborative intelligence community could concern itself with matters of current interest, though a few well-placed questions from consumers might serve to open new routes of research. In this manner, intelligence in a supply-driven cycle will follow its own course, with input from current events.

B. CULTURAL INTELLIGENCE

There is a tremendous need for cultural intelligence within the U.S. military, and especially in the Special Operations community. One topic of expanding interest is counter-insurgency (COIN) operations. The newly-approved Army COIN manual has this to say about intelligence in support of COIN:

3-8. The purpose of planning and IPB [Intelligence Preparation of the Battlefield] before deployment is to develop an understanding of the operational environment. . . . It should focus on the host nation, its people, and insurgents in the area of operations (AO). Commanders and staffs use predeployment intelligence to establish a plan for addressing the underlying causes of the insurgency and to prepare their units to interact with the populace appropriately.

3-9. IPB in COIN operations follows the methodology described in FM 34-130/FMFRP 3-23-2. However, it places greater emphasis on civil considerations, especially people and leaders in the AO, than does IPB for conventional operations. . . . IPB in COIN requires personnel to work in areas like economics, anthropology, and governance that may be outside their expertise. . .⁷

Concepts such as these are not to be dismissed simply as stale doctrine with no meaning to warriors in the real world. Rather, they stand as testament to the attitudes, concerns, and actions of those at the tip of the spear. As a case in point, when an interviewer recently asked SOCPAC⁸ Commander MG John Fridovich (U.S. Army) what assistance he would find useful from resources such as online distributed learning and knowledge management, he responded with the following:

⁷ U.S. Department of the Army, *Field Manual 3-24: Counterinsurgency* (Washington, DC: Government Printing Office, December 2006), 3-2.

⁸ Special Operations Command Pacific.

We would welcome in-depth socio-economic and cultural analysis of some of the austere areas where we train with our partners, as well as focused research on underlying conditions that foster terrorism.

Before launching a CT [counter-terrorism] or COIN initiatives, SOF must understand what is happening on the ground from various perspectives, to include the local radicalization process. External approaches designed to improve local conditions in a COIN environment will fail if they do not include parallel and simultaneous engagement with how people perceive the world they inhabit.

SOF professionals must comprehensively understand the socio-economic, historical, and cultural landscape in which social and political movements – to include terrorist groups – live. If we do not appreciate the complexity and richness of the values and concerns of the people with whom we are engaging, we will miss the mark.

Therefore, systematic polling, surveys, multi-disciplinary assessments, open source analysis, and focus group interviews would help us better understand the local radicalization process, as well as seeing more clearly what effect we are having in promoting security and addressing local grievances.⁹

In just a few sentences, MG Fridovich succinctly encapsulates what is not being done to help modern warfighters accomplish their missions, and with minimal use of force. Further, he reconfirms that some current doctrine is in line with reality.¹⁰

In truth, however, neither MG Fridovich's comments nor the guidance provided in FM 3-24 are revolutionary or original. Over 50 years ago, Paul Linebarger, a psychological operations officer from WWII, offered similar insights.

Linebarger identifies five skills that he feels an individual needs to possess in order to be an effective psychological operations planner and operator. Most of the skills deal directly with the ability to create and disseminate a message that can produce the

⁹ Daniel P. Fridovich, Major General U.S. Army, interview by Jeff McKaughan, "Building Capacity and Partnerships Throughout the Region," *Special Operations Technology*, volume 5, issue 2, March 2007, 28.

¹⁰ Colonel Eric Wendt states that in order for counterinsurgency operations to succeed, the personnel participating in such operations require "detailed local knowledge . . . cultural and area familiarization" so that they can properly implement a rewards program for the area that leads to the development of actionable intelligence. This is inline with the requirements for cultural intelligence that MG Fridovich lays out. Eric P. Wendt, Colonel U.S. Army, "Strategic Counterinsurgency Modeling," *Special Warfare*, September 2005, 3.

effects intended by the United States; but one skill in particular focuses on the ability to reach the target audience precisely. Linebarger states that “Professional scientific understanding of psychology, anthropology, sociology, history, political science, or a comparable field”¹¹ is one of the requirements for planning and executing effective psychological operations.

More specifically, Linebarger’s five skills are:

- 1) An effective knowledge of the US government administration and policy, so that the purposes and plans of the government may be correctly interpreted.
- 2) An effective knowledge of correct military and naval procedure and staff operations, together with enough understanding of the arts of warfare...
- 3) Professional knowledge of the media of information, or at least one of them (book-publishing, magazines, newspapers, radio, advertising in its various branches), or of some closely related field (practical political canvassing, visual, or adult education, etc.).
- 4) Intimate, professional-level understanding of a given area...based on first-hand acquaintance, knowledge of the language, traditions, history, practical politics, and customs.
- 5) *Professional scientific understanding of psychology, anthropology, sociology, history, political science, or a comparable field.* [italics added]¹²

He states that there is no single perfect person who can accomplish this myriad of tasks, but does state that “However – and the qualification is important – each psychological warfare [PSYOP] team represents a composite of these skills.”¹³

Although separated by over five decades and an amazing shift in adversaries, Linebarger’s concepts are surprisingly similar to MG Fridovich’s. In fact, with a thorough reading of military history, one can determine that similar concepts crop up

¹¹ William E. Daugherty and Morris Janowitz, *A Psychological Warfare Casebook* (Baltimore, MD: The John Hopkins Press, 1958), 159.

¹² Daugherty and Janowitz, *A Psychological Warfare Casebook*, 159.

¹³ Daugherty and Janowitz, *A Psychological Warfare Casebook*, 159.

throughout the ages. Yet, despite these concepts having been identified and re-identified, they never seem to enjoy mainstream support.

Extrapolating from Linebarger's statement, one can determine that it is important that a cultural intelligence community represent a composite of skills that allows an in-depth analysis of various cultural issues of interest to its clients. This cultural intelligence community must also operate in a competitive analysis environment. By having analysts in several agencies who have different backgrounds and perspectives work on an issue, parochial views more likely will be countered – if not weeded out – and a reasonable approximation of reality is more likely to be achieved.¹⁴

U.S. Army FM 2-0 dedicates an entire appendix to linguist support.¹⁵ However, in that appendix, no mention is made of the cultural intelligence support that various types of linguists can provide. In fact, the entire manual touches only very lightly on the concept of cultural intelligence, with the bulk of anything that could be deemed remotely related to cultural intelligence residing in Chapter 6 (Human Intelligence – HUMINT) and Chapter 11 (Counterintelligence – CI). Even those chapters are more concerned with the mechanical aspects of implementing HUMINT or CI operations, rather than with the vital role that cultural intelligence plays. This is perfectly illustrated by the words of a soldier who had served in Iraq around 2003:

I knew where every enemy tank was dug in on the outskirts of Tallil. Only problem was, my soldiers had to fight fanatics charging on foot or in pickups and firing AK-47s and [rocket propelled grenades]. I had perfect situational awareness. What I lacked was cultural awareness. Great technical intelligence . . . wrong enemy.¹⁶

This example typifies the intelligence community's preference for technology over psychology. In most cases, it is easier to assess *what* the adversary is doing – satellites and signals intelligence can paint a very vivid picture – but the picture doesn't tell us *why* the adversary is doing it. The case can be made, however, that knowledge of the

¹⁴ Lowenthal, *Intelligence*, 14-15.

¹⁵ U.S. Department of the Army, *FM 2-0 Intelligence* (May 2004), Appendix B, B-1 – B-11.

¹⁶ Robert H. Scales, Jr., Major General U.S. Army, "Culture-Centric Warfare," *Proceedings*, September 2004.

adversary's reasons for acting might lead you to his expected actions. In other words, *what* cannot tell you *why*, but *why* might lead you to *what*. For example, substantial debate took place over Soviet "capabilities versus intentions" in the U.S. in the 1970s, with the "intent" crowd staking out the position that "Only intentions made it possible to gauge the true level of threat."¹⁷ Standard intelligence can provide cultural information, but intelligence organizations rarely convert that cultural information into valuable cultural intelligence in the same manner they do with other, more concrete information.

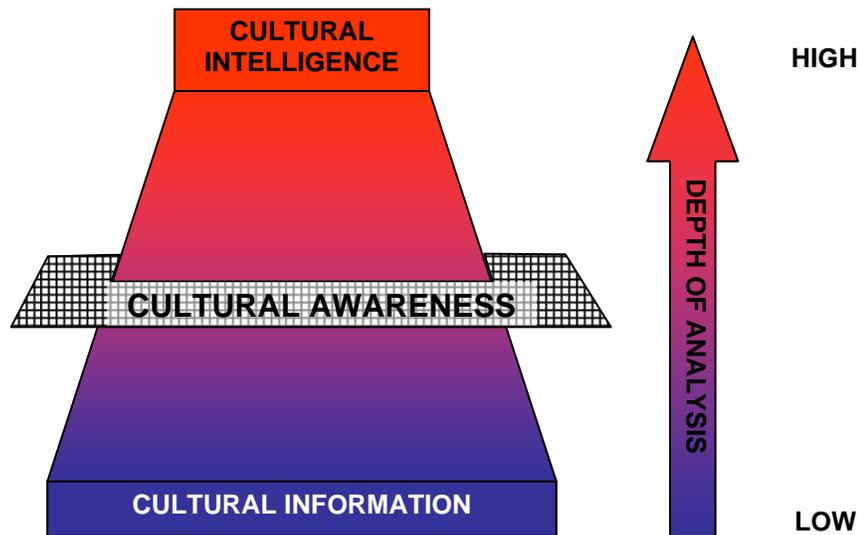
In determining the difference between cultural information and cultural intelligence, one first must look at the definitions of "information" and "intelligence." According to the *Cambridge Dictionary of American English*, "information" is defined as "news, facts, or knowledge"¹⁸ and "intelligence" as "the ability to understand and learn well, and to form judgments and opinions based on reason."¹⁹ Extrapolating from these definitions, cultural information is simply news, facts, or knowledge about culture and cultural intelligence is the ability to understand and learn well, and to form cultural judgments and opinions based on reason. Cultural intelligence is an analytic process that requires access to cultural information in order to produce well-reasoned analysis. Figure 1 illustrates the relatively straightforward process required to refine cultural information into cultural intelligence.

¹⁷ Lowenthal, *Intelligence*, 224.

¹⁸ Cambridge Dictionary of American English, "Information," Dictionary.Cambridge.Com, http://dictionary.cambridge.org/define.asp?key=information*1+0&dict=A (accessed May 8, 2007).

¹⁹ Cambridge Dictionary of American English, "Intelligence (Thinking Ability)," Dictionary.Cambridge.Com, http://dictionary.cambridge.org/define.asp?key=intelligence*1+0&dict=A (accessed May 8, 2007).

Figure 1. Cultural Information Becomes Cultural Intelligence Through Analysis



Despite the need for cultural intelligence, it may not be desirable to build an additional “physical” intelligence community devoted solely to cultural intelligence. The various segments of the intelligence community are already competing over a limited number of available and qualified analysts. Also, a typical paradigm in the intelligence community is to conduct analysis at some level of classification, which brings with it the need for a security clearance. The requirement for a security clearance artificially limits the number of personnel who can take part. On the other hand, the majority of information needed – and available – for cultural intelligence analysis is open source intelligence (OSINT). The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction submitted a report in March 2005 that insisted that OSINT must be included in the intelligence process. It highlighted the fact that only OSINT can “store history.” That is, only a robust open source program can, in effect, gather information to monitor the world’s cultures and how they change with time. In short, it would allow real time analysis of foreign countries and their issues.

The gathering of a disparate group of experts together in one location to analyze cultural information is daunting and probably not feasible, since there would be intense resistance from the established covert agencies against sharing resources with any new entity. Thus, in order to be effective, any cultural intelligence community will very likely

need to be a “virtual community.” The virtual community, operating with the capacities of what Jan van Dijk calls “new media,” can overcome the lack of a physical structure through a combination of online and offline applications that seek not to replace local face-to-face communications by online mediated communication, but to enhance the potentially fruitful interplay between them. Van Dijk specifically states that “the most important *structural* new media characteristic is the integration of telecommunications, data communications, and mass communications in a single medium. It is the process of *convergence*.”²⁰ New media has a potentially large geographical and social reach, limited only by the density of the Internet. It gives the cultural intelligence community the ability to be everywhere, anytime.²¹

Perhaps the best feature of new media is the huge storage potential of the virtual cultural intelligence community. The memory of the community is only limited by the storage capacity of the servers upon which it exists.²² It also allows the cultural intelligence community to conduct analysis on current information and “publish” those results near simultaneously.

In short, there is a recognized need for cultural intelligence, but at the same time, there exists an admitted lack of it. Department of Defense doctrine offers guidance suggesting a forward-looking intelligence process. By its nature, cultural intelligence is one of the best prospects to begin developing such a capacity. However, the breadth of information available on cultures – and the depth of analysis required to provide good intelligence from it – precludes the gathering of all the requisite experts in one location. This suggests that the best solution might be an inexpensive, unclassified, networked collaboration tool – a cultural intelligence wiki.

²⁰ Jan A.G.M. van Dijk, *The Network Society (Second Edition)* (London: SAGE Publications, 2006), 5-7.

²¹ Van Dijk, *The Network Society*, 15.

²² Van Dijk, *The Network Society*, 15.

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III. NETWORKING KNOWLEDGE

Networking cultural intelligence involves several key issues: building a self-sustaining community of experts; linking those experts and their knowledge; strengthening the community to avoid dysfunction; and applying these requirements to an intelligence community. This chapter elaborates on that process.

A. NETWORK KNOWLEDGE THEORY

Dr. Robin Dunbar, an anthropologist at the University of Liverpool, studied primates and discovered a stable ratio between the relative size of the neocortex (thought to be responsible for the evolution of intelligence) and the size of groups formed by particular species. Also known as “Dunbar’s Number,” this leads to an upper limit on group size for humans of about 150. Many clans, tribes, fan clubs, start-ups and other groupings remain well below this limit, as do most blog networks.²³ By defining the groups and assigning experts to them, a network could be developed that has the breadth and depth of both experience and talent to answer sophisticated cultural questions posed to it. For instance, a group dedicated to Arab societies could tap into populations of recent immigrants, sociologists, psychologists, theologians, and so on.

Any community assembled to conduct cultural intelligence analysis needs to be viewed as a community of professionals. By utilizing the “consensual definition” of professionalism established by Joseph Raelin and Donald Miller as a guide, it is possible to define how the cultural intelligence community should look and operate. The characteristics of this definition include:

- Expertise – normally gained from prolonged specialized training – in a body of abstract knowledge
- Autonomy – a perceived right to make choices that concern both ends and means
- Commitment to the work and the profession – in short the “calling”
- Identification with the profession and other professionals

²³ Malcom Gladwell, *The Tipping Point: How Little Things Can Make a Big Difference* (New York: Little, Brown, and Company, 2002), 177-181 and 185-186.

- Ethics – a felt obligation to render service without concern for self-interest and without becoming emotionally involved with clients
- Collegial maintenance of standards – a perceived commitment to police the conduct of other professionals²⁴

A community of professionals, whom people see as experts in their given fields, will generally internalize most or all of the above characteristics. It is imperative that any community set up to analyze cultural information is able to maintain these characteristics, as these characteristics foster high standards among the community and prevent it from losing its diverse expertise.

A community of experts also utilizes a capability that social psychologist Robert Cialdini describes as “Authority.” Laymen tend to recognize and pay attention to experts, much more than they do to “regular” folks like themselves.²⁵ So, if an intelligence consumer interprets analysis as coming from a group of renowned authorities in their fields, he imparts greater weight to the experts’ information than he does to lesser figures’ analysis.²⁶ But this tendency may also lead to a heterogeneous group moving its analysis to fit with that of the recognized expert, even if that expert is incorrect.²⁷ Even if they have information that contradicts the “expert,” people’s general desire to defer to the authority figure can lead to biased analysis. The use of anonymity, while potentially detrimental to the conduct of an academic discussion, becomes paramount to ensure unbiased opinions when it comes to analysis. Implied expertise based merely on authority does not necessarily equate to accuracy in analysis.

The observable diversity across the descriptions of culture (Chapter IV) is also observable within individual cultures. Amartya Sen provides some insight here when he states that “. . . culture is not a homogeneous attribute – there can be great variations within the same general cultural milieu.”²⁸ It is easy to assume that there is “one culture”

²⁴ Mary Ann von Glinow, *The New Professionals: Managing Today’s High-Tech Employee* (Cambridge, MA: Ballinger Publishing Company, 1988), 12.

²⁵ Robert B. Cialdini, *Influence: The Psychology of Persuasion* (New York: Quill, 1984), 214.

²⁶ Cialdini, *Influence*, 208-229.

²⁷ James Surowiecki, *The Wisdom of Crowds* (New York: Anchor Books, 2004), 173-191.

²⁸ Amartya Sen, *Identity and Violence: The Illusion of Destiny* (New York: W.W. Norton & Co., 2006), 112.

for an area or country, forcing artificial homogeneity onto a situation that is actually quite complicated and varied. Homogeneity can also be created by the viewpoint of the researcher – an anthropologist might focus on the aspects of culture important to his field, sometimes overlooking factors that would be picked up by theologians or historical economists. The desire to simplify the situation into personally meaningful segments often distorts the true situation on the ground. Rao and Walton add that they “. . . hesitate to privilege one definition over another. . . [culture] is not a set of primordial phenomena permanently embedded within national or religious or other groups, but rather a set of contested attributes, constantly in flux . . .”²⁹

An analogous phenomenon also exists within the military at many different levels. The Department of Defense, the various services, and their respective branches each maintain a different viewpoint on the composition of intelligence. More importantly, each entity imparts its own biases on the analysis of information. RAND researcher Carl Builder argues that the Army sees itself “ultimately, as the essential artisans of war . . . forged by history and the nature of war into a mutually supportive brotherhood of guilds.”³⁰ But this guild mentality does not just exist within the Army; it permeates the military as a whole, and the intelligence community in particular. In a guild, members work their way “up the ranks” by proving their abilities at each level. When they have mastered one level, they progress to the next and begin the process anew. Such an apprenticeship is a process that develops an institutionalized skill, with specialization taken as a sign of expertise. This specialized expertise is exactly what should be avoided in studying culture, but the only clear way to avoid it is to mandate the incorporation of multiple viewpoints. This is not to imply a philosophical grudge match, where the participants struggle to determine whose opinion does not fit and is therefore invalid, but rather it is a cooperative effort wherein those with dissenting viewpoints engage in

²⁹ Vijayendra Rao and Michael Walton, *Culture and Public Action* (Stanford: Stanford University Press, 2004), 4.

³⁰ Carl H. Builder, *The Masks of War: American Military Styles in Strategy and Analysis* (Baltimore: The John Hopkins University Press, 1989), 33.

dialogue to determine how and why they *do* fit together. As stated in *Culture And Public Action*, it is not just that culture matters, it is *how* culture matters.³¹

Communities have a tendency to organize into homogeneous groups. A group of cultural analysts, if not structured appropriately, will do the same, with the inevitable result being analysis that conforms to the biases of the group. A method to overcome this tendency is to establish an overarching goal for the analysis community as a whole. This super-ordinate goal³² serves as a guide or beacon for the virtual community and helps to define the ultimate purpose of cultural analysis. The Department of Defense (protecting the country) and the Centers for Disease Control (preventing epidemics) both utilize super-ordinate goals to overcome the tendency of the disparate communities within their organizations to focus on issues that solely affect or are of particular interest to those communities.

The tendency of people to form into like-minded groups is also an indicator of the level of trust present within the group. American philosopher Francis Fukuyama defines trust as “the expectation that arises within a community of regular, honest, and cooperative behavior, based on commonly shared norms, on the part of other members of that community.”³³ A network of peers, due to its shared expectations and experiences, is more ready to trust members of that peer group than those outside. Thus, a collective decision-making network utilizing personnel from different fields becomes more difficult to establish and maintain due to the lower level of trust that exists among the various participants.

However, the mere formation of a group of heterogeneous personnel does not ensure that they will maintain heterogeneous viewpoints. People have a strong tendency to seek out those similar to themselves. A process known as “homophily”³⁴ serves to reinforce existing cognitive filters and may cause the virtual community’s analysis to

³¹ Rao and Walton, *Culture and Public Action*, vii.

³² Rob Cross and Andrew Parker, *The Hidden Power of Social Networks: Understanding How Work Really Gets Done in Organizations* (Boston: Harvard Business School Press, 2004), 128.

³³ Peter A. Gloor, *Swarm Creativity: Competitive Advantage through Collaborative Innovation Networks* (Oxford, UK: Oxford University Press, 2006), 86.

³⁴ Cross and Parker, *The Hidden Power of Social Networks*, 83-84.

diverge from reality. A collective decision network produces the best decisions through disagreement and contention, a process that relies on the diversity and independence of the members of the analysis network.³⁵

Additionally, people do not have complete information; they have private, limited information. Sometimes this information is valuable and accurate, but it is always partial. Human beings also are not perfectly rational either. While some are altruistic in their actions, others seek to maximize their self-interest, but are unsure of how to do that. What results is a desire to settle for a less-than-perfect outcome.³⁶ The formation of a heterogeneous collective decision network seeks to use peer pressure as a tool to overcome these tendencies. By creating a higher purpose within the community (the importance and value of the analysis), the desire to settle for the 80% solution can be minimized. But in the drive to create that analysis community, diversity must be a guiding principle in the selection of members. It is this diversity, as well as the range of variations in culture, that precludes the establishment of a single monolithic point of view. Unfortunately, there is another downside to diversity, which is a potential lack of focus on the part of the group (especially from within military circles), and could be a factor in devaluing the analysis gained from the group. This degradation can become a downward spiral as members of the group lower their expectations, causing the resulting analysis to slip in quality. The consumer of cultural intelligence might then continue to lower his expectations, establishing a vicious cycle.

B. WIKIS AND BLOGS

A diverse grouping of cultural intelligence analysts would appear to provide the best solution for the dearth of cultural intelligence. But how can that endstate be achieved relatively quickly, cheaply, and without upsetting the balance of effort, power, and politics in the existing intelligence community? As is the case with many in the business

³⁵ Surowiecki, *The Wisdom of Crowds*, xix.

³⁶ Surowiecki, *The Wisdom of Crowds*, 105.

sector, the need for widespread collaboration may be filled by the “wiki.”³⁷ Wikis are web pages that allow almost anyone in a community to log in and change them. Wikis are thus a very pure form of participatory creativity and intellectual sharing, and represent “a socialization of expertise.” Wikipedia, with its millions of users and potential editors, is an anomaly in the world of wikis. Joe Kraus, the co-founder of JotSpot, a provider of wiki software, surmises that most of the millions of wikis already in existence are designed for small, well-defined groups of people. Wikis are communities, and “communities require trust,” says Kraus.³⁸ Trust comes most easily when the people involved know one another or are accountable for their contributions.³⁹ This also fits with the idea of developing a professional cultural intelligence environment as membership in a wiki essentially becomes a peer review vehicle.

But why wikis? According to Gloor, in order to encourage collaborative behavior, one must use a proper technology framework to create a highly personalized, globally accessible, collaborative workspace that embodies the three dimensions of online behavior: interactivity, connectivity, and sharing (Figure 2).⁴⁰ Such a framework currently exists in the form of the wiki. Wikis allow for the creation of a virtual community that both encourages and grows from the community members’ interactivity, connectivity, and proclivity to share. It is this organic property of wikis that is essential for the establishment of a successful and sustainable virtual cultural intelligence community.

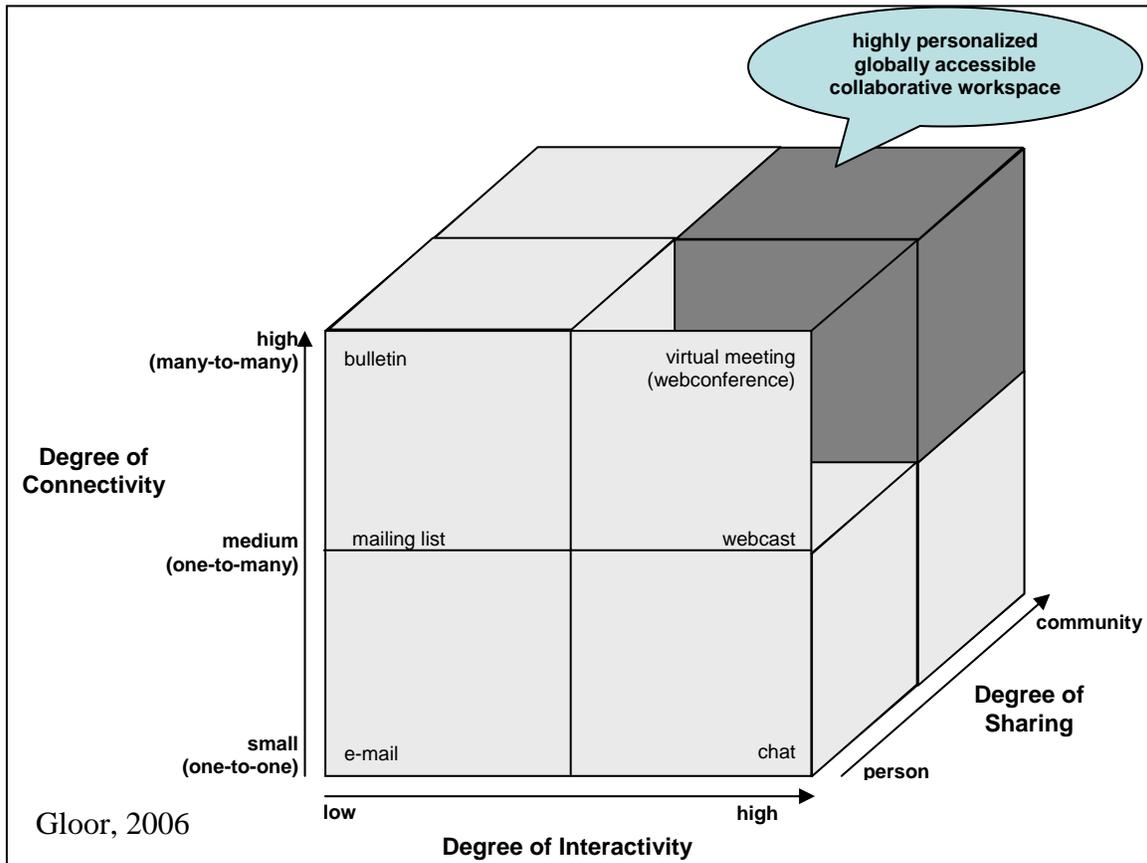
³⁷ Wikiwikiweb was the first of such software to be called a wiki. Ward Cunningham started developing WikiWikiWeb in 1994 and installed it on Internet domain c2.com on March 25, 1995. It was named by Cunningham, who remembered a Honolulu International Airport counter employee telling him to take the so-called “Wiki Wiki” Chance RT-52 shuttle bus line that runs between the airport’s terminals. According to Cunningham, “I chose wiki-wiki as an alliterative substitute for ‘quick’ and thereby avoided naming this stuff quick-web.” “Wiki Wiki” is a reduplication of “wiki,” a Hawaiian-language word for fast. Wikipedia, “What Is Wiki,” Wiki.Org, <http://www.wiki.org/wiki.cgi?WhatIsWiki> (accessed February 19, 2007).

³⁸ The Economist, “The Wiki Principle,” *Survey: New media*, Economist.Com. http://www.economist.com/surveys/displaystory.cfm?story_id=6794228 (accessed April 26, 2006).

³⁹ The Economist, “The Wiki Principle.”

⁴⁰ “Interactivity” is the degree of interaction between the members of the community and is an indirect measure of their responsiveness to the community, “connectivity” is the degree to which everyone in the community is connected to other members of the community, and “sharing” is the degree to which members are willing to share information with other members of the community. Gloor, *Swarm Intelligence*, 119.

Figure 2. Three Dimensions of Collaborative Technologies⁴¹



One of the most important considerations when contemplating any shift in technology or methodology is the expense. It is on this point that the wiki has no peers. Wikipedia offers an excellent illustration of this: despite its tremendous success and worldwide coverage, operating costs (for hardware and software) for the year ending in June 2006 were only \$426,209.⁴² In comparison to the billions of dollars annually allocated to the existing intelligence infrastructure, this barely qualifies as pocket change.

⁴¹ Gloor, *Swarm Creativity*, 121.

⁴² Gregory, Sharer & Stuart, P.A., "Statements of Financial Position," Wikimedia Foundation, Inc., available online at http://upload.wikimedia.org/wikipedia/foundation/2/28/Wikimedia_2006_fs.pdf, November 21, 2006 (accessed May 8, 2007).

In accordance with Einstein's principle that "everything should be made as simple as possible, but no simpler,"⁴³ the wiki was initially envisioned as "The simplest online database that could possibly work."⁴⁴ A wiki web site is typically server-based, and allows users to create and edit content from within their web browser. On the more open wikis, that means users can edit content posted by other users, though this is not a given.

Wikis support many of the standards one expects to find on web pages, such as graphics, hyperlinks to outside sources, cross-links to other pages in the wiki, and so on. The ability of any user to edit any other user's content is leveling, and creates a very democratic forum, while still maintaining the sought-after variety of opinion. The wiki interface is usually simple enough that even non-technical users can contribute.⁴⁵ A wiki can be either the server-based web-site or the wiki software engine for the web-site. Whichever, the implementation of a wiki provides many organizations with an effective tool for mass collaborative authoring.⁴⁶

The wiki community itself establishes the validity of postings. This trust is reinforced by controlling the number of people with authority to change entries. Further, by limiting "change authority" to contributing members but allowing the larger "virtual" cultural intelligence community to access the wiki, the analysis has the potential for large distribution. It also would spur the development of a professional cultural intelligence community. Given the requirement of academics to be published, it is possible that a professional journal, tied to the wiki, and available to the general public, could be developed to provide an impetus to the academic community to provide support to the "virtual" cultural intelligence community.

⁴³ Albert Einstein's original statement was "The supreme goal of all theory is to make the irreducible basic elements as simple and as few as possible without having to surrender the adequate representation of a single datum of experience." However, it is frequently paraphrased as noted in the text above.

⁴⁴ Wikipedia, "What Is Wiki," Wiki.Org, <http://www.wiki.org/wiki.cgi?WhatIsWiki> (accessed February 19, 2007).

⁴⁵ Wikipedia, "What Is Wiki."

⁴⁶ Wikipedia, "Wiki," En.Wikipedia.Org, <http://en.wikipedia.org/wiki/Wiki> (accessed February 19, 2007).

Additionally, with a management cell (in essence, a “cultural intelligence center”) based at a civilian institution of higher learning and primarily staffed by civilians to oversee the wiki and journal, further buy-in by the academic community would be enhanced.

Blogs are user-generated websites, with entries presented in journal style, but in reverse chronological order. The term “blog” is a contraction of “web log,” or a log on the web. Like wikis, blogs support graphics, text, hyperlinks and cross-page links. Many blogs will contain links to similar blogs, web sites, or other media related to the blog’s topic. Most blogs are interactive, as well, allowing readers to post comments on the blog’s content. As of November 2006, blog search engine Technorati was tracking nearly 60 million blogs,⁴⁷ indicating a sentiment among the general population that blogs are a worthy method of sharing information.

Although Google CEO Erik Schmidt states that most blogs have a readership of one – the blogger himself,⁴⁸ their widespread acceptance as a communications medium seems indicative of their utility. When tied to a wiki, a blog serves a key role in the tracking of concept evolution over time.

C. ANALYSIS OF D. ANDRUS’ WORK

In assessing the utility of wikis for a cultural intelligence community, it is instructive to examine literature that analyzes the current use of wikis and blogs for the intelligence community as a whole. The work of Dr. D. Calvin Andrus, an intelligence analyst at the CIA, is of particular interest. In June 2005, Dr. Andrus published a paper entitled “The Wiki and the Blog: Toward a Complex Adaptive Intelligence Community.”⁴⁹ Dr. Andrus’ work addresses the fact that U.S. policy-makers, war-fighters, and law-enforcers now operate in a real-time worldwide decision and implementation environment. The rapidly changing circumstances in which these professionals operate take on lives of their own, lives that are difficult or impossible to

⁴⁷ Wikipedia, “Blog,” En.Wikipedia.Org, <http://en.wikipedia.org/wiki/Blog> (accessed February 19, 2007).

⁴⁸ Daniel Cho, “10 Things Your Blogger Won't Tell You,” *Smart Money*, March 2007, 98-100.

⁴⁹ In 2004 Dr. Andrus received the Intelligence Community’s Galileo Award (an initiative of DCI George Tenet that invited members of the Intelligence Community to submit unclassified papers dealing with all aspects of the future of US intelligence) for an earlier unpublished version of this paper.

anticipate or predict. Andrus argues that in order to deal with this new operating environment the Intelligence Community must be transformed from a community with processes and procedures⁵⁰ into a community that dramatically reinvents itself by continuously learning and adapting as the national security environment changes.⁵¹ It is only by shifting to a community that can operate in an *ad hoc* manner that future intelligence challenges can be met.

Dr. Andrus observes that in this environment, the total “intelligence – decision – implementation” cycle timeframe can be as short as 15 minutes. This severe compression of response time ends up affecting not only high priority issues, but it “ripples back” into most routine intelligence, decision and implementation processes. Only by operating within the compressed response cycle can the United States maintain significant and tactical superiority over its adversaries.⁵²

But there is a physical limit to how fast humans can gather, process, analyze, and disseminate information. In a world where crises erupt on a regular basis, the amount of available information can overwhelm any system, leading to the imposition of analytical short-cuts in an attempt to regain control over the information required to operate successfully in a compressed response cycle. There is an alternative means, however, to reduce the amount of time devoted to gathering, processing, and analyzing information by front-loading these processes – that is, conduct the majority of them before the actual crisis occurs. But this solution requires that (1) a capacity exists in which to store the resulting analysis in a manner that can be readily accessed, and (2) this information repository will be utilized by the intelligence community when faced with a crisis.

⁵⁰ Wilson refers to Herbert Kaufman on this point, noting that once you start along the path of congressional or White House control and more constraints are imposed, “rigidities fixing agencies in their established ways intensify. As a result, complaints that they do not respond to controls also intensify. Further controls, checkpoints, and clearances are therefore introduced.” It is these processes that reduce the responsiveness of agencies in general, and the intelligence community in particular. James Q. Wilson, *Bureaucracy: What Government Agencies Do And Why They Do It* (New York, NY: Basic Books, 1989), 367.

⁵¹ D. Calvin Andrus, “The Wiki and the Blog: Toward a Complex Adaptive Intelligence Community,” available online at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=755904, abstract (accessed February 12, 2007).

⁵² Andrus, “The Wiki and the Blog,” 1.

Dr. Andrus goes on to identify the need to have a complex adaptive system created to conduct the necessary intelligence work required for this constrained operating environment. Utilizing research conducted by The Santa Fe Institute and The Center for Complex Systems Research, he argues that complex adaptive systems must contain six critical components: (1) Self-organization; (2) Emergence – that is the whole (the system) is greater than the sum of its parts. If the system is merely a summation of the analysis conducted, it does not solve the issues of operating in a complex environment; (3) Relationships – more importantly, local relationships; (4) Feedback; (5) Adaptability; and (6) Non-Linearity – small changes in initial conditions or the external environment have large and potentially unpredictable consequences on the results of the system.⁵³

In applying these concepts to the dynamic reinvention of the intelligence community, Dr. Andrus argues that the community must be able to continuously learn and adapt as the security environment changes. In order to create this environment, though, the following changes need to be made: (1) *Intelligence officers must be enabled to act more on their own* – in independent, self-organized ways – to developments in the National Security environment; (2) *Intelligence officers must be more expert in tradecraft* and maintaining this expertise must become a constant quest; (3) *Intelligence officers must share much more information* because, when members of the Intelligence Community know where their colleagues are located in the “intellectual space,” it is easier to self-organize to respond in near real-time to National Security concerns; (4) *Intelligence officers must receive more feedback from the national security environment* so that they can learn from and adapt to the changing environment they operate in; and (5) *Intelligence managers must be more persuasive about strategic objectives.*⁵⁴

In particular, his third point, “Intelligence officers must share much more information,” deserves further attention. The military often calls the ability to know where one is in terms of the battle “situational awareness.” Situational awareness, however, is more than just knowing one’s own location on the ground, it is knowing the location of one’s enemy, the current state of one’s own forces, the effect of the geography

⁵³ Andrus, “The Wiki and the Blog,” 7-9.

⁵⁴ Andrus, “The Wiki and the Blog,” 12-13.

and other natural factors on any action either force can take, along with other assets available that can be utilized to assist in a determined course of action. For the intelligence community, situational awareness is understanding what information is out there about the situation, and not just the specific information for a certain area of analysis. This allows the identification of gaps in the field of knowledge and allows for self-organization to fill those gaps. In order to be a truly responsive system, the intelligence community has to identify its gaps in knowledge and fix them immediately. Outside prompting generally arrives too late to affect the current situation.

Dr. Andrus further postulates that five technologies (Repository, Wiki, Blog, Search, Feedback) comprise a “Technology Stack” which is required to allow the intelligence community to start down the path of implementing the five mission recommendations (self-organization, tradecraft, information sharing, feedback, and strategic communication) suggested by complexity theory.⁵⁵ The wiki, in Dr. Andrus’ view, serves as a means to create a healthy market of debatable ideas that emerges from sharing points of view. The ideas that prosper – that is, the ones that survive the scrutiny of the intelligence community – will enable the growth of the adaptive behaviors that the intelligence community must adopt in order to respond to the mercurial National Security environment.⁵⁶ Fundamental is the notion that not all good ideas originate at the top (that is, longevity and/or expertise are not the sole requirements for creating good ideas), which allows the intelligence officer to create a self-organizing community that truly has a collaborative analytical capability.

Dr. Andrus points out that the space must have a sufficiently large critical mass of intelligence officers and must be open to not just the intelligence community, but also to other non-intelligence elements of national security. Implied here is that the space for change must be *organization independent*. If wedded to organizations, the capacity for change is reduced due to bureaucratic cultures and requirements. It is Andrus’

⁵⁵ James Moffatt describes Complexity Theory as providing “an explanatory framework of interrelationships, both metaphorically and analogously, of how individuals and military organisations interact, relate, and evolve within a larger ‘ecosystem.’” James Moffatt, “Complexity Theory and Network Centric Operations,” Command and Control Research Program, September 2003, available online at http://www.dodccrp.org/files/Moffat_Complexity.pdf.

⁵⁶ Andrus, “The Wiki and the Blog,” 20.

requirement for accessibility outside of the intelligence community that will enable the information sharing and feedback necessary for the intelligence community to adapt to changes in the National Security environment. The space also needs to be flexible and support the tools for self-organizing (wiki), information sharing (blog), searching, and feedback. It needs to be a space that is “always on, ubiquitously distributed, and secure.” According to Andrus, this space needs to be an electronic network, and more importantly, it needs to be an electronic network based on the SIPRNet.⁵⁷

Andrus specifies the need for SIPRNet as a movement away from JWICS and toward greater access, stressing the need for the largest possible number of people to have access to the tools of the online intelligence community. Andrus feels that JWICS is too restrictive to be an effective medium for information sharing. He identifies the requirement for accessibility as essential in the creation of reactive intelligence analysis capability. The authors agree with Dr. Andrus that greater access is desirable, but they feel that SIPRNet is still too restrictive a venue. To ensure the highest degree of information sharing, any proposed network should reside on the unclassified NIPRNet.

Ultimately, Dr. Andrus concludes that as a result of the findings included in the 9/11 Report, the intelligence community is under pressure (from the public and political realms) to adapt to the new operational environment and be successful against the threats facing the United States. He argues that ideas such as letting intelligence officers independently express their views, creating a body of intelligence knowledge without an editor-in-chief, and inviting policy counterparts at the Departments of State, Defense, Homeland Security, and other agencies is *avant-gard* and breathtaking. But these changes are timid compared to the changes he argues are required to bring the intelligence community into the 21st century.⁵⁸

D. BUILDING TRUST

As noted earlier, the idea of increasing the knowledge capability of institutions by coordinating the activities of others is not new. This concept was the basis for the Office

⁵⁷ Andrus, “The Wiki and the Blog,” 20.

⁵⁸ Andrus, “The Wiki and the Blog,” 26.

of the Coordinator of Information (COI),⁵⁹ headed by William Donovan in the early stages of World War II. But merely forming an institution to provide that link did not solve the issue of increasing knowledge capacity. Ultimately, COI ran into bureaucratic resistance from the Departments of War, Navy, and Justice, and in little over a year, was split into two organizations, the Office of War Information (OWI) and the Office of Strategic Services (OSS). The result was that both had reduced capabilities and authority.

Since the development and proliferation of computer networks, physical location – while important for establishing initial trust – is no longer a prerequisite for collaboration. It is possible to link disparate nodes separated by vast distances and form a functional analytical network. But it is important to determine what type of collective intelligence is going to form the super-ordinate goal of the analytical network.

James Surowiecki, in his work “The Wisdom of Crowds,” identifies three types of collective intelligence⁶⁰ that can serve as the basis for a collaborative information network. The first type of collective intelligence involves cognition problems, those problems that have (or will have) definite solutions. Determining “Who will win the Super Bowl this year?” or “How many recruits will graduate basic training?” are both examples of this type of problem. But cognition problems can also involve questions for which there is no single answer, although some answers are better than others. Questions such as “What is the best way to defeat terrorism?” or “What is the best location for a Provincial Reconstruction Team⁶¹ (PRT) camp?” would fall into this category.

The second kind of collective intelligence is coordination problems, that is, those problems that require members of a group to figure out how to coordinate their behavior with each other, knowing that everyone else is trying to do the same. For example, coordinating the patrols of several companies in the military, the interactions of several PRTs, or the PSYOP programs for adjacent divisions fall into this arena. The typical

⁵⁹ Paul M. A. Linebarger, *Psychological Warfare* (Washington, DC: Infantry Journal Press, 1948), 90-94.

⁶⁰ Surowiecki, *The Wisdom of Crowds*, xvii-xviii.

⁶¹ “PRTs are configured as joint civil-military teams in order to improve civil-military coordination by drawing on civilian expertise and facilitating the dispersal of government funds for relief and reconstruction projects and security sector reform.” Peter Viggo Jakobsen, “PRTs in Afghanistan: Successful But Not Sufficient,” Danish Institute for International Studies (DIIS) Report 2005:6, 12.

military (and government) solution for the problem of coordination issues is the use of hierarchical organizations – that is, clear cut lines of command where there is a higher authority to determine the ultimate outcome after input from subordinate units. The main reason for the use of this structure ultimately ends up being accountability for the eventual outcome, and thus the ability to affix blame if the outcome is found to be in error or disastrous.

The final type of collective intelligence problem Surowiecki identifies is cooperation. Cooperation problems involve the challenge of getting self-interested, distrustful people to work together. While Surowiecki states that issues such as paying taxes, dealing with pollution, and agreeing on definitions on what counts as reasonable pay are examples of cooperation problems, it can also be argued that coming to an agreement on definitions in general also falls into this category. The main basis for collaborative information requires individuals to agree to a definition that is the “best answer” to the question asked.

Diversity and independence of individuals participating in collaborative information networks is important since “the best collective decisions are the product of disagreement and contest, not consensus or compromise.”⁶² Ultimately, the best way for a collaborative information group to be smart is for each member to think and act as independently as possible. Yet, it also requires that the members of the collaborative information group trust the other members of the group.

Building trust may be easier in a small-scale wiki located within an organization or company, as most participants in these wikis have face-to-face contact with the other members of the community. Thus, the wiki becomes more of a knowledge repository that is accessible 24 hours a day. When a wiki increases in scale, other issues of trust may develop as it becomes physically impossible for all the members of the network to meet in person. While trust between members doesn’t rely solely on face-to-face contact, such contact can be of benefit.

⁶² Surowiecki, *The Wisdom of Crowds*, xix.

One goal of wikis is to use collaboration to establish knowledge with the greatest veracity, so the environment in which this knowledge development takes place often resembles that of scientific discovery. In science, new discoveries are often found through the interactions of scientific collaboration, competition, and reputation. When scientists collaborate, they do so through a “division of cognitive labor,” due to the fact that science has become increasingly specialized and it has become difficult, if not impossible, for a single person to know everything he needs to know to solve modern science questions. Through collaboration, scientists can incorporate many different kinds of knowledge, and can do so in an active way. Collaboration also allows for work on inter-disciplinary problems, problems that tend to be the most important in modern science.⁶³

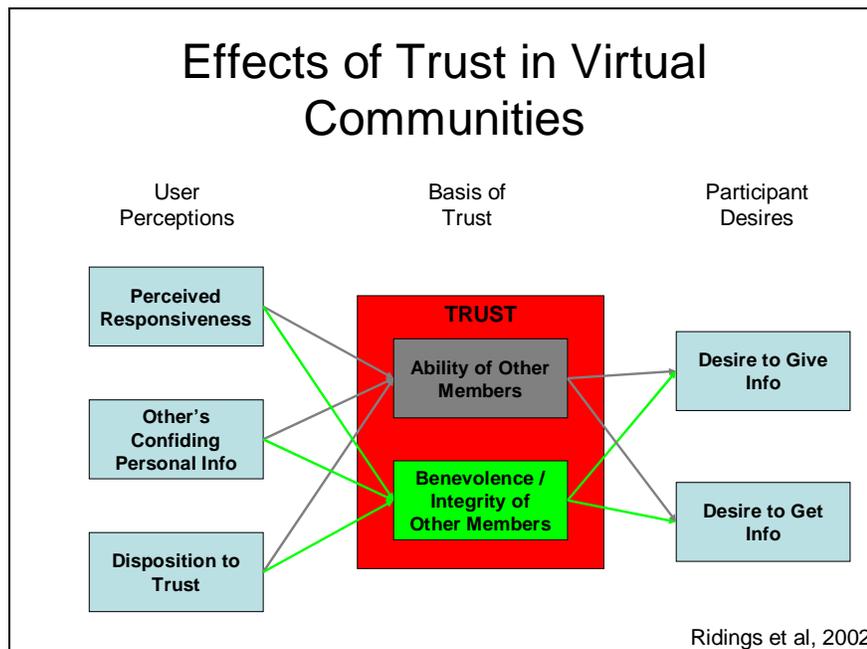
Collaboration also increases efficiency, allowing scientists to be more effective in their research efforts. This, coupled with the desire to be the first to solve a problem (competition) and the recognition (reputation) that results from success, creates an environment conducive to knowledge sharing. There is also the additional pressure of publishing one’s ideas for deliberation by the larger community. Often called a “publish or perish” motivation, this requirement often fosters the type of sharing required for collaborative knowledge. The same principles of competition and reputation apply to research in the social sciences.

So how does trust affect virtual communities? Organizational experts Catherine Ridings, David Gefen, and Bay Arinze, in their 2002 work “Some Antecedents and Effects of Trust in Virtual Communities,” propose a research model in which trust is the mediating variable. This model (Figure 3) seeks to prove that trust is essential in the information exchange of virtual communities, as it is in other forms of communications. Their model is predicated on the belief that there are three antecedents of trust [“Perceived Responsiveness” – (the community responds to requests for information from the user); “Other’s Confiding Personal Information” – (other members of the community share accurate personal information); “Disposition To Trust” – (the user is predisposed to trust)] that affect the two dimensions of trust [“Ability Of Other

⁶³ Surowiecki, *The Wisdom of Crowds*, 161-2.

Members” – (the other members of the community have the knowledge or expertise needed to answer the user’s query); “Benevolence/Integrity Of Other Members” – (the other members are sincere about sharing accurate information)]. These two dimensions of trust further affected participant desires [“Desire To Give Information” – (the participant wants to share further information with the community); “Desire To Get Information” – (the participant wants to get knowledge from the community)]⁶⁴ regarding the knowledge network.

Figure 3. Ridings, *et al.*, Trust Model⁶⁵



In assessing the validity of their model, Ridings *et al.*, used a cross-sectional survey of virtual community members to gauge levels of trust in virtual communities. In the course of their study they gathered 663 responses from 36 online communities.⁶⁶ The Partial Least Square (PLS) path coefficients found (Figure 4) highlighted the importance of perceived responsiveness towards establishing trust in the virtual community

⁶⁴ Catherine M. Ridings, David Gefen, and Bay Arinze, “Some Antecedents and Effects of Trust In Virtual Communities,” *Journal of Strategic Information Systems (vol 11)*, (Amsterdam, Netherlands: Elsevier, 2002), 277.

⁶⁵ Ridings, *et al.*, “Some Antecedents,” 277.

⁶⁶ Ridings, *et al.*, “Some Antecedents,” 280.

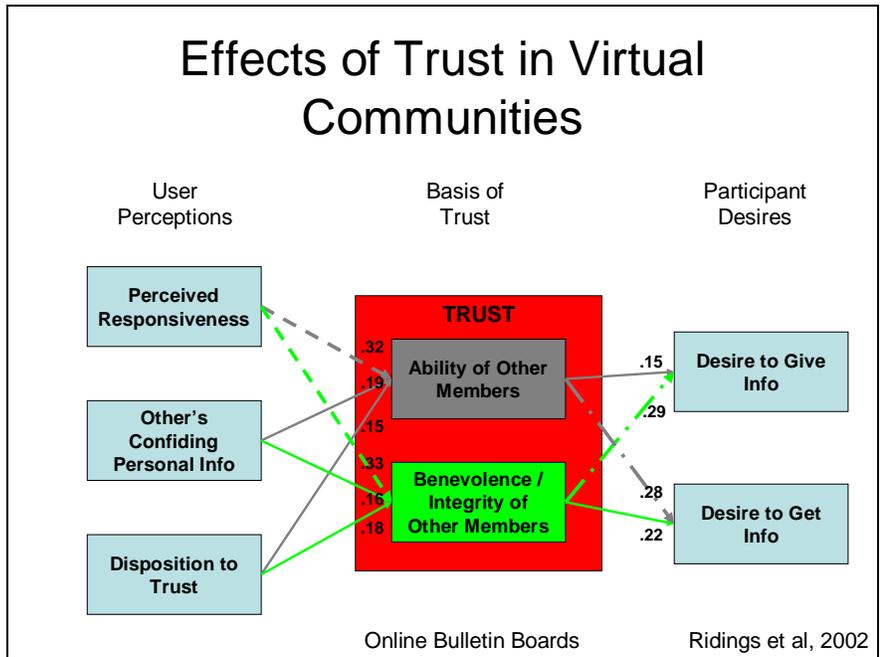
(perceived responsiveness had a coefficient of .32 for “Trust In Other’s Ability” and .33 for “Trust In Other’s Benevolence/Integrity”).⁶⁷ The old adage “what have you done for me lately” would seem to be validated by this result. In a virtual community, performance counts more for building trust than either knowing other participants’ personal information or the user’s personal disposition to trust. This is also in line with Polish sociologist Piotr Sztompka’s assessment on the influence of performance on the foundations of trust, which is that actual deeds, present conduct, and currently obtained results can be used to determine trustworthiness (Stompka says that this involves suspending the past, bracketing the actions, and focusing on what the potential beneficiary of trust is doing now).⁶⁸ Confiding personal information can also relate to Sztompka’s notion of performance as it allows an individual to establish a history of performance that is linked to identity. Performance can be identified here as contributing material that is both relevant and correct. It can be argued that a main issue with trust in these communities stems more from the relevance of the posts to the user’s interests. If the posts do not further inform the user, the posts are ignored. Additionally, contributors may build a reputation for contributing incorrect information and their level of community trust can suffer accordingly.

While Ridings, *et al*, did not specifically address the issue of clearances, it may be possible to extrapolate from the high correlation between perceived responsiveness and “Trust In Other’s Benevolence/Integrity.” The relatively open Caterpillar network appears to have had a high degree of transparency between members, and one might conclude that provides a basis for trusting in other’s benevolence. However, in an environment where personnel and activities are obscured by conflicting clearances and compartmented information, it is not as easy to determine what other network members are doing, or why. As a result, scores for “Trust In Other’s Benevolence/Integrity” and perceived responsiveness may suffer, leading to reduced trust across the network.

⁶⁷ Ridings, *et al.*, “Some Antecedents,” 286.

⁶⁸ Sztompka argues that this allows for a much less reliable clue on trustworthiness than reputation, because it does not allow for a judgment as to whether trustworthy performance is continuous, typical, and “in character.” This highlights the need to vet personnel participating in virtual communities to make up for this perceived flaw. Piotr Sztompka, *Trust: A Sociological Theory* (Cambridge, UK: Cambridge University Press, 1999), 77-79.

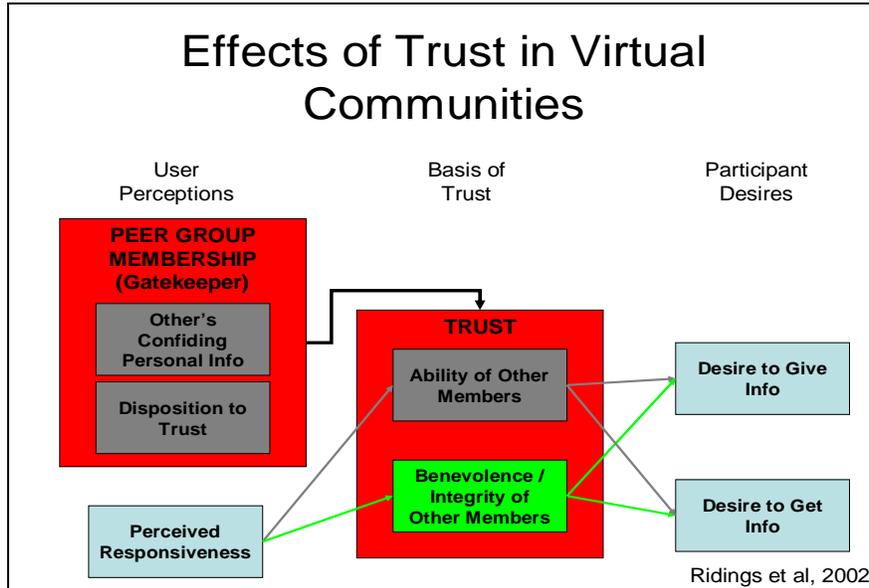
Figure 4. Research Model With PLS Coefficients⁶⁹



But what this result also enables is the establishment of the idea that one can account for the perceptions of “Other’s Confiding Personal Information” and “Disposition To Trust” in allowing membership to the knowledge network. If a peer community is used as the basis for establishing a knowledge network, the peer community, through either personal knowledge or professional accreditation, becomes a third party guarantor of the trustworthiness of the knowledge community (Figure 5). In the figure, the dashed lines represent the attributes that had the greatest effect on the subsequent attribute.

⁶⁹ Ridings, *et al.*, “Some Antecedents,” 286.

Figure 5. Proposed Effect of Peer Group⁷⁰



Restricting entry into the participatory side of the knowledge network purely through the use of peer groups does not mean that the knowledge network will share information freely. Often there are internal motivations and barriers for participation in knowledge networks. In their 2003 paper “Motivation and Barriers to Participation in Virtual Knowledge-Sharing Communities of Practice,” organizational experts Alexandre Ardichvili, Vaughn Page, and Tim Wentling address the issues of motivation and barriers to employee participation in a knowledge network at Caterpillar, Inc. The study indicates that knowledge flows easily when employees view knowledge as a public good belonging to the whole organization. Yet, even when individuals give the highest priority to the interests of the organization and of their community (the super-ordinate goal), these individuals tend to shy away from contributing knowledge for a variety of reasons.⁷¹

Ardichvili *et al.*, determined that evidence collected for the Caterpillar knowledge network pointed to the absence of a major barrier to knowledge sharing known as

⁷⁰ This modification is based on the Ridings, *et al.*, model, but uses the concept of Peer Groups to account for the User Perceptions “Other’s Confiding Personal Info” and “Disposition to Trust.” Since these two factors become requirements for entry, they are accounted for initially and not in the determination of the “Basis of Trust.”

⁷¹ Alexander Ardichvili, Vaughn Page, and Tim Wentling, “Motivation and Barriers to Participation in Virtual Knowledge-Sharing Communities of Practice,” *Journal of Knowledge Management (Vol. 7, No. 1)* (Boston, MA: Emerald, 2003), 64.

“information hoarding”, where knowledge is held to be an individual’s private asset and used for competitive advantage. The majority of participants in this study, 55%, believed that there was a strong evidence of employees’ willingness to share knowledge with the greater community. What was surprising was that less than 10% of the participants believed that there were some employees who were unwilling to share knowledge because of the “information hoarding” reasons.⁷² In the intelligence community, the compartmented nature of the network lends itself to information hoarding. The members of the network may (or may not) wish to share information, but that is irrelevant. By design, they *cannot*.

The most important barriers to sharing, as determined by Ardichvili, *et al.*, did not have anything to do with selfish attempts to hoard the information. Instead, participants indicated that, in many cases, they were afraid that what they post may not be important or may not deserve to be posted. Additionally, participants also worried that what they posted might not be completely accurate or relevant to a specific discussion. Critical elements of this fear were avoiding the loss of credibility (what the study termed “fear to lose face”), letting their colleagues down, and misleading those colleagues.⁷³

There was also the impression on the part of the participants that they had to “earn” the right to post on the company-wide system, an important indication of the importance of authority in terms of tenure and experience in the participants’ determination of the value of information. Both new and experienced employees were concerned that what they had to say might not be important or relevant enough to share with the knowledge network. Some of the participants also voiced a fear of possible criticism or ridicule of what they might post. It was this last group that was concerned that they may receive responses deriding the value of their contributions.⁷⁴

A more fascinating aspect of what was seen as a barrier to the sharing of knowledge dealt with way the knowledge network was organized and managed. In the Caterpillar case, the process of getting knowledge entries approved by managers was

⁷² Ardichvili, *et al.*, “Motivation and Barriers,” 68.

⁷³ Ardichvili, *et al.*, “Motivation and Barriers,” 68.

⁷⁴ Ardichvili, *et al.*, “Motivation and Barriers,” 69.

“time consuming” (under the company knowledge network guidelines, the community of practice managers had to verify the accuracy of entries before allowing their posting on the system). This requirement ultimately reduced the responsiveness of the system to the needs of the participants, and further, gave the impression that the management (and by extension the knowledge network) doubted the value of participant contributions, and introduced a bottleneck in the information flow.⁷⁵

Additionally, security and confidentiality concerns lead to self-imposed censorship by the participants. These participants felt that the knowledge they had, if shared, would compromise company secrets, embarrass other employees, or have legal ramifications. Some of the users solved this security dilemma by employing older methods of knowledge sharing, that is, mailing files to individual coworkers in response to their questions posted on the system, giving information over the telephone, or linking to personal Web sites. It was for these reasons that some participants avoided using the company knowledge network.⁷⁶ Regarding intelligence networks, the only way to avoid security and confidentiality issues is to situate the network on an unclassified, open system. For a cultural intelligence community, the data, discussion, and analysis all currently exist in open forums. In comparison to either Caterpillar or the existing intelligence community, there are no “company secrets” to divulge.

A major question in their article was “What are the reasons for employees’ willingness to use virtual knowledge-sharing communities of practice as a source of new knowledge?” While this research team was dealing with a community of practice, defined as an “activity system that includes individuals who are united in action and in the meaning that action has for them and for the larger collective,”⁷⁷ it can be argued that the results can be used as a basis for predicting behavior in a collaborative intelligence community.⁷⁸

⁷⁵ Ardichvili, *et al.*, “Motivation and Barriers,” 69.

⁷⁶ Ardichvili, *et al.*, “Motivation and Barriers,” 69.

⁷⁷ Jean Lave and Etienne Wenger, *Situated Learning: Legitimate Peripheral Participation* (Cambridge, UK: Cambridge University Press, 1991), 47.

⁷⁸ Ardichvili, *et al.*, “Motivation and Barriers,” 69.

Since user perceptions of “Other’s Confiding Personal Info” and “Disposition to Trust” can be used as determiners for membership in the virtual community, it allows the transference of trust in those areas from the individual to the institution (in this case the virtual community). In effect: the more one trusts the individuals with whom one interacts in a community, the more one will trust the community as a whole. Thus, any interactions within the virtual community are evaluated on the basis of “Perceived Responsiveness.” This means that one can maintain anonymity in the community, an especially important factor given the influence that an individual authority (either perceived or actual) has over other people’s desire to share information and extend trust to the community. Trust within this anonymous community is now based on assessments of the responsiveness of other members of the community.

This basis of trust on “Perceived Responsiveness” also enables a collaborative intelligence community to avoid the pitfalls of the influence of authority on members within the community. American sociologist Robert K. Merton described an aspect of this with his “Matthew Effect,” in which the relative worth of a scientific paper was judged not only on who participated in the research (the more famous the better), but also in what order they appeared on the paper as co-authors.⁷⁹ This can be interpreted as an efficiency tool (or heuristic device) by scientists to filter the vast amount of information by prioritizing based on reputation, but it means that more relevant work by scientists with lower reputations may not be considered in future research endeavors. In a knowledge network, the Matthew Effect would prioritize information by the source, not by the value, thus destroying credibility to the participants that their contributions are valued.

A drawback of using “Perceived Responsiveness” as a means of determining trust is that if the topic that the user is interested in is not a “popular” topic, that is, there is not a high enough density of participants who view this topic as one they want to contribute to, the user may feel that the network has failed them in this information requirement and further degrade their trust in the community. Yet participant non-contribution on the topic could be due to a number of factors: they have no information on the topic; they feel their

⁷⁹ Surowiecki, *The Wisdom of Crowds*, 170.

information on the topic is the same as that of the rest of community; they do not trust the veracity of their information; they are busy with other matters of higher priority.

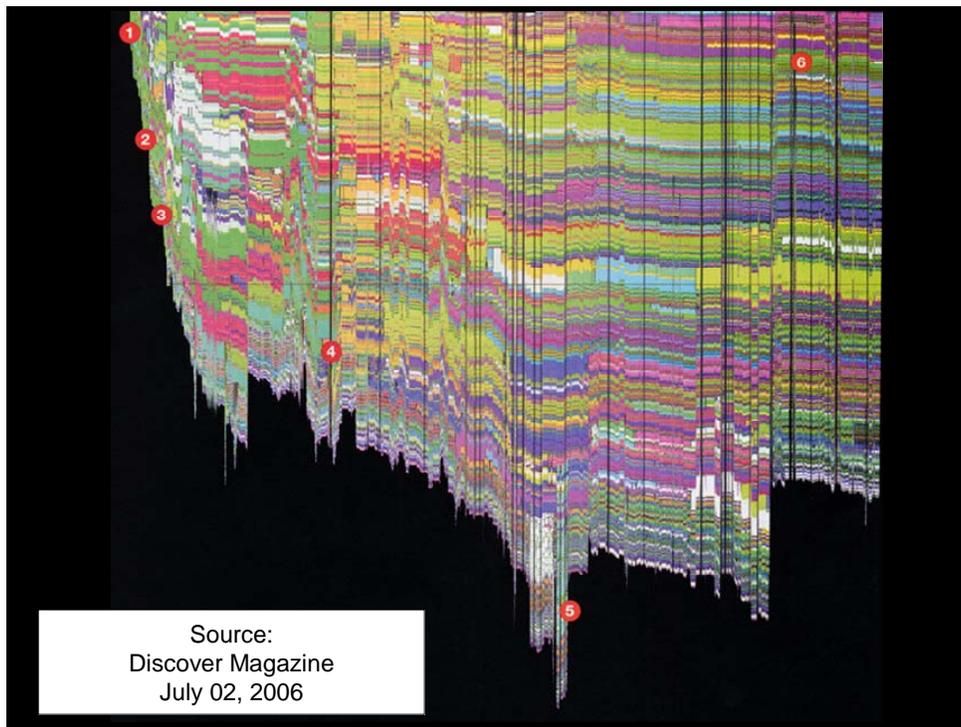
Additionally, the institution can establish the super-ordinate goal of the community as the collection of knowledge and that if knowledge is not present it needs to be added by the members. By designating this goal up front and making it known to the members as a whole, it could counteract the possible degradation of trust by individual users within the community. It becomes a requirement of membership within this collaborative community to identify holes in the knowledge database and attempt to fix them.

But, the establishment of a super-ordinate goal alone will not avoid all the problems of conducting collective intelligence analysis. Simply put, there are topics that, by their very nature, can divide a community and thus initiate an editing conflict between two opposing opinions. These topics tend to be subjects that, in the words of American anthropologist Anna Simons, involve “internally consistent logic” (ICL).⁸⁰ These subjects often involve points where either matters of faith are called into question or there is a lack of credible, quantifiable evidence to support a conclusion. An excellent example of this can be seen with the definition of “evolution” on Wikipedia (Figure 6). Between December 2001 and October 2005, 68 editors participated in the debate over an adequate definition of “evolution,” a debate that resulted in 2,081 alterations.⁸¹

⁸⁰ Anna Simons, “Internally Consistent Logic,” (lecture, Naval Postgraduate School, Monterey, CA, February 28, 2007).

⁸¹ Susan Kruglinski, “Map: Evolution Evolving – A Very Public Online Fracas,” DiscoverMagazine.com, <http://discovermagazine.com/2006/jul/evolutionmap> (accessed May 4, 2007).

Figure 6. Wikipedia “Evolution” Editing War⁸²



While this level of alterations shows that a healthy debate on the topic existed, it also highlights two issues: (1) If the topic is not “popular,” it will not be altered as much, possibly resulting in more errors that are not initially corrected; (2) Topics that involve subjects that cannot be proved beyond a reasonable measure of a doubt can fuel debates that can devolve into *ad hominem* attacks on the contributors and their ideas.

It is apparent that editing Wikipedia has become a popular pastime. Still, half of all vandalism (deletions and malicious content) are corrected within five minutes. However, if the vandalism occurs with a topic that is not popular (in terms of contributors or users), the vandalism may exist for a longer period of time before it is caught. A famous instance of this with Wikipedia was with the malicious biographical entry for “John Seigenthaler, Sr.” that existed for 132 days before it was caught – in this case by

⁸² Kruglinski, “Map: Evolution Evolving.”

the son of the subject.⁸³ Another instance of Wikipedia vandalism was initiated by Stephen Colbert, anchor of the mock news show “The Colbert Report,” who in the summer of 2006 encouraged his viewers to add false information on the topic of elephants.⁸⁴

Ultimately, in order for a knowledge network to succeed, it needs to be seen as being trustworthy and responsive to the needs of the users and participants. While it is beneficial to control the number of participants (as opposed to the Wikipedia example, which potentially has an unlimited number of contributors), especially in areas that require higher levels of veracity of information (intelligence, science), restricting the results of the collaborative process of the participants limits the effectiveness of their effort.

⁸³ John Seigenthaler, “A False ‘Wikipedia’ Biography,” USA Today.com, http://www.usatoday.com/news/opinion/editorials/2005-11-29-wikipedia-edit_x.htm (accessed March 5, 2007).

⁸⁴ Alexa Vaughn, “Educators weighing in on Wikipedia: Potential Legislation, Some Schools’ Policies Aim To Limit Web Site’s Application As A Research Tool,” Daily Bruin. UCLA.edu, http://www.dailybruin.ucla.edu/news/2007/feb/20/educators_weighing_wikipedia/ (accessed May 8, 2007).

IV. EXISTING CULTURAL INTELLIGENCE RESOURCES

A. U.S. GOVERNMENT AND DEPARTMENT OF DEFENSE

There is a lack of capacity within DoD to accomplish cultural intelligence work. This is implied by cultural intelligence's absence in military doctrine, and further corroborated by Anthropologist Anna Simons:

No organization within the U.S. government's vast intelligence system currently gathers information about indigenous forms of association, local means of organization, or traditional methods of mobilization. Yet, ties built through kinship connections, tribal relationships, religious education, and other forms of normal, everyday association remain available to our adversaries throughout the non-western world as ready-made means of recruitment, communication, resourcing, and support. Worse, in addition to doubling as latent networks, these indigenous institutions offer ideal cover. They *comprise* the social fabric most places; they are as familiar and comfortable as the neighborhoods in which people grow up. *And* they are completely unfamiliar to us.⁸⁵

The only military agency that appears to be consistently dedicating any assets to the development of cultural intelligence is the Marine Corps Intelligence Activity (MCIA) which has a new "Cultural Intelligence Program" (CIP). They are in the process of fleshing out their cultural database. The following passage is representative of their method:

The Afghanistan Culture Guide represents our first wiki effort and we intend to have all our Culture Guides and Field Guides on Intellipedia within a few months. We have active pages up on SIPR and JWICS Intelink sites and will replicate all our wikis when they become available. Please invite any experts you know to provide researched and referenced additions or changes.⁸⁶

This appears to be one of the first instances in recent history where cultural intelligence has been deemed important enough to address in a dedicated forum. Unfortunately, it still

⁸⁵ Anna Simons, "Improving Human Intelligence in the War on Terrorism: The Need For An Ethnographic Capability," (internal report to OSD/Net Assessment, Department of Defense Analysis, Naval Postgraduate School, Monterey, CA, 2006), 2.

⁸⁶ Alfred B. Connable, Major U.S. Army, e-mail message to author, February 2, 2007.

resides on SIPR and JWICS, so their call for contributions from experts may lead to limited success – only experts with clearances can participate.

Other entities currently exist that conduct intelligence operations with a limited cultural aspect. For instance, the Strategic Studies Detachment (SSD) of the 4th Psychological Operations Group (Airborne) at Fort Bragg, North Carolina provides cultural intelligence for Psychological Operations forces in particular and Special Operations Forces in general. But the work of this detachment is often classified and sometimes requires personal communications with the SSD itself. Additionally, the SSD is a relatively small organization that cannot meet the cultural intelligence needs of the entire United States Government. It is often possible to gain information on local conditions in foreign areas from the Central Intelligence Agency (CIA), Department of State, Foreign Broadcast Information Service (FBIS), the Library of Congress, and the US Information Agency (USIA),⁸⁷ but no existing network links all these nodes with other nodes of cultural information.

The military is also striving to utilize contractors to provide Cultural Intelligence support. Utilizing commercial sources allows competition to deliver a product at the best price possible, but is it necessarily the best cultural intelligence available? The product that is delivered may be, in the end, not cultural intelligence, but cultural awareness. The business community has defined cultural intelligence (and abbreviated it as “CQ”) as “the ability to cope with national, corporate and vocational cultures,”⁸⁸ but this definition is more appropriate to the guides on etiquette given in travel books, in essence, cultural awareness. Cultural awareness is definitely needed in military operations, but it is not the level of analysis or information needed for Special Operations or Information Operations to adequately engage foreign populations in order to accomplish mission goals. As illustrated in Figure 1, there is a gulf of difference between cultural information and cultural intelligence.

⁸⁷ Frank L. Goldstein and Benjamin F. Findley, Jr., *Psychological Operations: Principles and Case Studies* (Maxwell Air Force Base, AL: Air University Press, 1996), 35-36, 82-83, 203-204.

⁸⁸ Value Based Management, “Cultural Intelligence,” ValueBasedManagement.net, http://www.valuebasedmanagement.net/methods_earley_cultural_intelligence.html (accessed April 26, 2006).

Furthermore, an over-reliance on contractors reduces the ability of the military to have a competitive cultural intelligence environment. Contractors are paid according to the amount of support they provide, and they are expensive. They are thus not motivated to utilize outside sources or competitors to fine-tune their analysis. What is needed is an environment where participants can provide cultural intelligence in a manner that is readily accessible, timely, and accurate. Not only do wikis provide access to a wider community of experts than found in contractor offerings, but they do so at a dramatically reduced cost.

The fluid nature of cultural intelligence and the relative availability of open source information allow it to be dealt with in a wider variety of ways than is possible with classified information. For instance, the military is developing computer programs and databases to increase cultural intelligence capabilities across the armed forces. Advanced Concept Technology Demonstrations (ACTD) at U.S. Joint Forces Command (USJFCOM) is developing simulation and modeling tools to help in conducting cultural intelligence. Additionally, the Joint Psychological Support Element (JPSE) at U.S. Special Operations Command (USSOCOM) is working on the Cultural Attitudinal Database (CAD), while USSOCOM is developing the Cultural Preparation of the Environment (CPE) project. The Department of the Army is also trying to assist the development of cultural intelligence with the development of Mapping the Human Terrain (MAP/HT).⁸⁹ But what is lacking is a collaborative, professional environment in which civilians and military personnel can interact and provide cultural intelligence to the community at large.

It is telling that the *Department of Defense Dictionary of Military and Associated Terms* defines culture as “A feature of the terrain that has been constructed by man. Included are such items as roads, buildings, and canals; boundary lines; and, in a broad sense, all names and legends on a map.”⁹⁰ Culture is simply specialized terrain features that enable the military to determine its location in order to conduct its mission. This

⁸⁹ John Condroski, e-mail message to author, April 17, 2006.

⁹⁰ US Department of Defense, *Joint Publication 1-02: Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: Government Printing Office, October 16, 2006), 137.

definition removes the human aspect of culture and also reinforces the idea that culture is static and can be precisely located and defined. This point of view is misleading, and some military professionals have found a way to step beyond this narrow view. That need is addressed in this somewhat more nuanced description from Commander John P. Coles (USN), who writes in *IO Sphere*, “Cultural intelligence can be defined as analyzed social, political, economic, and other demographic information that provides understanding of a people or nation’s history, institutions, psychology, beliefs (such as religion), and behaviors.”⁹¹ He states explicitly in his explanation of the definition that the concepts of analysis and evaluation are what differentiates “cultural intelligence” from “culture.” While Coles doesn’t address the macro issues of culture, such as duration, intra-cultural variety, and so on, he does appear to have a valid concept. Most of the other cultural thinkers in the following pages touch on one or more of the items on Coles’ list, which lends credence to his selections. As Coles is obviously concerned with the operational and tactical implications of cultural analysis, his selection of cultural traits are most useful to him simply because they are the ones he will most frequently encounter.

B. ACADEMICS

The broad academic community provides the basis for describing and explaining cultural intelligence, and for the purposes of this study, it is necessary to adopt a position on the nature of culture. That position cannot be framed through analysis of military writings on the subject, but must be developed from the wealth of academic knowledge available. Attempting to settle on a specific definition of culture would be counterproductive. Rather, one must analyze several viewpoints on culture, with an eye toward what they offer in the construction of a cultural community, as well as what they lack. A survey of different authors’ viewpoints on culture is also illustrative of the variety and debate necessary in a cultural intelligence community – and of its ready availability in academe.

British anthropologist Edward Burnett Tylor defines culture as “That complex whole which includes knowledge, belief, art, morals, law, custom, and any other

⁹¹ John P. Coles, Commander U.S. Navy, “Incorporating Cultural Intelligence Into Joint Doctrine,” *IO Sphere* (Spring 2006), 7.

capabilities and habits acquired by man as a member of society.”⁹² This is a fairly broad definition, resting at the civilizational level. While it is possible to use this set to evaluate a culture, it is sometimes important to take a slightly more theoretical stance, and look also at the foundation of the attributes themselves. Analysis not only requires answering the questions “*What* do members of this society do?” and “*How* do members of this society function?” but also frequently demands answering the question “*Why* do members of this society do what they do?” It is that “why” that seems to be left unasked by Tylor.

The 19th century German sociologist Maximilian (Max) Weber maintains that:

The concept of culture is a value-concept. Empirical reality becomes ‘culture’ to us because and insofar as we relate it to value ideas. It includes those segments and only those segments of reality which have become significant to us because of this value-relevance.⁹³

This definition remains in the more general and theoretical realm, as opposed to delving into the details that preoccupy so many other writers. There is, of course, nothing wrong with this approach. In fact, it offers a framework into which many different cultural paradigms may fit. If anything, it is the closest thing to a usable concept available. Rather than push culture into a form designated by a researcher, it allows – or even requires – culture to retain its original state, and further requires the researcher to accept that fact. It would appear to be the ultimate embodiment of agnosticism in cultural relativity, in the strictest sense of the term “cultural relativity.”

American anthropologist Ruth Benedict contends “Society in its full sense . . . is never an entity separable from the individuals who compose it. No individual can arrive even at the threshold of his potentialities without a culture in which he participates. Conversely, no civilization has in it any element which is not the contribution of an individual. Where else could any [cultural] trait come from except from the behavior of a man or a woman or a child?”⁹⁴ This is frequently oversimplified to read “Culture is

⁹² Felix M. Keesing, *Cultural Anthropology* (New York: Holt, Rinehart and Winston, 1958), 18.

⁹³ Richard Swedberg, *The Max Weber Dictionary: Key Words and Central Concepts* (Stanford: Stanford University Press, 2005), 56.

⁹⁴ Ruth Benedict, *Patterns of Culture* (Boston: Houghton Mifflin Co., 1934), 253.

personality writ large.”⁹⁵ While she doesn’t attempt to strictly define culture, Benedict adds that man shapes culture and culture shapes man. This concept – of culture and man being functions of the other, and of the fluid nature of each – is important to bear in mind while attempting to evaluate cultures. Updating one’s understanding of cultures based on changes over time is paramount to maintaining clear cultural analysis. Benedict goes on to say that “There has never been a time when civilization stood more in need of individuals who are genuinely culture-conscious, who can see objectively the socially conditioned behavior of other peoples without fear and recrimination.”⁹⁶ This highlights the need to remain non-biased, and touches on the cultural relativism implied in Weber’s treatment.

American anthropologist Clyde Kluckhohn describes culture as “[All the] historically created designs for living, explicit and implicit, rational, irrational, and non-rational, which exist at any given time as potential guides for the behavior of men.”⁹⁷ While Kluckhohn’s description resembles Tylor’s in its use of a detailed list, it does so from a “mindful” perspective. This is idea that the “designs for living” may not be explicitly stated (or even explicitly understood) by the culture itself, and that they may appear irrational (perhaps to both cultural insiders and outsiders). This is further reinforcement of the need to apply cultural relativism, and to strive for an objective understanding of the “why” question.

Another American anthropologist, Clifford Geertz, says “The concept of culture I espouse . . . is essentially a semiotic one. Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning. It is explication I am after, construing social expressions on their surface enigmatical.”⁹⁸ It is an extremely rich, yet still flexible, point

⁹⁵ Clyde Kluckhohn, “Southwestern Studies of Culture and Personality” in *American Anthropologist*, New Series, Vol. 56, No. 4, Southwest Issue (August 1954), 694. Stable URL: <http://links.jstor.org/sici?sici=0002-7294%28195408%292%3A56%3A4%3C685%3ASSOCAP%3E2.0.CO%3B2-M> (accessed February 12, 2007).

⁹⁶ Benedict, *Patterns of Culture*, 10-11.

⁹⁷ Keesing, *Cultural Anthropology*, 18.

⁹⁸ Clifford Geertz, *The Interpretation of Cultures* (New York: Basic Books, Inc., 1973), 5.

of view. It offers some possibilities for shaping general thoughts on culture, as well as the community (or web) in which culture will be considered.

American political scientist Samuel Huntington writes that “Civilization and culture both refer to the overall way of life of a people, and a civilization is a culture writ large. They both involve the ‘values, norms, institutions and modes of thinking to which successive generations in a given society have attached primary importance.’”⁹⁹ Huntington offers no elaboration on the content of culture, but he adds a temporal component to the equation. His contribution is the concept of duration, but he tempers it with the implication of change over time, as well. It is this durational/malleable quality that closes the loop for us on the question “What is culture?”

These descriptions illustrate the contentious nature of defining culture, that one’s viewpoint is often determined by one’s academic background and/or practical experiences. Each definition, while not representing the absolute definition of culture, illuminates an important aspect of culture that must be addressed. Thus, the various definitions support the need for a forum that allows for the discussion and debate of mutual viewpoints within the topic of culture. While there may be some discussion of the nature of culture itself, such discussion is not necessary to support the community’s goals.

It is important to bear in mind that this disparate group of imminent thinkers does not precisely agree on the nature of culture. It is that disagreement which supports more thorough, insightful analysis of cultural factors. Further, this does not mean that culture cannot be defined, it simply means that culture is not definable along one line of reasoning – nor does it need to be. The diversity of definitions of culture implies the need to employ a diverse group of contributors to build a successful virtual community. Lacking a variety of opinions, any such attempt is likely to fail. The strength in a community lies in its ability to cover many of the wide range of aspects of a culture under study.

⁹⁹ Samuel P. Huntington, *The Clash of Civilizations and the Remaking of World Order* (New York: Simon & Schuster Paperbacks, 1996), 41.

Just as culture does not conform to a single definition, the same can be said of cultural intelligence, the content of which varies according to the culture being studied and the information desired from the study of that culture. Likely, the best technique is to allow – or even encourage – community members to contribute based on their understanding of culture. Each specialty has its own way of looking at culture, every one just as valid as another. This framework allows for the fusion of multiple aspects of culture within the same database, without pinning community members to something that doesn't fit their analytical model.

But why is the academic community so important to this effort? Why can the military not just rely on highly-trained servicemembers to provide the cultural framework and analysis? The importance of the academic community, though counterintuitive, is for a very simple reason: variety. The academic community, being representative of widely divergent (but equally relevant) opinions, may be the best place to start when building a foundation in cultural intelligence. It is important to include academia as a resource, rather than avoid it due to what may appear to be chaos to an outsider. That “chaos” is simply the noisy interplay of developing and establishing theory. Compare that to the military, which tends to operate and deliberate along established lines of reasoning (doctrine, TTP, etc). Ultimately, it is the analysis of cultural properties – and their effect on operations – that CI requires, and academia is currently the best source for this skill.

C. CASUAL EXPERTS

Wikipedia is a prime example of a broad field of casual experts coming together to provide insight on an ever-expanding array of topics. While there has been some attempt to compare Wikipedia with a standard “hard-bound” encyclopedia, the comparison is bound to fail. Standard encyclopedias have limited space, limited time prior to publication, limited funds to hire researchers, limited ability to address evolving topics, and so on. The key concept for them is “limited.” Wikipedia, on the other hand, does not have limited space, has no publication timeline, does not pay its authors for their contributions, has endless ability to address evolving topics, and so on.

The fact is, casual experts, or hobbyists, are the key to the success of any broad community. Wherever an expert opinion is required, there exists at least one individual

with knowledge of that information set. Whether it is the grammarian who can see errors from across the room, the grandmother who spent the better part of her life in India, or the Special Operations Soldier who has deployed again and again to South America, they all have key roles to play. These are the bedrock assets of the virtual community. They know the information because they *like* to know it – it interests them. They take part because they enjoy it – it is not a job, but rather a challenge.¹⁰⁰ The challenge is being to make the information as “right” as possible based on their real-world experience.

Casual experts may offer something else, as well: the ability to drill deeper into arguments espoused by the academic community. While the academic community as a whole has a great deal of variety, individual academics can be insular. The casual expert may tend to be less “wedded” to a particular concept, may have more of a tendency to be interested in a range of topics, and thus may be able to make connections (between seemingly unrelated concepts) that others may miss. Casual experts can have greater access to real-time, real-world information as there are greater numbers of them and therefore, better access to a wide variety of experiences. Michael Handel describes these casual experts as amateurs, but regardless of title, their contributions remain worthwhile:

Amateurs frequently bring with them new enthusiasm, a creative imagination, informality, perhaps some academic openness, and a somewhat more detached and objective search for veritas – all of which are intellectual qualities highly useful for intelligence work in general and deception work in particular. This fresh start allows them to reexamine old problems from a new point of view, unlike the pre-war professional intelligence bureaucrats: they were not obligated to commit themselves to earlier, not always fully rational, traditions or to old policies.¹⁰¹

Members of diaspora communities may also fall into the casual expert category. They, more than anyone else, can access the nuances of a target culture – from inside jokes to social *faux pas* – better than even the most well-trained non-native cultural expert. This applies even to the point of being able to make the “right” mistakes. Native

¹⁰⁰ Willinsky describes the Wikipedia entry on “Mister Jip,” a fictional comic book character: “. . . the expertise on Mister Jip appears to lie entirely in the hands of the 13 contributors to this entry, without need for outside sources.” John Willinsky, “What open access research can do for Wikipedia,” FirstMonday.Org, http://www.firstmonday.org/issues/issue12_3/willinsky (accessed May 8, 2007).

¹⁰¹ Michael I. Handel, “Intelligence and Deception,” in *Military Deception and Strategic Surprise*, eds. J. Gooch and A. Perlmutter, *et al.* (London: Frank Cass, 1982), 140.

members of a culture make different mistakes than non-natives, and while they may not be able to put their finger on exactly what the problem is with a non-native who is attempting to “pass,” native members are certain he is not one of them.

D. SHORTCOMINGS OF EXISTING INTELLIGENCE PARADIGMS

Outside of the comparative dearth of cultural intelligence resources in DoD today, there are some other key considerations for any potential cultural intelligence consumer. To begin with, what does the DoD consider cultural intelligence to be? How flexible is the U.S. government in allowing subordinates to apply their own cultural intelligence methodologies? What organizations can be counted on to assist in developing cultural intelligence? Does new doctrine address any of the bases for good cultural intelligence? What is the role of classified intelligence in the process, as opposed to the role of OSINT?

How does the military currently understand cultural intelligence to be? Implied in the DoD definition of culture is the concept of cultural intelligence as the analysis of man-made terrain features. That seems woefully inadequate, but fortunately there is more opinion available. Unfortunately, it too, appears to be inadequate. Presently, for example, members of the 25th Infantry Division’s 3rd Brigade are serving in Kirkuk, Iraq. CPT Elliot Olmstead, the Brigade’s Assistant Intelligence Officer, relates his experience with cultural intelligence as consisting of two weeks of cultural awareness training prior to entering the country. In his words, he and his Soldiers were instructed on “how to run check points, how to separate women and children, how not to touch the Koran, or have women searched by men . . .” Since beginning operations he has developed his own understanding of cultural intelligence, which consists very basically of “understanding the cultural implications of activity, [and] how the populace sees it, versus the Coalition.”¹⁰² What is evident is that there is a haphazard patchwork of individual opinion on cultural intelligence, that has developed in the absence of any overarching guidance from DoD.

Returning to CDR Coles, one can see that he was forced to devise his own working definition of cultural intelligence after determining the official DoD definition to

¹⁰² Elliot Olmstead, Captain U.S. Army, e-mail message to author, December 11, 2006.

be insufficient. Coles' belief that analysis and evaluation of culture – however one defines culture – may be useful here. There are two sides to this coin: what is considered important enough to concentrate research attention on; and what the end user deems necessary for the successful completion of his mission.

The U.S. Army Field Manual (FM) 3-24 titled “Counterinsurgency,” though newly revised, only serves to reinforce the lack of emphasis on culture within the rest of the U.S. DoD. In fact, the most comprehensive definition yet available in U.S. doctrine appears to be contained in its pages:

3-37. Culture is “web of meaning” shared by members of a particular society or group within a society. (See FM 3-05.301/MCRP 3-40.6A.)
Culture is—

- A system of shared beliefs, values, customs, behaviors, and artifacts that members of a society use to cope with their world and with one another.
- Learned, though a process called enculturation.
- Shared by members of a society; there is no “culture of one.”
- Patterned, meaning that people in a society live and think in ways forming definite, repeating patterns.
- Changeable, through social interactions between people and groups.
- Arbitrary, meaning that Soldiers and Marines should make no assumptions regarding what a society considers right and wrong, good and bad.
- Internalized, in the sense that it is habitual, taken for granted, and perceived as “natural” by people within the society.¹⁰³

This description of culture is on par with many of those offered by civilian cultural experts, and may be a sign of positive developments in the military's understanding of the value of culture and cultural intelligence.

¹⁰³ Department of the Army, *Field Manual 3-24: Counterinsurgency*, 3-6 – 3-7.

Chapter 3 – Intelligence in Counterinsurgency – is devoted to the requirements for intelligence support for counterinsurgency operations. However, this chapter reveals that there is no institutional support available for conducting an analysis of culture by intelligence assets. Paragraph 3-9 states that in the development of the Intelligence Preparation of the Battlespace (IPB) for Counterinsurgency:

Whenever possible, personnel must conduct a very thorough and detailed IPB in preparation for deployment. IPB in COIN requires intelligence personnel to work in areas such as economics, anthropology, and governance that may be outside their expertise. Therefore, integrating staffs and drawing upon the knowledge of non-intelligence personnel and external subject matter experts with local and regional knowledge are critical to effective unit preparation.¹⁰⁴

Limited staffs with limited training trying to tackle an unbounded issue (local culture) results in the production of “Fodor’s Guides” – checklists of cultural traits that apply to large regions but do not readily lend themselves to fully understanding the local populace and effectively engaging them in psychological warfare.

Additionally, paragraph 3-10 goes on to state that:

If there are already units deployed in theater, these are the best potential sources of intelligence available. Deploying units should make an effort to reach forward to units in theater. Governmental agencies such as the Department of State, U.S. Agency for International Development, and intelligence agencies are often able to provide country studies and other background information on a theater. Open-source intelligence is also very important to pre-deployment IPB. In many cases, background information on the populace, cultures, languages, history, and government of an AO may be found in open sources. These include books, magazines, encyclopedias, Web sites, tourist maps, and atlases. Academic sources, such as journal articles and university professors, can also be of great benefit.¹⁰⁵

The results of such a process are superficial compendiums that further emphasize the lack of a cultural analytical capability within DoD and the lack of desire on the part of the intelligence community to fully develop this field as a viable mission for intelligence personnel.

¹⁰⁴ Department of the Army, *Field Manual 3-24: Counterinsurgency*, 3-2.

¹⁰⁵ Department of the Army, *Field Manual 3-24: Counterinsurgency*, 3-2.

An additional risk of asking the existing intelligence community to conduct cultural analysis is that, when pressed for time, tactical analysts will most likely use their cognitive filters to streamline the process, thereby degrading the value of the resulting cultural intelligence.¹⁰⁶ One positive effect of operating in a resource-constrained environment, especially with regard to time, is that it forces the analyst to discount the issue of their personal level of trust of the source of cultural intelligence. People will ultimately go where they need to, to get information, regardless of whether they trust or like someone.¹⁰⁷

There are obstacles for including academics in conducting cultural intelligence analysis for the military, primarily the lack of trust on the part of the academic community when it comes to conducting research for the U.S. government. This distrust is notably evident in the anthropology community, a field that is felt to be the only academic discipline that explicitly seeks to understand foreign cultures and societies. Anthropology has historically been – and could again become – a major contributor to the U.S. national security policy, in both foreign policy and special operations. However, due to deep isolationist tendencies which have evolved within the community over the past several decades, anthropologists have been reluctant to work with the military.

This atmosphere of distrust of military research is fostered by the anthropologists' professional organization, the American Anthropological Association (AAA). The AAA's current "Statement of Professional Responsibility" goes so far as to say:

Anthropologists should undertake no secret research or any research whose results cannot be freely derived and publicly reported . . . No secret research, no secret reports, or debriefings of any kind should be agreed to or given.¹⁰⁸

¹⁰⁶ Ephraim Kam, *Surprise Attack: The Victim's Perspective* (Cambridge, MA: Harvard University Press, 2004), 82-156.

¹⁰⁷ Cross and Parker, *The Hidden Power of Social Networks*, 97.

¹⁰⁸ Montgomery McFate, "Anthropology and Counterinsurgency: The Strange Story of their Curious Relationship" in *Joint Center for Operational Analysis (Quarterly Bulletin)*, Vol. VIII, Issue 3, Southwest Issue (September 2006), 72.

This guidance reflects a widely held view among anthropologists that “any research undertaken for the military is de facto evil and ethically unacceptable.”¹⁰⁹ It also serves to further isolate the military from experts in the field of culture at a time when the military is one of the main aspects of American government and society that is in contact with foreign cultures. The emphasis on “secret” in the AAA’s “Statement” might indicate that opportunities to exist to entice their membership to conduct unclassified research.

Other academic communities are not as “hard line” on their willingness to work with government agencies. The Council on Foreign Relations,¹¹⁰ for instance, includes various members of the U.S. government on its boards and panels, which lessens the risk of homophily on the part of the Council. However, the analytical capability of the Council in terms of cultural issues is not readily available due to a lack of connectivity between the Council and the consumers of cultural intelligence. Meanwhile, there are concerns about whether analysis based on open-source intelligence (OSINT) is accurate or applicable to SOF cultural intelligence requirements.

Currently, the intelligence community harbors some institutional prejudice against OSINT, as it seems to run counter to the purposes for which the intelligence community was created.¹¹¹ Some members of the intelligence professions mistakenly equate the degree of difficulty involved in obtaining information with its ultimate value to analysts and policymakers.¹¹² To much of the intelligence community, intelligence is about discovering secrets – so the fact that a certain piece of information is classified further adds to its validity. Many hold the mistaken belief that the classification level of information or analysis is an important aspect of the data – that the higher the classification, the more valuable the data is. This perception presents another obstacle to overcome in creating an open-source based cultural intelligence wiki.

Another challenge to creating a wiki-based cultural intelligence community is the overabundance of information. OSINT, however, has the potential to outstrip all other

¹⁰⁹ McFate, “Anthropology and Counterinsurgency,” 72.

¹¹⁰ Council on Foreign Relations, “Council on Foreign Relations,” CFR.Org, <http://www.cfr.org/> (accessed December 14, 2006).

¹¹¹ Lowenthal, *Intelligence*, 79.

¹¹² Lowenthal, *Intelligence*, 103.

collection techniques in the quantity and quality of intelligence information due to the sheer amount of information that is available.¹¹³ Against this is a principle that Cialdini discusses, which is the idea of scarcity.¹¹⁴ Open-source intelligence is as abundant as sand on a beach, so it is sometimes considered nearly worthless. Classified intelligence, however, is much less available – both in the sense of quantity and accessibility – and so is considered much more desirable. The concept “the harder it is to get, the more it is worth,” while suitable for pricing raw commodities or goods, discounts the value that analysis imparts to information. In this case, “difficulty of acquisition” may also refer to the level of classification of the information. In real terms, both classified and open-source information must be “mined” for suitable content – which must then be analyzed to produce intelligence – and the idea that one is better than the other based merely on scarcity is an untenable point of view.

Advocates of OSINT hold that if publicly acquired information is properly organized and analyzed, a potential goldmine of intelligence information exists that could rival the intelligence gained from other, more clandestine intelligence disciplines. Proponents cite the fact that due to the greater openness and transparency of political and economic systems throughout the world, 80% of all intelligence information can be gleaned from open-source materials. In the realm of economic intelligence alone, 95% of the information comes from open sources.¹¹⁵ Moreover, OSINT can put classified intelligence into a wider context, thereby amplifying the value of the classified intelligence in determining trends for policy makers.¹¹⁶

In sum, supporters of OSINT hold that the true value of information comes from its analysis. Analysis is made better by offering the data to a wider group of interested parties who can then provide a more detailed and useful study of its implications.

¹¹³ Michael A. Turner, *Why Secret Intelligence Fails* (Dulles, VA: Potomac Books Inc., 2005), 93.

¹¹⁴ Cialdini, *Influence*, 237-271.

¹¹⁵ Turner, *Why Secret Intelligence Fails*, 93.

¹¹⁶ Lowenthal, *Intelligence*, 102.

E. THE TWO EXTREMES: WIKIPEDIA AND INTELINK

In addressing current virtual collaboration resources, it is insightful to look at two divergent examples: Wikipedia and Intelink.

Wikipedia exemplifies how a broad community of disparate thinkers can come together to provide useful information that, with some exceptions, is highly reliable. Its downfall is that it can be too open; anyone can sign up for an account and (in the extremes) either provide singularly expert input or wreak havoc with existing data. Individuals and organizations may exhibit an unwillingness to use it because the information may be suspect and thus its very openness serves to deter people from relying on its data.¹¹⁷

A more conventional version of an online encyclopedia – called Nupedia – had existed since March of 2000, and had an “elaborate system of peer review and required many highly qualified contributors, but the writing of articles was seen as very slow,”¹¹⁸ and this process ultimately restricted the amount of information available and its usefulness to the consumer.¹¹⁹ It was this effect on the flow of information that caused Jimmy Wales and Larry Sanger – two people who had worked on the Nupedia project – to get together in 2000 to “discuss various ways to supplement Nupedia with a more open, complementary project.”¹²⁰ The two met with a computer programmer – Ben Kovitz – on January 2, 2001. On January 10, 2001, Nupedia’s wiki was launched under

¹¹⁷ The history department at Middlebury College in Vermont announced a policy forbidding students from citing Wikipedia articles in research papers, stating “Wikipedia is not an acceptable citation, even though it may lead one to a citable source.” Alexa Vaughn, “Educators Weighing In On Wikipedia: Potential Legislation, Some Schools’ Policies Aim to Limit Web Site’s Application As A Research Tool,” DailyBruin.UCLA.Edu, http://www.dailybruin.ucla.edu/news/2007/feb/20/educators_weighing_wikipedia/ (accessed May 8, 2007).

¹¹⁸ Wikipedia, “Wikipedia: About,” En.Wikipedia.Org, <http://en.wikipedia.org/wiki/Wikipedia:About> (accessed February 11, 2007).

¹¹⁹ “Nupedia was based on solicited articles going through a seven-step review process (much like traditional encyclopedias), but by the end of its first year had only 200 articles before floundering. Wikipedia, on the other hand, had 20,000 articles added in its first year.” John Willinsky, “What Open Access Research Can Do For Wikipedia,” FirstMonday.Org, http://www.firstmonday.org/issues/issue12_3/willinsky (accessed May 8, 2007).

¹²⁰ Wikipedia, “Wikipedia: About,” En.Wikipedia.Org, <http://en.wikipedia.org/wiki/Wikipedia:About> (accessed March 7, 2007).

the name “Wikipedia.”¹²¹ The original group of Nupedia editors and reviewers were resistant to the more liberal wiki format, so Wikipedia was relaunched on January 15, 2001, on its own domain – wikipedia.com. The points to take from this are: from conception to initiation of planning took something less than one year, and from initiation of planning to physical implementation took eight days. The technical and funding aspects are equally telling: Nupedia’s founder, Jimmy Wales, donated the initial bandwidth and servers, and Wikipedia’s “seed” content was provided by the Nupedia online encyclopedia project.¹²²

Sanger and Wales also addressed concerns about ownership of content: All the text in Wikipedia, and most of the images and other content, is covered by the GNU Free Documentation License (GFDL). Contributions remain the property of their creators, while the GFDL ensures content will remain freely distributable and reproducible.¹²³ Solving the issue of copyright and content ownership holds a key position in encouraging the success of any sort of wiki: academics – or anyone who wishes to publish – might be deterred from sharing their original insights in a more or less “open” forum if they cannot be guaranteed ownership of their own material. If anyone else can pick up their “thread” without attribution, there is no motivation to contribute anything of substance. Rather, those potential high-value contributors might hold back their best effort for their own benefit, thereby closing (or never even opening) alternative avenues of approach to points of cultural intelligence with which the community is dealing.

Counter to what one might expect, the high-profile pages that generate a lot of interest tend to be the most “correct” of all due to consistent monitoring by experts of all stripes. The less well-read pages – though not incorrect – could be more correct than they are. That is to be expected when only a handful of analysts edit the page, maintaining their cognitive filters and homophily.

¹²¹ Wikipedia, “Wikipedia: About,” En.Wikipedia.Org, <http://en.wikipedia.org/wiki/Wikipedia:About> (accessed March 7, 2007).

¹²² Wikipedia, “Wikipedia: About,” En.Wikipedia.Org, <http://en.wikipedia.org/wiki/Wikipedia:About> (accessed March 7, 2007).

¹²³ Wikipedia, “Wikipedia: About,” En.Wikipedia.Org, <http://en.wikipedia.org/wiki/Wikipedia:About> (accessed February 11, 2007).

In contrast, Intelink is supposed to be manned by vetted members of the intelligence community, whose authority is not to be questioned. Intelink suffers its own difficulties, though. First off, the bulk of “good” information is behind a classified wall, so the vast majority of potential contributors cannot get access to it – either to debunk it or to build on it. Another impediment is that it is on a “.gov” domain, so many academics who qualify for participation might opt out. Further, entry into the community implies one’s ability to successfully undergo a background check in order to receive access to a secure computer network. Why would that be necessary? Because the “Remote Access Password” is emailed to the user’s SIPR email account (which one cannot get without first having a clearance), as opposed to his unclassified email account. A further downfall for Intelink is related to homophily – most of those who do qualify for participation have already self-selected for membership in government activities such as the military, other government agencies, and so on. Because of this, they may be more alike than a typical cross section of non-government experts, thereby skewing their analysis.

Intelink also does not have any means to link documents to one another. Analyst’s postings do not include hyperlinks, even to reports they cite. It further lacks the sort of “social” ranking that helps Google stand out – the idea that the more people link to a web object, the more important it must be.¹²⁴ That social linking concept can – and has been – abused for profit or personal gain in the public sector, but remains relevant as a tool to determine the relative worth of a web object. Intelink has been rated a relative success based on its number of edits. Prior to Christmas 2006, there were approximately 2000 edits on Intelink documents. That had grown to 3500 edits just after Christmas of 2006, and up to approximately 4500 edits currently. This suggests a lack of information scrutiny and a dearth of overall interest in the content of Intelink.

Of further concern is Intelink’s framing through document selection. Framing refers to the method in which something is presented (data, in this case) and how that presentation affects the audience’s use of the data. Intelink was “seeded” with documents from the C.I.A. World Fact Book, but these documents are basically finished products,

¹²⁴ Clive Thompson, “Open-Source Spying,” NYTimes.com, <http://www.nytimes.com/2006/12/03/magazine/03intelligence.html?ex=1177041600&en=cc5544227fb7ff9d&ei=5070> (accessed December 10, 2006).

with the implication as such that they require no further input to be usable. This suggests that Intelink does value the collaborative debate that editing creates, but has not taken full advantage of it.

Compare this to Intellipedia, which was founded in the fall of 2005. Intellipedia sprung from Intelink, and includes much of Intelink's existing pages (works from the C.I.A. World Fact Book), as well as a large number of pages lifted directly from Wikipedia. Intellipedia thus combines both classified and un-classified information. Any intelligence employee *with a classified clearance* can read and contribute to it.¹²⁵ By the fall of 2006, over 3,600 members of the intelligence services had contributed a total of 28,000 pages.¹²⁶ The downfall with Intellipedia is the classified nature of the network. Again, it artificially limits access to those with the requisite access – who may not be the best analysts to maximize the intelligence value to be gained from inspection of the material. Intellipedia shares the same problem with framing as does Intelink, which is the implication that the data present is already complete. Again, this serves to discourage further editing.

The key to understanding the value of Intelink's and Intellipedia's numbers is a comparison to the bellweather of wiki success: Wikipedia. The relative success of this loose-format, open-source wiki is best described by Wikipedia's own (constantly revised) history:

There are over 75,000 active contributors working on more than 5,300,000 articles in more than 100 languages. As of today [March 7, 2007], there are 1,675,631 articles in English; every day hundreds of thousands of visitors from around the world make tens of thousands of edits and create thousands of new articles to enhance the amount of knowledge held by the Wikipedia encyclopedia. Visitors do not need any specialised qualifications to contribute, since their primary role is to write articles that cover already-existing knowledge, and people of all ages can therefore write Wikipedia articles.¹²⁷

¹²⁵ Thompson, "Open-Source Spying."

¹²⁶ Thompson, "Open-Source Spying."

¹²⁷ Wikipedia, "Wikipedia: About," En.Wikipedia.Org, <http://en.wikipedia.org/wiki/Wikipedia:About> (accessed March 7, 2007).

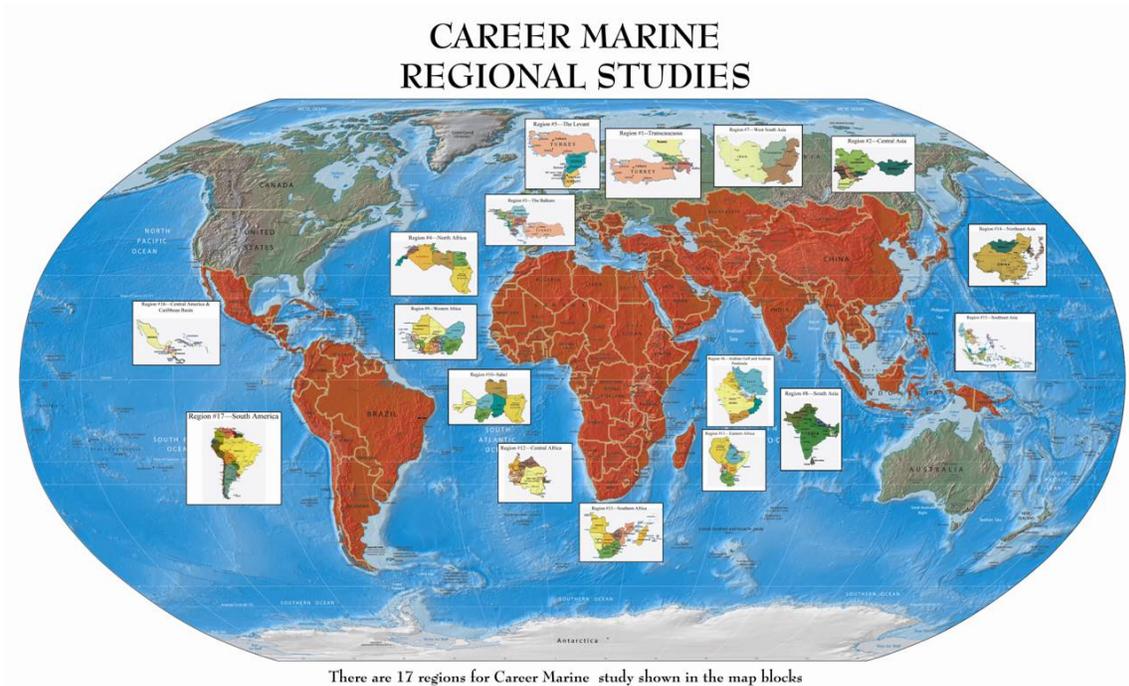
Visitors to wikipedia look for those articles which interest them, fix them when they are wrong, and add to them when they are lacking. Almost anyone can be an editor – making Wikipedia one of the least-exclusive collaborative efforts in the world. Since Wikipedia was “seeded” from existing articles, framing could possibly have been a factor in its early days, but it is not as likely in this case for a couple of reasons. First, the seed data provided by Nupedia was much more broad-based, and therefore less limited in scope. Second, and probably most important, is that the seed data came from an online resource. At the time of Wikipedia’s inception, online encyclopedias were still in their infancy, so they were significantly less “respectable” than traditional publications. That fact would tend to eliminate the effects of Cialdini’s “Authority”¹²⁸ on resistance to editing. The data was not seen as being nearly as exclusive as that found in traditional encyclopedia formats, so when the Wikipedia gates opened, it was “game on” for the internet public. The final pillar of its overwhelming success is actually related to the nature of Wikipedia itself: it is open source. Anyone can edit, so they do.

As mentioned before, there is one bright spot in the discussion of USG cultural intelligence resources: the Marine Corps Intelligence Activity’s (MCIA) Cultural Information Program (CIP), which receives guidance from the Marine Corps’ Center For Advanced Operational Culture Learning (CAOCL). The CAOCL divides the world into “micro-regions,” in which they expect their career Marines to become expert.¹²⁹ These micro-regions are illustrated in Figure 7. The micro regions appear to be based on national or geographic boundaries, rather than on cultural divides. Discussion is based on country and national boundaries (CIP information products refer to specific items such as the “Afghanistan Culture Guide”) rather than being based on (more loosely) cultures themselves, which in many instances can span national boundaries.

¹²⁸ Cialdini, *Influence*, 208-36.

¹²⁹ U.S. Marine Corps, “Center For Advanced Operational Culture Learning Center of Excellence Charter (CAOCL COE),” available online at <http://www.tecom.usmc.mil/caocl/>, 2.

Figure 7. Marine Corps Intelligence Activity, Cultural Information Program World Regions¹³⁰



The map in Figure 7 illustrates the MCIA's effort to break the world into manageable areas. While useful from a military-organizational point of view, such divisions do not support thorough cultural analysis and instead create cultural stove-piping based on geography. For example, groups that span political boundaries (such as the Kurds in Iraq and Turkey, the Romany (Gypsies) in Europe, and so on), may be split into different regions and thus become marginalized when that region is analyzed. It also reinforces the idea that cultures can be readily ascribed to set regions and ultimately creates seams in knowledge that can allow pertinent and vital information on these groups to be ignored.

Additionally, according to the email received by the authors, the CIP is based in Intellipedia, which is "open to any government employee or contractor" – with a clearance, of course. This tends to restrict access to federal employees and denies the potential contributions in analysis of those outside of the government. Further, there appears to be no validation of new members' credentials, as a portion of the apparently

¹³⁰ Jeffrey Bearor, e-mail message to author, May 5, 2007.

randomly-forwarded email contained an invitation to take part in the editing process. The implication is that the only vetting necessary is one's ability to log into Intellipedia, much like Wikipedia. Furthermore, the explanatory email details how the CIP database is being populated by existing documents from the classified arena.¹³¹ This has the effect of framing the boundaries of the discussion – of providing the answer, so to speak. Finally, to provide some insight as to the relative importance of the CIP: one of the authors personally visited the CIP, and found that it currently resides in a trailer at Quantico, with about 20 workstations staffed by a small number of Marines and civilians. These are hardly the hallmarks of either a well-supported or an “up and coming” organization. It is true that Wikipedia also started on a limited budget. However, Wikipedia's strength and success lies in its accessibility – something which is lacking in all current intelligence wikis.

It is important to note that, with the exception of the MCIA CIP, these are all generic intelligence resources, not cultural intelligence resources. In order to provide valid cultural intelligence analysis, the resource must specifically address cultural intelligence, otherwise the cultural focus may either be lost or never even achieved.

Ultimately, while resources are available within the federal government to create a rudimentary cultural intelligence community, adherence to existing prejudices within the intelligence community may doom it to failure. The lack of the free sharing of information due to security concerns, the belief that OSINT is less valuable than classified information, the lack of accessibility to a wide variety of experts outside of the government, and the idea that group-based analysis cannot be verified – and is thus suspect – all contribute to an environment that is hostile to the concept of using wikis for intelligence analysis. In order to create a successful cultural intelligence wiki, these concerns must be addressed.

¹³¹ Alfred B. Connable, Major U.S. Army, e-mail message to author, February 2, 2007.

V. THE GOLDBLOCKS DILEMMA – IS THERE A PERFECT SOLUTION?

A. ORGANIZATION

It is important to initiate a cultural intelligence community on a firm foundation, and to anticipate long term success by building flexibility into the design.

Thus, the initial group must consist of a diverse cross-section of the intelligence, academic and expatriate communities. Their selection should be accomplished by a small proponent office that determines initial criteria for membership. Membership should be by invitation only – not entirely open as is the case with Wikipedia. Once their credentials are validated by the proponent office, charter members could then modify existing seed articles, contribute their own original works, and issue invitations to other potential new members.

An important first step is validation of contributors' credentials: simply being asked to join is one aspect of the validation process, but potential contributors must provide verification of their qualifications in order to become members. Once validation is complete, they should be anonymously introduced to the community at large. Their contributions will speak for themselves: other members will pick up the concepts and run, or they will rest idle. But even if they rest idle, the information will still exist in a format that allows researchers to find it again later when it may be of more immediate need.

An invitation to join the community is considered at least partial validation (by the recruiting member), and the recruiting process must include complete validation of credentials. However, once recruiting is complete there is no need to continually validate credentials. This community should be structured in such a way so that there is no further need to maintain titles or other personal information cues. At that point, all intra-community communication should be conducted according to anonymous accounts. This will help negate the effects of Cialdini's "Authority,"¹³² and encourage more thorough peer review.

¹³² Cialdini, *Influence*, 214.

As in any community, some members may have a tendency to flock, or even to try to sway the system to their conclusions through means other than open discourse and debate. This may manifest itself in the manner in which they recruit new members. There must be a method for dealing with members who might attempt to “massage” the system in this way (or others). The primary line of defense is simply to achieve consensus from the community prior to actually inviting in a new member – though in the interest of time and simplicity, it might be desirable to use the maxim “silence equals consent,” especially in light of the fact that the proponent office should have already validated a prospective member’s credentials. However, if it seems that a member has been successful in stacking the deck, then there must also be means by which the community can offer censure – even to the point of expulsion of the offending party.

As stated by Wales and Sanger, extensive peer review at Nupedia was counterproductive, but the more relaxed version of peer review is working quite well for Wikipedia. The authors recommend following the Wikipedia model. The goal is fluid and active interchange between members, and an old-fashioned system with high managerial oversight, such as at Caterpillar, tends to limit activity. Using the old military adage that “the 80% solution on time is better than the 100% solution too late,” one recognizes that there can be too much of a good thing (review, in this case). Further, based on the relative excellence of the members, extensive peer review should be unnecessary.

Some proponents recommend establishing a physical “Office of Cultural Intelligence” in order to achieve a greater degree of legitimacy. Dr. Christopher Lamb argues in favor of an organization exclusively devoted to cultural intelligence.¹³³ In his view, if cultural intelligence is truly important, it should have the infrastructure (bureaucracy, personnel, and resources) dedicated to it. Dr. D. Calvin Andrus, on the other hand, believes the intelligence community’s needs would be better served by networking the various analysts and experts within the intelligence community. This network, by utilizing four factors (a larger purpose; vast amounts of content; a sense of belonging to the community; name recognition of the network), would enable the intelligence community to conduct more meaningful and accurate intelligence analysis in

¹³³ Christopher Lamb (National Defense University), in discussion with the author, February 9, 2007.

support of the U.S. Government.¹³⁴ However, the creation of a fully-staffed physical organization would be another layer in the already burdensome intelligence bureaucracy, especially when factoring in such requirements as a budget, new personnel, congressional oversight, and need to communicate with other agencies. And as illustrated in the case of Office of Strategic Information (OSI), ownership by a single agency could be tantamount to a death knell. Sooner or later, any one agency in the intelligence community may find itself on the chopping block. If cultural intelligence is tied to that agency, it, too, is out the door. As seen in WWII with the OSI, new commands can be stood up and plowed under in almost no time at all. The benefit of a virtual community is that the loss of one supporting office out of many would not be likely to lead to the downfall of the entire community.

On the other hand, establishing a cultural intelligence “Czar”¹³⁵ might be an appropriate solution. Such an oversight and proponent office could serve to: coordinate initial efforts; establish the interagency links required to make a virtual cultural intelligence network self-sustaining; standardize both the process and format by which member agencies contribute. The real benefit from using the “czar” concept comes in the form of minimal staff, minimal bureaucracy, and little funding. Remember, the goal is not to invent an entirely new organization to conduct cultural intelligence, but rather to maximize the ability of existing agencies to do so. The Office of the Cultural Intelligence Czar could be the conduit through which already-existing agencies coordinate their efforts. In the interest of longevity, utility and growth, one should apply Occam’s Razor to the Gordian Knot that is the current intelligence establishment – that is to say, trim the excess until the simplest solution presents itself.

Selecting the appropriate sponsoring institution is paramount to ensuring the long-term success of the community. The domain on which a web site resides can have an amazing effect on who will access it. A “.org,” “.edu,” or “.com” domain is much preferable to a “.mil” domain, for the simple reason that many potential contributors

¹³⁴ D. Calvin Andrus (Central Intelligence Agency), in discussion with the author, February 7, 2007.

¹³⁵ In this case, “czar” is used in a metaphorical sense to represent someone in a high position of authority who is in charge of an agency or action deemed critical to the security and safety of the citizens of the United States. Answers.com, “Czar,” <http://www.answers.com/topic/czar> (accessed May 8, 2007).

might not be able to access a “.mil” domain. Even those who are able to might wish to avoid the exposure, as evidenced by the American Anthropologists Association’s “Statement of Professional Responsibility.”¹³⁶

One potential location solution is the Library of Congress. While the Library of Congress (LOC) web site resides on a “.gov” domain, the “.gov” domain is still more palatable to many than a “.mil” domain. Further, the LOC is one of the world’s pre-eminent repositories of knowledge and is almost universally revered as such. Using the LOC or some other such institution as the “base of operations” for a cultural intelligence community should help establish immediate credibility. There is some precedent for this: the LOC is the author of many of the military’s country studies.

Finally, a strong cultural intelligence wiki must be able to track editors and their contributions. Is a large amount of input coming from one agency, several closely-related individuals, or contributors from a specific field? If so, is the community capable of absorbing the targeted input without becoming unbalanced? While it’s best for users to remain anonymous to each other, the system should be structured in a way that allows the association of any edit with a specific contributor for auditing purposes. In addition, tracking editors allows system analysis and maintenance such as: establishing the ratio of contributors to users; preventing drive-by editing; vandalism.

Many members will be concerned with ownership of their original content, and this needs to be addressed in detail to insure sustainment of intellectual property rights and prevention of data theft. Use of off-the-shelf technologies like GFDL (used by Wikipedia to verify ownership) may suffice to eliminate concerns in this arena.

Along with copyright comes the desire for remuneration. In this proposal, contributors would not be restricted from deriving financial gain from their contributions to the wiki. In fact, they would be encouraged to seek publication in additional venues, as that would serve the dual purposes of providing both compensation and wider exposure for their input.

¹³⁶ McFate, “Anthropology and Counterinsurgency,” 72.

B. TECHNOLOGY

The wiki format allows the members to immediately and continuously update topics of interest. Adding a blog allows members to track, in near real time, areas of concern. Because both wikis and blogs can be “linked to,” that is, other websites can set up links on their pages to the analysis found on the cultural intelligence wiki, popular analysts can trace the linkage of their work (blogs, articles, etc.) by other members of the cultural intelligence community. This will expose the broader community to key concepts as they are brought into existence. A blog would also allow the tracking of concept development over time, lending a depth of background and analysis that might be missed in a wiki alone. Regardless of readership numbers for blogs in general, the blogging phenomenon offers some implications for a virtual community. Blogs can serve to spread new concepts widely and quickly. As stated by Kinniburgh and Denning:

Links are added by people, not some abstract network entity implementing a formula for network growth. The decision to add a link is based on social considerations, such as trust, reputation or social pressure, as well as on personal preference.¹³⁷

What this means for bloggers in a virtual community is that ideas with appeal to the broader community can get linked to by more members, thereby causing the ideas to quickly gain relevance and widespread distribution. When community members gain the trust and respect of their peers (the goal being that the trust and respect is based on quality of product, rather than Cialdian “Authority”) their works will be more frequently searched for, read, and linked to. So, while an article in the associated wiki might take quite some time to develop, the emerging concepts that help drive the final success of the article can already be receiving exposure in the blogosphere. That can have the added benefit of not only exposing the greater virtual community to leading-edge concepts that have yet to be officially published, but also serve to prepare them to become contributors to the new articles themselves, either pre- or post-publication.

There are a number of other benefits to establishing the community in wiki format. The costs to establish wikis and blogs are relatively minor. As discussed in

¹³⁷ James Kinniburgh and Dorothy Denning, “Blogs and Military Information Strategy,” JSOU Report 06-5, June 2006, 7. The JSOU Press, Hurlburt Field, Florida, 2006.

Chapters III and IV, startup costs (monetary, hardware, personnel) for wikis and blogs can be quite minimal, especially when compared to fully-staffed, physical organizations and bureaucracy. Although it has not achieved the same level of broad success as Wikipedia, Intellipedia's wiki still only cost a few thousand dollars and took only days to implement. In addition, it offers responsiveness, low maintenance costs, and minimal additional bureaucracy.¹³⁸ Compared to the costs incurred by more traditional intelligence resources – both in terms of systems and organizations – a wiki is a unqualified bargain.

In addition to the basic financial and hardware considerations, the connectivity between intelligence organizations is also critical. Generally speaking, connectivity problems can be avoided from the start by simply choosing a network solution. Wikipedia uses this sort of design, placing information on multiple servers around the world. The user interface is web-based, so anyone, anywhere, with web access, is able to use (read and write) the Wikipedia information repository. The servers are synchronized to prevent data loss in the event of local emergencies. In this model, the data is standardized, the entry method is standardized, and the viewing method is standardized.

An added benefit to such a system is that it can be mirrored. While the authors recommend against hosting on a “.mil” domain, it is entirely acceptable to mirror the results into an arena such as the Defense Knowledge Online network (DKO). DKO is now the military-wide standard for knowledge management, and can be used to distribute information to those who may not have ready access to other cultural resources. DKO can accept information from a mirror origination point, and can then make it freely available to anyone with DKO access.

C. CLOSED OR OPEN SOCIETY?

There are actually two aspects to the concept of “closed” in the context of this discussion: that of the data and that of the environment. The data must be open source, but the community must be somewhat closed.

As for the data, an open-source focus is key to the success of an effort such as this. As illustrated by the case of German journalist Berthold Jacob in the 1930s, a large

¹³⁸ Thompson, “Open-Source Spying.”

amount of valuable information exists outside of classified venues. The incident is described in *A Psychological Warfare Casebook* as follows:

On March 20, 1935, this man, an author named Berthold Jacob, was kidnaped [sic] by agents of the German secret service from Switzerland. Jacob had written extensively about the German army that was then in its initial stages of rearmament. He had published a little book which spelled out virtually every detail of the revived General Staff, the army group commands, the various military districts, even the rifle platoons attached to the most recently formed Panzer divisions. It listed the names of the 168 commanding generals of the army and supplied their biographical sketches.¹³⁹

But to what classified resource did Jacob refer in order to put together his “little book?” What spy within the German command was feeding him information? Amazingly, there was no spy, and Jacob’s resource wasn’t classified at all – it was the German newspapers of the day. During Jacob’s interrogation, Colonel Walther Nicolai (Hitler’s intelligence advisor) asked Jacob “Where did you get the data for your confounded book?”¹⁴⁰ Jacob’s answer was as unsettling to the German as it was straightforward:

Everything in my book came from reports published in the German press, Herr Oberst. When I stated that Major General Haase was commanding officer of the 17th Division and located in Nuremberg, I received my information from an obituary notice in a Nuremberg newspaper. The item in the paper stated that General Haase, who had just come to Nuremberg in command of the recently transferred 17th Division, had attended a funeral.

In an Ulm newspaper, I found an item on the society page about a happier event, the wedding of a Colonel Vierow’s daughter to a Major Stemmermann. Vierow was described in the item as the commanding officer of the 36th Regiment of the 25th Division. Major Stemmermann was identified as the Division’s signal officer. Also present at the wedding was Major General Schaller, described in the story as commander of the division who had come the paper said, from Stuttgart where his division had its headquarters.¹⁴¹

¹³⁹ Daugherty and Janowitz, *A Psychological Warfare Casebook*, 514.

¹⁴⁰ Daugherty and Janowitz, *A Psychological Warfare Casebook*, 515.

¹⁴¹ Daugherty and Janowitz, *A Psychological Warfare Casebook*, 515.

Not only does this example validate the concept of open source data mining, but it also serves to reinforce a rarely-acknowledged truth, which is that classification level frequently has no bearing on the value of the data. Rather, the value comes from the analysis of the data. The Germans had assigned neither value nor classification to the “social” data, but it was far from worthless. Classification is more typically based on the need to hide the means by which the information is gathered, not the information itself. Open source means that anyone can look at it, use it, and analyze it. Even more, open source means that almost any information is available. There is no question of the right person not getting access to the right information because he didn’t have the appropriate clearance or compartmental read-on. Instead, community members are free to roam at will throughout the breadth and depth of the data in order to find what it is they think is important, put it together, and push it out for other community members to then continue to act on.

The environment, on the other hand, must be somewhat sheltered from the mass of wider society. In the military, the goals for analysis and academic rigor are of critical importance. Analysis would likely suffer if the wiki was set up to simply welcome anyone, as Wikipedia does. This wiki would be an asset that supports USG activities, and by extension, the military. That means data errors would not just result in “page six retractions.” Rather, data errors could result in battlefield deaths. That point alone is enough to require a much higher standard of input than one finds in Wikipedia in general. Having said that, it might be appropriate to open the wiki for viewing by the general population, and then offering them a means to provide feedback in the event they have an insight that hasn’t been previously covered.

D. SYSTEM DESIGN

In any intelligence system such as this, there are some basic requirements: contributors, users, data, and data analysis. Each of these requirements can be filled in abundance. Further, the system itself must meet some criteria. It must be usable, sustainable, relevant, and verifiable. A community such as is outlined here meets these criteria. The wiki format has been proven to be usable in a number of civilian and business fields. Likewise, many of those same examples provide proof of sustainability.

Relevance is self-evident: cultural intelligence has not always been as tightly integrated into military operations as more traditional forms of intelligence, but it has been a factor in their success – recognized or not. The United States’ current adversaries provide ample reason to rely on cultural intelligence, as evidenced by intelligence demands from servicemembers in the field today, such as Commander Coles and Captain Olmstead. Regarding verifiability, the data and analysis offered by this system will be corrected by those taking part in it, because they will have a vested interest in making the intelligence product as true – and therefore as useful – as possible.

E. POPULATING THE COMMUNITY

In order to set up a successful virtual cultural intelligence community, it becomes imperative that the community is made up of individuals who (1) believe in the concept of wikis as a means to produce collaborative intelligence (Chapter III) and (2) that the community is diverse enough to create a heterogeneous group rather than a homogenous amalgamation of talent (Chapter II).

Based on Dr. Dunbar’s findings that the optimal size of any group is 150 people (Chapter III), one can assume that the initial set of invitees to the cultural intelligence wiki should be 150 or less. This allows for the creation of a reasonably diverse group without the risk of overwhelming the wiki administrators – a possibility that could occur with a larger initial group.

The core group – the pioneers – should have some proselytizing element. That is, they should want to both “sell” the concept and invite additional talent in. It is this dual nature – what Gloor labels “emotional intelligence,”¹⁴² and describes as a function of a combination of Gladwell’s “maven” and “salesman”¹⁴³ – that is most applicable. According to Gloor “Real salespeople feel what their clients want and are able to package and present their products in a way that profoundly appeals to those clients.”¹⁴⁴

These pioneers will build the community needed to conduct cultural intelligence. By utilizing existing social and peer networks, they can tap into existing talent and

¹⁴² Gloor, *Swarm Creativity*, 44.

¹⁴³ Gladwell, *The Tipping Point*, 61 and 70.

¹⁴⁴ Gloor, *Swarm Creativity*, 44.

further expand the community. Continued series of invitations will result in exponential growth, and the community will populate in short order. Since the community is predicated on the fact that existing members vet new members, the percentage of “lurkers,” that is, people who are members but don’t actively participate, should be lower than the Wikipedia example.

F. CONCLUSION

Ultimately, cultural intelligence, while of vital importance to the SOF community, is not a priority for the established intelligence agencies. Culture, with its myriad of definitions, highlights the difficulty of utilizing national-technical means to conduct cultural intelligence. Additionally, with the current focus on “actionable analysis,” the government bureaucracy lacks the drive or the desire to create another intelligence apparatus to conduct cultural analysis. However, by utilizing new media to create a virtual community where various experts with an interest in culture can coordinate and analyze cultural information, it is possible to create a new cultural intelligence capability – one that is not limited by a physical structure, and that can grow rapidly and almost automatically.

Technology exists which could allow the U.S. to take advantage of existing intelligence agencies to overcome its shortfall in cultural intelligence, both with low overhead and high coverage. The U.S. military, specifically the SOF community, has identified the importance of cultural intelligence in achieving success in its missions. Much of modern warfighting occurs on the information front, yet the U.S. military only pays lip service to problem of developing operations based on thorough cultural intelligence assessments. Success in this full-spectrum fight will hinge on DoD’s incorporation of the full range of warfighting tools, not just the lethal ones.

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