

Human Aspects of the Operational Environment: Final Report

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HUMAN ASPECTS OF THE OPERATIONAL ENVIRONMENT



FINAL REPORT



NATO HUMINT CENTRE OF EXCELLENCE



**HUMAN ASPECTS OF THE
OPERATIONAL ENVIRONMENT
- FINAL REPORT -**

ORADEA 2014



Realized within **Human Aspects of the Operational Environment** Project,
NATO HUMINT Centre of Excellence

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EXECUTIVE SUMMARY

The Human Aspects of the Operational Environment (HAOE) study explores those dimensions of human beings which would likely impact future NATO operations. It is designed to serve as the foundation for a follow-on Bi-Strategic Command (Bi-SC) capstone concept, which would inform the NATO Defence Planning Process (NDPP) and transform existing capabilities to better adapt to human requirements in operations. The HAOE study is based on shortfalls and gaps identified in recent operations as well as the work of seven distinct research panels.

The HAOE study proposes capability transformations that can mitigate the challenges NATO might face in future operational environments as the human dimension becomes increasingly more important. The report concludes that increased cooperation and coordination with international organizations (IOs), governmental bodies, academia, think-tanks, and nongovernmental organizations (NGOs) using a Comprehensive Approach strategy¹ would improve the Alliance's effectiveness in conducting Non-Article 5 Crises Response Operations (NA5CRO). However, the evolving characteristics of the security environment require NATO to build a common understanding of trends and inform its continuing transformation efforts.

The HAOE research focuses on seven broad areas: main drivers of human action; understanding the human environment; complexity of cross-cultural communication; dynamics of the local situation; perception and acceptance of NATO operations; measurable indicators of a population's attitude toward NATO operations; and transforming NATO capabilities to better adapt to the human environment. A summarization of key findings from each research area is provided in the following paragraphs.

Understanding the **main drivers of human action** enhances rapport building with the local population.

¹ The Comprehensive Approach is a global concept that, although often associated with civil-military cooperation (CIMIC), goes beyond the existing NATO doctrine on enhanced civil-military cooperation. Furthermore, CIMIC is often mentioned in conjunction with counterinsurgency, Provincial Reconstruction Teams (PRT-Afghanistan), peace operations, stability operations and crisis management.

NATO's new Strategic Concept, adopted at the Lisbon Summit in November 2010, underlines that lessons learned from NATO operations show that effective crisis management calls for a comprehensive approach involving political, civilian and military instruments. Military means, although essential, are not enough on their own to meet the many complex challenges to Euro-Atlantic and international security. Allied leaders agreed at Lisbon to enhance NATO's contribution to a comprehensive approach to crisis management as part of the international community's effort and to improve NATO's ability to contribute to stabilization and reconstruction

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- Knowing that the most common and fundamental needs tend to be higher priority for humans and less cross-culturally variable supports ‘cultural-bridging’.
- Observing behavioural and emotional responses to situations leads to identification of the root drivers of human action.
- Raising and subsequently frustrating expectations will create conflict particularly in circumstances where lower expectations would otherwise have been met.
- Moral norms are important in regard to shaping how people seek to satisfy their basic needs and their other behavioural choices.
- Observing how different individuals’ networks overlap could likewise reveal the potential for cooperation or conflict.
- On a group/community level, humans will tend toward decisions that minimize personal costs and maximize material gains.

Understanding the human environment supports both the management of first contact with a foreign culture and the process of adaptation to that culture for NATO forces.

- Local communities represent a sum of human groups with different levels of influence, motivated by natural and contextual drivers.
- Communities should be analyzed over time, from the dynamic of change perspective, not in ‘snapshots’ taken without a baseline.
- Once deployed, a NATO Force becomes a key actor within a community. The success of the NATO force may hinge on its ability to demonstrate its respect for the opinions of local community members and provide improvements as defined by the local community.
- Understanding a population’s previous responses to conflict may aid in anticipating reactions to a new conflict or a NATO intervention.
- A “human aspects analysis unit” could analyze the human dimension in countries or regions to which NATO forces may deploy in the future.
- Integrating social science/humanist methods into the intelligence analysis process provides the necessary tools to effectively study the processes that shape the attitudes, beliefs and opinions of different cultures.

Cross-cultural communication is a key element in building rapport with other cultures.

- NATO’s inherent multiculturalism represents an important advantage in positively portraying the Alliance to others.
- Understanding how people get information and adapting the message to the level of the target audience are the fundamentals of efficient communication.

- ‘Cross-cultural competence’ is a fundamental skill for NATO military and civilian personnel who must interact with people from other cultures.
- Understanding the cultural and social environment, in particular the social system, its sub-systems and dynamics, is fundamental to constructive cross-cultural communication.

Understanding the **dynamics of local situation** is critical for achieving mission’s strategic objectives.

- Understanding the dynamics of the local situation is a challenge for both NATO and local populations.
- A key point in understanding the local situation is to understand the mechanisms and the balance of power in the area.
- Establishing operational goals tailored to the local situation and finding a proper balance between what is wanted at strategic level, what can be accepted at local level, and what is possible to be implemented represents a prerequisite for a successful NATO operation.
- Change must be managed considering that even positive change is a source of insecurity, resistance, fear, and identity-seeking.

The foundation for **perception and acceptance of a NATO Operation** is its legitimacy.

- NATO can achieve strategic objectives without engaging in combat actions by effectively and positively influencing perceptions.
- NATO can improve its overall performance in stability and reconstruction operations by applying lessons learned through United Nations peace-keeping operations.
- Key leader engagement and operational mentoring and liaison present new human-centric focus areas to support operational objectives.
- Information strategy and the battle of narrative are critical in achieving objectives at all levels.

Effective **understanding of attitudes concerning NATO operations** in a timely manner can enhance or contrarily diminish the operational success.

- Attitudes serve as deliberative input into intentions and behaviour.
- To promote behavioural change it is necessary to understand and influence individuals’ beliefs/attitudes toward the targeted behaviour.
- Routine assessment of a population’s attitudes can support both short- and long-term operational planning.
- Technology can be used to improve the quality of both data collection and analysis with respect to attitudes.

Evolving characteristics of future operations impose **transforming NATO capabilities to better adapt to the human environment**.

- Recent NATO operations have proved that the human environment in a conflict area is a key element whose understanding implies different NATO capabilities.
- Understanding the human aspects of the operational environment is essential to successful planning across the full spectrum of military operations.
- Challenges posed by the complexity of future operational environment require the development of a Human Aspects overarching concept and implementation of Human Aspects as an integrated force capability, by adapting mindset; organization; decision-making processes; tactics, techniques and procedures (TTPs); and education and training (E&T) programmes.
- The transformation of NATO capabilities to better adapt to the Human Environment must be built upon the implementation of Comprehensive Approach principles.

The final chapter of this report summarizes the key research findings and proposes possible solutions for improving NATO capabilities in accordance with the Joint Capabilities Integration Development System - DOTMLPFI.

- Engaging in a coherent effort to enhance the human aspects awareness has significant potential to increase NATO's long-term effectiveness.
- A comprehensive operational planning framework would allow NATO to work side-by-side with IOs, NGOs, and other governmental bodies and would fully leverage national and international capabilities and prevent civilian-military disconnects.
- Socio-human science can augment a more traditional military understanding of the human dimension of an operational environment.
- To ensure unity of effort and increased efficiency, a single NATO body/structure should be appointed to coordinate all existing human aspects-type efforts in this field within the Alliance.

The HAOE study seeks to not only provide a starting point for discussion, but also to generate a continuous, collaborative, and transparent effort which encourages meaningful initiatives and an open exchange of ideas among the Nations and results in a better understanding of the human dimension of the operational environment.

INTRODUCTION

Aim

The aim of the Human Aspects of the Operational Environment (HAOE) Study is to provide Nations, NATO leaders and defence planners a starting point for an in-depth look at a component of increasing importance in any operational environment: the human dimension.

Background

The Human Aspects of the Operational Environment (HAOE) concept is rooted in the challenges faced by North Atlantic Treaty Organization (NATO) forces in understanding and adapting to the human element in current theatres of operations (TOs). Both Allied Command Transformation (ACT) and Allied Command Operations (ACO) requested the NATO Human Intelligence Centre of Excellence (HCOE) focus on developing and propagating an understanding of the human aspects of the operational environment in direct support of the Combined Joint Intelligence HUMINT Integration Offices (CJ2Xs) in the International Security Assistance Force (ISAF) in Afghanistan and the Kosovo Force (KFOR).

If present trends are a good indicator, NATO will likely continue to be involved in operations outside its territory and the majority of those will be Non-Article 5 Crisis Response Operations (NA5CRO).

Although the initial inputs for this study highlighted the need for a better understanding of the Afghan population, it quickly became apparent that a better understanding of the more generic human dimensions that would apply in any operational environment would have a greater significance and broader applicability for future challenges to NATO.

The project created a forum for identifying and presenting different, and sometimes opposing, viewpoints regarding the human aspects influencing military operations. Such a broad and complex subject raises many challenges that can be overcome only through a comprehensive approach, involving the military alongside academia, and international and governmental organizations.

Scope

HAOE explores aspects regarding the human dimension of the operational environment that are likely to impact NATO operations. HAOE is designed to serve as the foundation for a follow-on Bi-SC capstone concept.

HAOE seeks to provide a starting point for a continuous, collaborative, and transparent effort that encourages meaningful initiatives and an open exchange of ideas among the Nations for a better understanding of the human dimension of the operational environment.

Terminology

For the purpose of this study the human aspects of the operational environment are defined as:

Human Aspects of the Operational Environment represents a complex set of elements, factors, processes, interactions, and perceptions in a society affected by medium or major violence that might either influence the operations of military forces, or determine the outcome of the conflict. HAOE refers to psychological, cultural, and sociological factors in connection with an historical, political, military, and economic context of crisis situations. They are of the highest relevance in Stability and Reconstruction Operations, COIN, Peace Keeping/Enforcing, and similar operations.

HAOE Structure

After a chapter describing the relevance of the human aspects to military operations, the subsequent chapters examine the main findings of each of the research panels as well as possible solutions for adapting NATO capabilities to better cope with the human dimension of the Operational Environment.

The research focused on seven main themes seeking to present in logical sequence the areas of interest regarding human environment to be considered when planning military operations, especially Stability and Reconstruction Operations.

Main drivers of human action: determines the goals and motivations behind individuals' actions focusing on those drivers of human actions which appear to apply across diverse local populations.

Understanding the human environment: emphasizes the role of historical analysis for understanding current behaviours, attitudes, beliefs and actions as well as how different societies evolved and function.

The complexity of cross-cultural communication: examines the challenges posed by communicating across different cultures and proposes a communication strategy based on constructive approach.

Dynamics of local situation: assesses the contemporary dynamics of a local situation underlining its human component and presents some underutilized tools that can effectively improve the actual understanding in this field.

Perception and acceptance of NATO operations: based on realities of kinetic and non-kinetic military operations, provides insights on how perceptions and acceptance of a local population can be influenced.

Measurable indicators of population attitude: highlights the importance of understanding how attitudes are formed and the benefits that can be achieved by determining them.

Transforming NATO capabilities to better adapt to human environments: based on the shortfalls and gaps identified in recent NATO operations this panel suggests possible transformations that have the potential to improve NATO's effectiveness in this field.

The final chapter summarizes a series of possible new capabilities having the potential to improve NATO's ability to address the human dimension of the operational environment.

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CHAPTER I

RELEVANCE OF HUMAN ASPECTS FOR NATO OPERATIONS

Main Trends of the Future Security Environment

In today's transitive and increasingly globalised world characterized by a rapid pace of change, uncertainty and complexity, adaptability becomes a critical consideration. From an organizational perspective, adaptability can be seen as "an ability to change something or oneself to fit to occurring changes"². Therefore, a continuous transformation represents the solution for successful adaptation to an evolving environment. However for the large organisational structures which have proven their effectiveness over time, the transformation cannot only conflict with inherent organizational inertia, but can represent a serious source of risk. For minimizing and overcoming the risks imposed by transformation a viable solution is to determine and to understand future trends and consequently to identify the new environmental characteristics that may be shaped by them.

The most important element to be considered when addressing the need for transforming the North Atlantic Treaty Organization's capabilities refers to the main features of the future global security environment where these capabilities will have to operate. Therefore both NATO and other International Organizations (IOs) with responsibilities in the domain of security are concerned about determining the main trends and characteristics of the future security environment and the impact that these will have on the accomplishment of their primary role as a security provider.

A series of studies developed by the Allied Command Transformation (ACT) such as *The Multiple Futures Project* (MFP) in 2009 and the newer *Strategic Foresight Analysis* (SFA) Report in 2013, together with those developed by the Organization for the Security and Cooperation in Europe (OSCE), European Commission, U.S. National Intelligence Council, and other organizations and institutions, highlighted an evolving security environment in the early twenty-first century that creates new global challenges.

² K. Andresen, N. Gronau, "An Approach to Increase Adaptability in ERP Systems", In: *Managing Modern Organizations with Information Technology: Proceedings of the 2005 Information Resources Management Association International Conference*, 2005.

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These studies indicate not only that several drivers have an increased potential to shape global trends (for which some of them are highlighted in the *New NATO Strategic Concept* adopted in 2010 by Heads of State and Government in Lisbon), but also that they are relevant from the perspective of understanding the dynamics of human environment.

Competing Ideologies and Worldviews

Competing ideologies and worldviews is a permanent issue affecting the security environment and refers to alienation, disagreement, and confrontation based on different cultures, values, religions, and historic geopolitical perspectives of international actors. The changing global security situation has seen a shift in emphasis from the certainties of a super-power confrontation toward more complex interactions of state and non-state actors. Furthermore, terrorism and the spread of weapons of mass destruction are likely to remain principal threats. A clash of ideologies also constitutes a trigger for potential frictions in international decision making.

Resource Allocation

The majority of studies related to this topic, encompass essential resource issues such as availability, affordability, access to and competition. Although sufficient resources are likely to be available to sustain the growing global population and the global economy, the distribution and access to these resources will be uneven, and shortages will occur at local or regional levels, increasing the likelihood of societal instability and of disagreement between states, thus providing the triggers that may ignite conflict³.

Economic, social, and political inequalities will continue to fuel perceptions of injustice among individuals and groups whose expectations have not been met, generating tension, unrest, and instability both within and between societies.⁴ Competition for resources such as water and food is unlikely to result in state-on-state conflict, although internal or inter-regional disputes could possibly break out amongst people trying to secure these resources for their survival.⁵

Globalisation

All reference documents, including military publications,⁶ consulted during this panel's research list globalisation, an all-encompassing trend, as a major influence on the security

³ UK MOD Development, Concepts and Doctrine Centre (DCDC), *Global Strategic Trends – Out to 2040*, 2010, p.73.

⁴ Ibid., p.22.

⁵ Canada National Defence, *The Future Security Environment 2008-2030 Part 1: Current and Emerging Trends*, January 2009, p.5.

⁶ AJP-3.10 Allied Joint Doctrine for Information Operations (November 2009) and “*The Future Security Environment (FSE)*”, produced by the Intelligence Sub-Division, Headquarters, Supreme Allied Command Transformation (HQ SACT 2007).

environment. Globalisation refers to the extent to which national and regional economies trade as well as their level of functional integration. Emerging powers will play a key role within economic integration affecting the balance of power in the world, which is likely to shift from hegemony to national pluralism.

Most studies of global trends predict that over the next forty years the United States is likely to remain a critical player, but will cede at least partial authority to China, while low and middle-income countries in Asia and Latin America will become an immensely powerful force in the world economy.

Globalisation is directly linked with competing worldviews, since it has shown a tendency to empower some while marginalizing others and generate tensions between individual and group identity. Although it contributes to a steady rise in shared economic interests between and among countries, globalisation provides no sure remedy for international suspicions and rivalry⁷.

Complexity, Unpredictability and Uncertainty

Globalisation, competition for resources, competing ideologies, and tensions in political and social structures combined with ideological, religious and cultural distinctions may generate other features affecting the security environment: complexity, unpredictability and uncertainty. The majority of the above mentioned studies stress that the future security environment will be dominated by complexity and unpredictability, features posing real challenges to solidarity among allies when an alliance's most powerful tools are unity of values and ideas, burden-sharing, and commitment to its decisions. The implications derived from these multiple futures scenarios suggest that the security environment will continue to evolve but it will be subject to a variety of unforeseeable developments in the political, social, technological and military domains.

Demographics

Current social and demographic trends will have a significant impact on the evolving future security environment, increasing the potential scope and intensity of intrastate conflict and warfare conducted by non-state actors⁸. The growth of the world's population, estimated to reach close to 8.3 billion people by 2030, could have significant social effects such as expanding urbanization, growing the gaps between social classes, poverty, unemployment, and migration, all of which can be triggers for conflict.

Significant demographic differences between developed and developing countries will continue. Many developed nations face population ageing and decline, while most developing

⁷ NATO, *NATO 2020: Assured Security; Dynamic Engagement - Analysis and Recommendations of the Group of Experts on a New Strategic Concept for NATO*, May 2010.

⁸ National Intelligence Council, Long Term Strategy Group, *2025 Security Environment: Final Report*, June 2008.

ones will continue to have younger, steadily increasing populations. Population growth can negatively affect security if it is not successfully integrated with the economy. Technological, cultural, and economic trends have the potential to fuel the denial of traditional communities and institutions mainly in the developed nations. Even the existence of nation states might be challenged in these countries as society becomes more fractured.⁹

Technology/ Innovation

The use of technology has become an increasingly important factor in the security environment. It refers to an exponentially increasing pace of technological innovation, continuous evolution, and diffusion and accessibility of technology that empowers individuals and non-state actors. Proliferation of weapons of mass destruction and the development of laser weapons, electronic warfare, nano and bio technologies as well as space-related technologies will have major global effects on the security environment.¹⁰ The increased dependency of today's critical infrastructure on networked computer systems in conjunction with the level of access to newest technology makes computer hacking a serious security threat.

Environmental Constraints

Climate change must be considered a long-term significant development that may have an impact on international relations. Increasing water scarcity and growing energy needs are further shaping the security environment in areas of concern to NATO. *The World Economic Forum Report 2013* highlights the importance of understanding the implications of the changes in the energy landscape, as well as those of other natural resources and warns that this issue must be examined not only from the perspective of quantity and distribution, but also within larger ecosystems of societal usage¹¹. Climate change negatively impacts mostly developing countries – which are already under economic hardship and social stresses – inflating existing tensions and instabilities.

Characteristics of NATO Future Operations

As a direct consequence of the security environment characteristics described above the main features of future operations will be represented by:

- *Complex operational environment*: Simultaneous engagement of forces throughout the full operational spectrum – air, land, maritime, space, and cyber – with a higher pace of operations and an increasing role of non-kinetic means.

⁹ Allied Command Transformation, *Strategic Foresight Analysis 2013 Report*, 2013.

¹⁰ Strategic Concept for the Defense and Security of the Members of the North Atlantic Treaty Organization (2010)

¹¹ Global Agenda., World Economic Forum Annual Meeting 2013

- *Combined joint expeditionary operations:* Because the most unstable areas with the greatest potential for conflict lie outside of NATO territories, developing expeditionary capabilities, as directed by most current NATO doctrine, becomes a must.
- *Increasingly confronted by Hybrid Threats (HT)*¹²: Threats will come through a hybrid form of warfare employing conventional, irregular, and criminal capabilities, integrated operationally and tactically at the lowest level possible, mainly in urban environments and in locations where the Alliance lacks capabilities support.
- *Diffuse Non-conventional Adversaries:* This element is directly linked with the HT challenge. We face an important paradigm shift from the traditional concept of a super-power confrontation in which the enemy is identified as state actor (states or rogue states) toward more complex interactions of state and non-state actors. Because NATO has demonstrated its ability to quickly and effectively conduct major combat operations, states countering NATO will increasingly rely on sponsoring and exploiting surrogates and proxies to generate asymmetric challenges. Since the use of criminal and terrorist elements as well as other non-state actors gives nation-states options for effectively opposing NATO interests and objectives without direct action, their role will likely increase in future operations.
- *Urbanization of warfare:* Population growth trends, especially in developing countries, indicate that by 2025 more than 60% of the world's population will live in cities. From a military perspective, urban warfare is extremely challenging due to its specific features and requirements (increased number of troops, severe limitations in effective use of fire-power, manoeuvre within a multidimensional confrontation environment—underground, ground level, and buildings—and presence of civilians).
- *Population – centre of gravity:* In future operations, operating areas will increasingly overlap with densely inhabited areas. Subsequently, the local population will represent a key feature of the operational environment, and gaining the population's support will become a key prerequisite for success.
- *Comprehensiveness:* Recent NATO operations have demonstrated that the military is not able to effectively deal with the challenges posed by stability operations on its own. The complexity of such operations requires a multidisciplinary approach and enhanced inter-agency cooperation.

¹² HT refers to those posed by adversaries, with the ability to simultaneously employ conventional and non-conventional means adaptively in pursuit of their objectives, according to Bi-SC Input to a New NATO Capstone Concept for the Military Contribution to Countering Hybrid Threats, 25 August 2010. The main feature of HT is the employment of a combination of actions, both conventional and non-conventional, against military and civilian objectives in an increasingly unconstrained operational environment to include non-physical domains (cyber, info/media, financial). The HT activity is difficult to attribute to a proximate adversary or actor as well as to identify of its originator or sponsor and may be the result of an ambiguous cooperation between sponsor states, terrorist, and insurgent organizations, corrupt governments or individual actors.

Importance of the Human Dimension of the Operational Environment

Today's conflicts embody a new type of threat that is irregular, singular, elusive, and imprecise. Adversary fighters mix, meddle, and mask themselves with the local population, which eventually becomes part of the battlefield. In current conflicts, threats are concealed among the population, which increases operational complexity and uncertainty and hampers threat identification. In order to overcome this irregular threat, it is crucial to gain the support of the population. Although the local population has been always a key element of any operational environment, as adversaries purposefully move the conflict to the population, gaining its support becomes a more important than ever as a centre of gravity for both NATO and its opponents.

Recognizing the importance of human aspects as a factor in warfare is not a new phenomenon. In the history of modern civilization there are a lot of personalities¹³ or different structures¹⁴ focusing on influence of human aspects in warfare. Although knowledge of the enemy is historically one of the first principles of warfare, military operations and security decision-making have consistently suffered due to the lack of knowledge about foreign cultures and societies. Ethnocentrism, biased assumptions and mirror-imaging have had negative outcomes during the North Vietnamese offensive (1968 and 1975), The Soviet – Afghan war (1979–1989), Shiite transformation of Iran (1979), the Iraqi invasion of Kuwait (1990), India's nuclear tests (1998), and the second war in Iraq (2003–2011), to name just a few recent examples¹⁵.

In order to cope with the emerging security challenges of the future, knowledge of human aspects pertaining to an adversary should be considered a priority. An immediate transformation in the NATO conceptual paradigm is necessary for two reasons: first, the nature of the adversary has changed since the end of the Cold War, and second, the current operational environment has altered fundamentally over the past twenty years as a result of globalisation and other evolving characteristics of the security environment.

A series of recent studies highlighted the need for NATO to better understand the human environment in order to effectively communicate with the people, authorities and other actors and successfully complete its operations.

Recent NATO operations in Kosovo, Afghanistan and Libya demonstrate that both understanding the human environment in a conflict zone and comprehending the motivation behind a local population's active or passive support of a NATO opponent are key aspects to consider when developing NATO capabilities.

¹³ Sun Tzu 544-496 B.C., Alexander the Great 356–323 B.C., Niccolò Machiavelli 1469–1527 A.D., Thomas Edward Lawrence 1888–1935 A.D., etc

¹⁴ For example the Bureau of American Ethnology under leadership of major John Wesley Powell established during Indian Wars 1865 – 1885

¹⁵ Montgomery McFate, "The Military Utility of Understanding Adversary Culture", in Joint Force Quarterly, Issue 38, 2005, pp. 42-43.

A lack of knowledge of human aspects of an adversary can have serious, undesirable consequences. Conversely, understanding adversary culture can make a positive difference strategically, operationally and tactically.¹⁶ Misunderstanding human aspects at a strategic level can produce unrealistic strategic objectives; lack of knowledge of human aspects at an operational level can lead to development of negative public opinion; and at a tactical level it can endanger both civilians and troops.¹⁷

Success in future operations will require reliance on social sciences knowledge to exploit a wide range of human aspects. Despite moderate progress in NATO in highlighting the need for increased consideration of the human aspects of the operational environment (e.g. Comprehensive Approach Concept, Operations Planning Process Update, etc), the Alliance still lacks the right programs, systems, models, personnel, and organization to deal with either the existing threats or the changing environment.

Because there is no central resource for human aspects knowledge and analysis, both the military and policy communities who need such information the most are left to their own resources.¹⁸ Nonetheless, there is reason for optimism as long as individual members of NATO Nations possess the necessary knowledge that can provide a better understanding of the human dimension of the operational environment. The only condition is to create the mechanisms that would allow NATO decision-makers and planners timely access to the pertinent information.

¹⁶ Ibid., p. 44

¹⁷ Ibid., p. 45

¹⁸ Ibid., pp. 46-47

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CHAPTER II

MAIN FINDINGS OF THE RESEARCH PANELS

As the operational environment becomes more and more complex, the military must resort to non-traditional knowledge and skills in order to be successful. Comprehensive engagement of the military with subject-matter experts (SMEs) in non-military disciplines such as the social sciences is a new approach to operations that may overcome this shortfall.

This project, which implements NATO's Comprehensive Approach Strategy, is a first step in that new approach. It brings together SMEs from different domains with the goals of sharing their knowledge and understanding of human aspects and prompting follow-on multidisciplinary research.

1. Main Drivers of Human Action

Identifying the main drivers or motivators of human action is a critical human aspect of the operational environment and the first step in defining the sources of potential conflict and/or cooperation with local population. The direct relevance to the military of these main drivers will vary depending upon the level of operational goals under consideration.

FINDINGS

The most common and fundamental needs (such as need for food, water, safety, health, property, core social relationships) tend to be a higher priority for humans and less cross-culturally variable. People generally act in ways that allow them to fulfil these needs with the least amount of loss of other things they want or need. However, humans can and do sometimes act counter to their 'genetic best interest'. Local context as well as social, moral, religious, and other factors may significantly modify how these needs are prioritized and how people act in their pursuit.

Anthropology and evolutionary psychology clearly demonstrated the existence of behavioural and cognitive traits common to all neurologically normal humans regardless of their race, culture, and religion. Territoriality, fear of death, rituals, childcare, pretend play, mourning,

food sharing, kin groups, social structure, collective decision making, etiquette, envy, and weapons are just a few of the hundreds of human universals¹⁹ detailed in scientific literature that emphasize the fundamental cognitive commonality between members of the human species.

Humans are subject to a number of social learning biases that help them pick out models for learning or imitation.

- *Similarity* bias is the tendency to imitate or learn from those that we regard as similar to ourselves in important areas such as age, gender, clan, tribe, ethnicity, religion and class.
- *Prestige* bias is another powerful shaper of learning. People who appear prestigious are more likely trusted as sources for learning information and used as examples for acting, even if the prestige is borrowed from an irrelevant domain.
- *Conformity* is a general pressure that humans experience. We tend to think and act like the majority of people in our social group.

Moral norms profoundly shape how people seek to satisfy their basic needs and make other behavioural choices. Local variability exists but generally people's moral sensibilities focus on a few basic foundations that are cross-culturally recurrent and emotionally driven: loyalty, authority, and sanctity, as well as harm/care and fairness.

Religious values are highly motivating in most cultures. Because religious commitments and activities are likely to be encountered in almost all operational environments, religion represents a significant human aspect to be considered during strategy development. Although the specifics of religious expression vary greatly from culture to culture, understanding religious elements is an integral part of preparing for any operational engagement.

A simple way to identify religious commonalities is to ask local religious leaders and laypeople about their religious traditions, listen for common concerns in their responses, and then together develop a list of common goals. (Because formal religious leaders or officials are not necessarily the best source of information concerning a layperson's religious goals, both sources are important.) If NATO forces impede religious goals or infringe upon religious convictions or rituals, the amount of resistance relative to other blocked goals will be substantially greater. Hampering achievement of religious goals generally results in emotionally powerful and motivationally significant resistance that manifests itself not only individually but also through social bonds and networks.

On the group or community level, humans tend to move toward decisions that minimize personal costs and maximize material gains. Local populations tend to be attracted to arrangements they regard as economically beneficial to them. Nevertheless, on the individual level, in specific situations, many other factors trump economic considerations, particularly moral and religious values. When people are committed to moral ideals they may radically break away from the patterns of action predicted by models.

¹⁹ Donald E. Brown, *Human Universals*, McGraw-Hill, San Francisco, 1991.

RECOMMENDATIONS

Identify the main drivers, goals, or motivators in the operational area and then harmonize NATO objectives with those drivers of the local population to minimize conflict and increase cooperation. If NATO operations pursue freedom from fear, freedom from want, and freedom to live in dignity (the three freedoms promoted by the Human Security concept) and their seven constituent security aspects (physical, food, health, economic, environmental, community, political), NATO's aims can be directly mapped onto basic drivers of human action.

Create conditions that target several levels of needs or drivers simultaneously. Because drivers vary by age, sex, status, and so forth, and also because their priority may vary as a function of expectations and environmental stressors, often a good strategy when trying to create security to satisfy these drivers is to address multiple categories simultaneously. Satisfying one driver at the expense of others may result in the opposite of what was expected.

Manage expectations and frustration. Frustrated expectations can create conflict above and beyond absolute levels of driver's satisfaction, so it may be strategic to seek to gauge and influence expectations as much as satisfy perceived wants and needs.

Systematically observe behaviour and emotional responses to situations to identify root drivers. Because specific local manifestations of basic drivers of action cannot be determined through simple consultation with the leading class of a community, commanders in the field should establish specific collection requirements pertaining to local population motivators.

Discover key players' social networks in an operational environment. This is critical information because of its implications for identifying personal motivations and obligations. Observing how different individuals' networks overlap could likewise reveal potential for cooperation or conflict.

Influence key individuals, become part of their personal social network or influence members of their personal social network. It would be advantageous to NATO to influence local populations by soliciting the aid of individuals who are prestigious and representative of the various subpopulations (youths, the elderly, men, women, different clans, etc.) Becoming part of another's personal active network alters the former relationship and triggers a different level of trust and potential cooperation. At times, NATO forces themselves are regarded as particularly skilled or are esteemed for their roles as peacekeepers or professionals. NATO forces can elevate the prestige of selected locals by purposefully associating with them in public. By the same token, savvy locals may increase their prestige by publicly associating with NATO personnel.

Identify how moral foundations are manifest and discover religious and "sacred values". Religious values and practices often generate considerable social cohesion and prompt individuals to make enormous personal sacrifices. They also fall outside of economic negotiations. Sacred values, whether they are religious landmarks, rituals, or people, cannot be traded for monetary compensation or the like. Honouring religious expression and facilitating the accomplishment of religious goals is likely to result in the positive emotions of trust and

happiness. Finding commonality between NATO goals and the religious goals of local people goes a long way toward building rapport and encouraging peaceful cooperation.

Provide the support of social and human experts (cultural studies, demographics, social geography, political science, religious studies, sociology, psychology, anthropology) to commanders and staffs in order to improve the understanding of the local population and apply this understanding to the Military Decision-Making Process. It is necessary to understand the human aspects of the operational environment through synthesizing data, and analysis of people as they live and act within societies, populations, communities, and other groups or networks, including their activities, relationships, and perspectives (stakeholders, drivers, enablers, and processes). It may be possible in many cases for civilians with appropriate security clearances to contribute to operations in various capacities, but it may also be important for NATO and the military forces of the Alliance to educate officers in critical areas of the human sciences. NATO's decision-makers and field commanders must also have tools for evaluating the primary drivers in a specific operational environment.

IMPLICATIONS

From the very beginning of the stabilization phase of an operation, NATO must develop a comprehensive plan for engaging the local population based on its main drivers, goals, and motivators. It is critical to correctly identify the drivers, remembering that a human's motivation is not always based on greed and that the promise of a material reward will not always motivate the desired behaviour.

Although human universals are useful in shaping effective methods for making an initial approach to a local population, missing or ignoring the unique and particularly salient characteristics of the target society could damage rapport in the long run.

2. Understanding Human Environment

Understanding the current situation is an essential component for the success of a security mission as its personnel try to build rapport with and gain the support of the local population. It is impossible, however, to fully understand the current situation without some knowledge of relevant historical events.

History and other disciplines from the humanities and social sciences can play a vital role in military missions by explaining why humans behave as they do in different social settings. While developing an understanding of the circumstances that have brought about a particular current event, it is important to keep in mind the present is built upon the past.

FINDINGS

Communities represent a sum of human groups with different levels of influence, motivated by natural and contextual drivers. These communities should be analyzed over time, from the dynamic of change perspective, and not as snapshots taken without a baseline. From an operational point of view, the community's needs are more important than each individual's needs.

Past experiences provide insight into current behaviours, attitudes, beliefs and actions as well as the evolution of individual communities. History provides key evidence about past behaviours and actions and how they have shaped communities of today in a variety of ways:

- Colonialism continues to define aspects of life in different parts of the world to this day. Ancient dynamic colonizers left memories of conquest, slavery and profound changes in language, religion and social structures in different countries/regions. Some of these memories still resonate in former colonies.
- Across all continents, migrating populations have been a source of conflict as they settled or occupied land and displaced or dominated indigenous groups. Long memories of previously owned land, access, lost traditions, and language have emerged as grievances in civil unrest throughout the ages.
- Significant ancient minorities continue to exist, and regardless of persecution or toleration, can become catalysts for nationalist, separatist movements depending on geographical location, religious differences and sense of betrayal.

It is important to understand not only a community's recent history, but also its historical mythology and legends of status, language, religion, tribal and cultural boundaries and kinships, natural trading and dealing instincts, the nature of loyalties and folk heroes past and present. By understanding the long-term factors and influences that have created a sense of identity within the local population, and by using that knowledge in its operational planning and execution, a security or peace-keeping force is much more likely to ascend from the grudging acquiescence of a population to positive acceptance.

Once deployed, a NATO force becomes a significant actor within the local community. The force can improve its chances of success by showing it cares about what locals think and by determining and working to enact the improvements expected by the populations. The local population will be more tempted to cooperate with NATO forces and local authorities if they consider them to be legitimate and they perceive they will benefit from cooperation. Further, communities are changed by events that happen to them; the dynamics of change influence the characteristics of community.

Opponents of a NATO mission may twist the historical record to present an interpretation of the past that emphasizes negative experiences with a foreign presence (even though that event may have proved extremely beneficial) in order to build a sense of suspicion and antagonism toward the foreigners on their soil. Or, the opposite could take place. Proponents of a NATO mission to their country could downplay negative consequences of dealing with outsiders in the past in order to encourage support of the mission, perhaps for their

own purposes. It is essential to be sensitive to the historical viewpoint of any foreign society or culture in order to have as complete a historical analysis and understanding of the local population as possible before the commencement of NATO operations.

History does not offer a complete picture of the past, but it may offer clues as to how a society might react or respond to a security or peacekeeping mission. Although history on its own cannot offer absolutes, it can be paired with other disciplines in the humanities and social sciences and become a powerful tool for building a better understanding of both a given current situation and the evolution of the community in which it is occurring.

RECOMMENDATIONS

Utilize historical analysis along with other disciplines to develop cultural awareness in order to maximize opportunities to build rapport with the local population. Lack of understanding of culture can not only have negative consequences to military operations at all levels of the operational spectrum but also (and above everything else) put in danger the lives of soldiers and civilians. As a consequence, a solid understanding and application of cultural awareness should be a pre-requisite in the planning and execution of military operations, particularly in low intensity conflicts. As one studies culture, one must take into consideration many aspects of a specific country/society to include:

- Composition (ethnicity, sex, languages, level of education, etc.)
- Institutional influences (religious, political, economic, etc.).
- Societal stratifications (opportunities of advancement, pluralistic vs. individualistic society, interests, etc.

While historical analysis can serve as an effective foundation for understanding unfamiliar societies and culture, it must always be kept in mind that history is not an exact science. History is a discipline that relies on interpretation, while teaching by both example and analogy.

Analyze the local population's history of relations with outsiders in order to anticipate how they may view the presence of NATO forces in their country. There may be a tendency to respond to a NATO security or stability mission on the basis of past experiences with outsiders. Depending on that experience, the local population may have a preconceived positive or negative viewpoint about the presence of NATO forces that can affect its response to the situation.

Learn about a population's previous responses to conflict to anticipate possible reactions to a new one, especially a NATO intervention in their homeland. The population in those regions or countries where NATO might conduct security or peacekeeping operations will apply past individual experiences and historical analogies in assessing the operation and determining whether or not to support it.

Learn everything possible about the culture in which the operation will take place, utilizing history, linguistics, and the social science disciplines to do so. To this end, an

understanding of a community's prejudices or biases is indispensable, including the treatment of minorities, women, or other specific groups. Determining if these prejudices are driven by religion, education, social structure, political systems, or other elements is critical to this understanding. It is equally important to remember that each member of the NATO force comes from his own stereotyped culture with prejudices of his own that must be overcome. These realizations can help shape the attitude of the local population toward a NATO operation taking place in its territory.

Minimize the possibility that NATO forces may be perceived as "occupiers" or "neo-colonialists". The message that NATO sends to the population from the very first phase of the operations is very important. Cooperation and support should be the keywords to gain the trust of the population and foster positive attitudes and acceptance. Local populations need detailed explanations of the anticipated benefits of the mission in order to gain their trust and support. This is true for the "home population" as well.

Develop and maintain a cultural analysis unit to identify regions or countries where NATO response forces might deploy in the future in order to prepare NATO personnel for operations in such places. Political-military organizations rely on intelligence analysis for the process of planning policies and/or operations. This requires identifying patterns of behaviour and predictions about how local populations might react to NATO intervention in their homeland, and historical analysis can play a key part in this process. Utilizing and implementing historical analysis and social science methodologies, a NATO unit can formulate plans that contain critical information about the cultures in the regions in question and recommendations for training NATO personnel to effectively build local support for the mission. Such a unit would likely need to be a permanent structure, as constant monitoring of conditions and events in these critical areas is necessary.

Integrate social science/humanist methods into the process of intelligence analysis. As a political-military organization, NATO requires the tools necessary to effectively study the processes that shape the attitudes, beliefs, and opinions of the cultures in which it might operate. These tools are even more important when dealing with non-democratic nations or organizations that oppose democratic values. Intelligence analysis must incorporate not only the techniques of historical analysis, but also those of the various academic disciplines within the social sciences, including cultural anthropology, psychology, political science and sociology to name but a few. In this regard, history provides a foundation from which the diversity of human interactions can be analyzed in order to prepare NATO forces for 21st century operations.

IMPLICATIONS

NATO might face challenges developing E&T curricula to complement a traditionally technically-oriented military education with socio-human science education. However, the difficult work of integrating social science and humanities methodologies with the process of

Intelligence analysis is of critical importance to a quality result, particularly when dealing with non-western cultures.

3. Complexity of Cross-Cultural Communication

The full-spectrum of operations NATO is likely to face in the future demand an effective cross-cultural communication capability, whereby military leaders are able to prepare for and adapt successfully to any cultural setting. In contrast with the high level of technology that maximize the distance between military members and antagonists on the battlefield, the nature of NATO peacekeeping and stabilization missions has increased the need for adaptive interpersonal skills and capabilities. Recent NATO operations and likely future operations require close interaction between military forces, particularly ground personnel, and local populations from different cultural backgrounds. In these scenarios, communicating, negotiating, and conducting local key-leader engagements are all vital skills. To operate successfully in this environment, NATO personnel must be able to respond appropriately to any situation.

FINDINGS

Effective communication is critical in building rapport; it includes understanding how people get information and adapting a message to the target audience. NATO should focus its strategic communication efforts to positively portray itself to the others as a fundamentally multicultural alliance and consider that, at the operational level local media has more impact than international media. NATO personnel need better training in cross-cultural communication (beyond simple greetings and “do’s and don’ts”) and a deeper understanding of cultural characteristics. Additionally, the importance of nonverbal communication when NATO forces interact with local populations should not be overlooked.

Cross-cultural competence is the ability to understand a culture different from one’s own and act appropriately within that culture’s mores. It is a fundamental skill for NATO military and civilian personnel who must interact with people from other cultures. Cross-cultural competence is culture-general knowledge and abilities developed through education, training, and experience that provide the ability to operate with efficacy within a culturally complex environment. It provides a conscious knowledge of a “culturally appropriate, adaptable mode”, and helps to mitigate undesirable outcomes by supporting critical skills, in particular for conflict resolution and communication.

The transition from war to peace and the more general conflict resolution process can benefit from the application of a comprehensive cross-cultural communication approach. NATO should support such an approach because at the community level it would facilitate discussion within and among diverse sectors of society and local authorities. A political settlement at the state level without significant progress at the local level is unlikely to produce

a consensus capable of supporting conflict resolution and a sustainable peace, which is the ultimate goal of any NATO mission.

An understanding of the cultural and social environment, in particular the structures and dynamics of the social system and its sub-systems, is fundamental to constructive cross-cultural communications. While language and regional expertise facilitate operation in a specific culture, the broader competence of cross-cultural communication can provide NATO forces the prerequisites to operate effectively in any culture.

Despite the increased interest of different National Defence Services in language and cultural training, there is no framework within NATO to coordinate efforts to develop the knowledge, skills, and competencies required to understand and successfully interact with a particular population in a particular region.

To fully understand the dynamics of the contemporary battlefield, NATO must work to improve cultural communication competencies and support the development of Intelligence analysis by investing in an Operational and Cultural Network (OCN). The OCN is a graphical and digital construct based on the categorization of the elements of a society in accordance with their self-representation (supra-systems, systems and sub-systems). OCN operates on three levels (macro, meso, and micro) and works on each one in line with the socio-cultural analysis process. Each level represents a specific target for strategic communication.

Institutionalizing cross-cultural competence will require a shift in organizational culture, but can be implemented using a multilateral approach comprising a number of cross-cultural resources, including:

- Education and training;
- Individual/unit-level assessments;
- Information (at local and regional levels);
- In progress research (info-collection) activity on the field.

RECOMMENDATIONS

Prepare well-trained and competent groups of specialists in cross-cultural communication. The expertise of these specialists should cover domains including sociology, anthropology, psychology, geopolitics, strategy, economy, and media, allowing them to support NATO in defining the most efficient approaches, from the HAOE perspective, to pre-deployment training, operational planning, strategic communication, intelligence analysis, and Information Operations.

Employ “on the field” SME capabilities utilizing individuals with high professional and cultural backgrounds. These SMEs should provide assessment and evaluation of the pre-deployment training, support the planning process and operational execution, and add value to Intelligence analysis.

Invest in cross-cultural competence training. Training outcomes are articulated as short, medium and long term goals which will positively affect the overall mission. Dedicated training should focus on enhancing cross-cultural communication skills with basic training for all personnel and advanced training for key specialists.

Briefly, this training method is structured on two foci:

Create partnerships and dialogues with local communities and other actors. Active dialogues and partnerships will promote NATO interests and aims through participation and cooperation in key local and regional initiatives, will foster partnerships and cooperation with other organizations (IO and NGO) to facilitate the achievement of mission objectives, and will encourage the local populations to cooperate in identifying collective solutions to community needs (in agreement with local norms, traditions and rules).

Ensure that NATO's strategic and operational communication planning process continues to be well-informed and reflective of community needs and aspirations. A comprehensive cross-cultural communication process in NATO's areas of operations requires a much more deliberate design than currently exists. Topics that must be addressed through an effective communication process include:

- Local communities have to be involved in decision-making processes in order to create an ongoing forum for identifying key issues, work, and activities with the NATO counterpart.
- The local governments, as well as local civil society, have to be involved and supported in the design of a comprehensive conflict solution process based on permanent dialogue.

IMPLICATIONS

The complexities of cross-cultural communications demand NATO adopt a more robust communication strategy and develop a better understanding of what its actions communicate. Because even the simplest actions of the most junior soldier represent a non-verbal message, NATO must provide at least basic training in cross-cultural communication to all of its personnel. NATO will encounter difficulties in communicating with non-state actors indifferent to international accountability.

4. Dynamics of Local Situation

The 21st century operational environment NATO faces includes complex and constantly evolving asymmetric, unconventional, and irregular threats posed by transnational actors and states wielding new technologies, significant financial resources, powerful information and strategic communications tools, in some cases even working with and through global narco-criminal networks to threaten peace, stability, and regional security. Understanding the

dynamics of this complex environment comprising a multitude of actors with different identities, narratives, and goals is essential for NATO.

Whether an understanding of human aspects is expressed in the lexicon of population-centric counterinsurgency, human terrain and geography, social network analysis, or “hearts and minds of the people,” NATO must embrace, explore, and move forward to institutionalize the HAOE concept.

FINDINGS

Understanding dynamics of the local situation is a challenge for both NATO and local populations. Consider the challenges facing any developing nation with a growing youth bulge; widespread poverty and illiteracy; religious and ethnic strife amongst a multi-cultural population; poor basic health and sanitation; a nascent and ineffective system of governance and corrupt judicial institutions; constant violence between narco-criminal gangs and government security forces; and inadequate power, transportation, water, and other infrastructure systems. Add high unemployment and continuing drought and the stage is set for a humanitarian crisis, a failed nation state, and incipient insurgency. One of the common threads here is the link between understanding the complexity of the operational environment and local dynamics with the ability to affect and lead change. Success in shaping and leading change is often tied to effectively understanding those complex dynamics and shaping attitudes, actions, responses, and words accordingly. It is not easy for local populations and is clearly more complex for NATO to truly understand the dynamics of a particular local situation.

Correct assessment of the local dynamics problem is essential. NATO is likely to face multiple challenges in future operations, so it is important for NATO to develop a detailed understanding of the dynamics of the target political, military, economic, socio-cultural and infrastructure systems. The crucial point in understanding the dynamics of the local situation is awareness of the roles of key actors and the mechanisms and the balance of power in the area. It is necessary to understand and manage the manifestations of power networks, the struggle to gain or preserve influence within established formal structures and to control the ungoverned spaces as well as the role of NATO as part of this power and influence network. NA5CRO planning must consider the country-centric model addressing all systems from a central to a local perspective. In developing this understanding, NATO should keep in mind at least two views of the problematic situation: an external view, and an internal view.²⁰ The external view reflects a series of functional problems along the lines of the various stakeholders and agencies engaged in the effort, while the internal view is from the perspective of both local officials and the population. Each group of actors has its own perspective; even within the same group, some individuals might define problems differently, in terms of their own expertise and interest. To achieve success in future NA5CRO operations, NATO should first harmonize and reconcile the

²⁰ C. Richard Nelson, *How Should NATO Handle Stabilisation Operations and Reconstruction Efforts?*, The Atlantic Council of the United States, Policy paper, 2006

external and internal views of all key actors. In achieving this goal it is essential to find a *proper role for each actor* and *achieve a power balance*, acceptable to all actors, which must be analyzed for each particular case, considering that a too strong a government might suffocate a society which previously benefited from greater autonomy in self-governance, while a weak society could impede government performance and provision of basic services at the local level.

Effective and achievable goals must be established and tailored to the local situation. Social change and socialization of norms can happen only when the target population of an intervention is given a common goal (which former opponents can share), with benefits greater or more important than those that could be obtained through fighting. Sharing a common goal can aid in building social cohesion, seen as a convergence across different groups within a society. Social cohesion provides an overarching structure for collective life that helps ensure a certain predictability and certainty, even if it does not guarantee that all groups will agree on all issues. At a minimum, convergence across groups offers the incentive for groups to coexist.²¹ This leads to a constructive, positive paradigm of cooperation rather than a negative one of conflict and opposition. Commonality of purpose also prevents the local population from identifying foreign forces as the other or enemy against which they define their new or regained identity. A distinction must be made between the ambition of democratisation (building a more or less liberal regime, respecting human rights and civil liberties) and that of just delivering peace and stability. The coincidence of goals between the local population that wishes to rid itself of an oppressive regime and the troops helping it do that is often just that: *a temporary coincidence of goals*. It in no way implies the local population shares the same values or reasons behind that goal as the foreign troops. Considering these aspects, finding a proper balance between what is wanted at strategic level, what can be accepted at local level, and what is possible to be implemented represents a prerequisite for a successful NATO Operation.

Change must be managed. Even positive change is a source of insecurity, resistance, fear, and identity-seeking. Although the tempo of change affects different local communities in different ways, generally rapid social change is alienating. It is in this light that NATO and its allies, the often the recognisable agents of change, may be framed ambivalently or as a mildly positive factor but also as a potential threat. In the present international environment, globalisation and accelerated change bring about clashes because they put significantly different communities in touch with one another (e.g. via technology). Contrary to the mores of political correctness, differences are never easy to accept. As they generate identity crises, frustrations, competition, and uncertainties, it is helpful for people to name these differences precisely because they are often diffuse, complex and abstract. An easy way to do that is to establish the 'Other' as the source of the challenges, the impersonation of all of their negative outcomes, and the justification of one's own failures and shortcomings (i.e. the 'Other' is the one setting obstacles to legitimate self-fulfilment). The existence of an 'Other' provides a cause to fight for with the associate benefit of a sense of fighting to re-establish stability, predictability, and control over the environment. It also provides the lure of simplicity; in an increasingly complex,

²¹ Marc, Alexandre, Alys Willman, Ghazia Aslam, Michelle Rebosio, with Kanishka Balasuriya. 2012. *Societal Dynamics and Fragility: Engaging Societies in Responding to Fragile Situations*. Washington DC: World Bank. DOI: 10.1596/978-0-8213-9656-8. License: Creative Commons Attribution CC BY 3.0

difficult to understand world, radicalism takes advantage of simple, easy to understand messages that simplify life and reduce all problems and solutions to the very basics.

Local problems must be viewed from a regional perspective. A local situation can change rapidly and its dynamic is often influenced by regional changes. These influences might have different outcomes which are hard to anticipate even if a pattern of change has been identified. Analyzing current NATO operations, it is increasingly clear that operations in Afghanistan cannot succeed while Pakistan is still a disruptive agent and that operations in Kosovo cannot succeed unless Serbia and the entire Balkan region cooperate. Progress in post-war situations is often painstakingly slow. There must be an acknowledgement of results as they occur to keep people committed to the end. Neighbours or any other groups that the local population claims kinship with (e.g. diasporas, people of the same religion or ethnic origin in other countries) can play an important role in identity construction, while foreigners can more easily be considered the other.

There is no formal NATO framework for assessing dynamics of a local situation. Conceptual frameworks organize a body of knowledge and become the intellectual start point for NATO strategy, plans, operations and training. The absence of NATO doctrine defining and framing HAOE and the dynamics of the local situation remains a key challenge. Individual NATO Nations already possess knowledge and expertise in this field that can be used to form the backbone of a standard assessment tool tailored to needs of the appropriate decision making levels:

- **ASCOPE and PMESII** methodologies are complimentary approaches. ASCOPE is a methodology which provides an in-depth analysis of civil considerations which are vital for success of coalition operations, grouped into six categories: **Areas, Structures, Capabilities, Organisations, People and Events**. As a complement to ASCOPE, the PMESII methodology provides a comprehensive view of the **Political, Military, Economic, Social, Information, and Infrastructure** aspects of the operational environment.²²
- **District Stability Framework (DSF)** is an analysis and program management process specifically designed to help practitioners improve stability in a local area.²³ DSF has been successfully employed by U.S. and coalition military and civilian personnel in Afghanistan, Iraq, and the Horn of Africa. In addition to the ASCOPE-PMESII methodology, the DSF toolkit consists of other useful tools aimed at supporting troops in understanding a local situation: cultural matrix, factors of instability/stability matrix, DSF collection planner, tactical conflict survey, tactical stability matrix, activity design matrix, synchronization matrix, monitoring and evaluation matrix, and the overall stability index.
- **Social Network Analysis (SNA)** is an approach to analyzing organizations focusing on the relationships between people and/or groups as the most important aspect. Social network analysis provides an avenue for analyzing and comparing formal and

²² Civil-Military Fusion Centre's Cmic Web portal

²³ *Center for Army Lessons Learned, Afghanistan Provincial Reconstruction Team Handbook, Feb 2011*

informal information flows in an organization, as well as comparing information flows with officially defined work processes. Main goals of the SNA which can be used in understanding local dynamics are to visualize communication and other relationships between people and/or groups by means of diagrams, to identify the factors which influence relationships and the correlations between relationships and to draw out implications of the relational data.²⁴ IBM i2 Analyst's Notebook (ANB) is one of the most frequently used commercial software tools.

- **Socio-Cultural Intelligence (SOCINT)** can be characterized as “the process of directing, collecting data related to any of the social sciences, analyzing, producing, and then disseminating such data for situational awareness in any operational environment.”²⁵ The following disciplines are attributed to SOCINT elements: geography, anthropology, psychology, economics, religion, demography, criminology, political affairs, and archaeology. Although SOCINT is not a recognized intelligence discipline at present, the intelligence operations and products focused on the local population, its composition, attitudes, and other human related aspects are not new. Collecting and analyzing information on such subjects is necessary during any military or non-military operation when a civilian (local) population is involved. These considerations are particularly important in counterinsurgency and peace support operations where winning the population's support is the key to success.

RECOMMENDATIONS

Develop a standard framework for a comprehensive analysis of local situation by integrating all contributing disciplines and methodologies: ASCOPE, PMESII, SNA, and SOCINT.

Recognize Socio-cultural Intelligence (SOCINT) officially at doctrinal level as a special functional category of intelligence (similar to Target Intelligence) and apply it when necessary (e.g. NA5CRO, stability and reconstruction operations). Alternatively, establish an SOCINT-focused organization under a more neutral, non-intelligence-related name (similar to the US HTS) within the Knowledge Management Directorate that would closely coordinate its activity with the CJ2.

Focus the analysis of the local situation not only on producing assessments of sensitive and fragile regions of the country but also on the more stabile administrative divisions, to identify key differences and commonalties and to exploit both in adapting the overall and local strategy.

Teach local situation analysis methodologies and tools not only in intelligence analysis courses, but also in pre-deployment training to provide all staff a basic awareness of the importance of the contributions of all military skills and capabilities to this effort.

²⁴ Kate Erlich and Inga Carboni, *Inside Social Network Analysis*, [online] 03-07-2012.

²⁵ Kerry Patton, *Sociocultural Intelligence. A New Discipline in Intelligence Studies*, 2010, p. 11.

IMPLICATIONS

Developing and implementing a comprehensive model for understanding the dynamics of the local situation will require NATO to first perform an analysis of each of the above-mentioned tools to identify strengths and weakness, as most are linear assessment methodologies and do not provide the holistic approach required for HAOE.

The role of Intelligence might be reconsidered by developing dedicated information requirements relevant to understanding the local situation.

5. Perception and Acceptance of NATO Operations

Recent NATO operations have proven that winning in combat is not sufficient to be successful. In many situations by influencing *perceptions* on a local or global scale, strategic objectives can be achieved without engaging in military action. NATO can successfully influence the perception and acceptance of its mission based on the realities of 21st century kinetic and non-kinetic military operations.

FINDINGS

Positive perception of an operation and acceptance by not only the local population but the population at large gives legitimacy to a NATO operation. In political science, perceived legitimacy is a basic principle behind any claim to power. NATO's presence in an operational theatre will be always challenged by part of the local population. Some of these legitimacy problems can be political, economic, or cultural in nature. With regard to military intervention, it is generally agreed that the United Nations (UN) Security Council is the body best suited to authorize military actions, but a UN stamp of approval conferring "unique legitimacy" does not automatically change a population's perception. A significant portion of a population might be uneducated or unaware of the UN Security Council and its role; even those who do understand the role of the Council may not believe that body has the right to make key decisions regarding their daily life.

The colonial legacy can have a significant impact, positive or negative, on a local population. The colonial legacy has affected the political, economic, cultural, racial, ethnic and religious composition of numerous nations and should be taken into account in the context of modern military operations. This is particularly true in regard to relations between former colonial powers in NATO and those nations in Africa and the Middle East that were their colonial possessions. Turbulent relationships between a NATO nation and any of its former colonies, prior to or after independence, can adversely affect any proposed operation.

Overall performance in stability and reconstruction operations can be improved by learning from positive UN peace-building experiences. As a result of NATO's experience in Kosovo, it is wise to focus on the seven principles considered essential to the success of peace-

building efforts anywhere. First, any operation must have a clear mandate. Second, it must have the authority and resources to do the job. Third, the force must run the mission correctly from the beginning. Fourth, it must learn from the host society and from its own mistakes. Fifth, it must finish what it starts. Sixth, the mission must first establish security and the rule of law as the framework for democratization. Seventh, it must try to change the host society's practices which can inhibit the successful achievement of the mission's goals, even if those practices are fiercely ingrained traditions in that society. The sixth and seventh principles tend to be the most difficult to enact.

Maintaining the moral high ground is very important. For over a decade, NATO has been involved in complex counterinsurgency and asymmetric operations in Afghanistan and elsewhere. Insurgency is more than confrontation between armed groups, but rather, a political struggle with a high level of violence. Language and cultural differences and cultural misunderstandings can have devastating effect on these types of missions. Insurgency is not only a battle against a faceless enemy but is a struggle carried out in the "marketplace of ideas." As such, it is imperative to maintain the moral high ground at all costs. To this end, it is beneficial for NATO to vocally advocate for and adhere to high moral standards. Maintaining the moral high ground denies the adversary opportunities to take advantage of NATO mistakes. In the end, the object is to win the support of the local population.

Currently, within the NATO force structure there are personnel charged with analyzing and evaluating the perception and acceptance of a NATO mission by a local population. These offices include Intelligence (Human Intelligence in particular), psychological operations, civil-military cooperation, and the commander's advisory group (which includes a political advisor, legal advisor, and cultural advisor). All of these organizations have individual doctrine, standard operating procedures, and other formal documents to outline their roles and responsibilities, but these standard procedures do not generally extend to encouraging effective coordination, cooperation, and knowledge sharing among them.

Two functions established in recent NATO operations, key leader engagement (KLE) and operational mentoring and liaison teams (OMLT), will continue to serve NATO well in future operations. KLE is about building and maintaining working relationships with persons or entities having influence in the theatre, including not only government officials but others such as student groups, women's groups, tribal elders, and religious leaders. KLE, a cyclical process requiring thought and careful planning, creates relationships that are sustained by face to face, deliberate, focused meetings. Conducting KLE can provide legitimacy to an operational mission, allowing the effective communication of NATO strategic messages to the public to take place via those individuals or groups who already have influence and legitimacy in the theatre. This in turn strengthens local leaders, creating sustainable leadership while providing opportunities for future leaders to be legitimized.²⁶ The OMLT program is an important part of NATO's contribution to the development of local armed forces that provides training and mentoring. OMLTs also provide a liaison capability between local armed forces and NATO or coalition forces,

²⁶ A recently concluded JFC Naples NATO Rapid Response Force certification exercise highlighted the importance of using and exploiting KLE as a strategic communication tool.

co-coordinating planning of operations and ensuring local armed forces units receive necessary enabling support such as close air support, medical evacuation, and casualty evacuation. Due to the fact that OMLTs interact with armed force leaders and members on a daily basis, the teams can assist in evaluating the perception of NATO by local populations. OMLTs can also transmit messages, which can contribute to acceptance of a NATO presence.

NATO was slow to recognize the importance of targeted strategic communication and winning the battle of narrative in influencing perceptions and achieving mission objectives at all levels. Further, NATO has often been ineffective in aligning a narrative to goals and desired end states. To be effective in today's missions, messages must be tailored to the target audience, balanced between formal and emotional, and transmitted by the appropriate bodies, which for local populations may be local media not international media.

A proper evaluation about NATO operations perception has to be based on data acquired from all societal layers and must consider the relations among those layers.

RECOMMENDATIONS

Achieve and maintain mission legitimacy. Principles contributing to achieving legitimacy include strict adherence to rules of engagement and protection of human rights, inclusion of the local population as part of the larger process of engagement, preservation of the dignity of non-combatants, and recognition of the importance of historical experience. NATO must advocate mission legitimacy to all societal layers.

Assess the historical relationship with the country or countries involved in a potential crisis area and take into account the colonial legacy, as these can have a significant impact, positive or negative, on the local population.

Reconsider the implementation of the UN seven peace-building principles based on best practices developed in Kosovo.

Doctrinally formalize Key Leader Engagement and Operational Mentor and Liaison Team functions.

Identify key leaders and approach them before the beginning of an operation.

IMPLICATIONS

Engaging with contested leaders might negatively affect perception of a NATO mission in the long term. Therefore, sound biographic Intelligence on key personalities in the area of operations is needed in the earliest planning and preparation phases of the operation.

Extreme caution should be used in the planning and employment of kinetic operations as collateral damage and casualties have a major negative impact on the perception of the legitimacy of a NATO mission.

6. Measurable Indicators of Population Attitude towards NATO Operation

Attitudes are critically important yet understudied in the military context. Operational effectiveness can be enhanced or diminished by the effective and timely understanding of attitudes concerning NATO operations.

FINDINGS

An “attitude” has been defined as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour." Attitudes are comprised of three components – affective, cognitive, and behavioural. Attitudes have been traditionally conceptualized as bipolar (presumably reflecting a natural tendency to classify something as either positive or negative). However, one of the most important aspects of behaviour in natural context is individuals’ ambivalence.

The traditional view of attitudes and attitude-behaviour relationship is a primarily deliberative one, assuming that attitudes are consciously accessible and serve as deliberative input into intentions and behaviour. This view has been challenged by the growing evidence suggesting that although intentionality can be important, the lion’s share of behaviour is dictated by automatic processes, independent of intention.

Regarding the measurement of attitudes, the traditional approach was primarily based on individuals’ endorsement of different statements regarding the object of the attitudes. However, whether an individual endorses a statement or not, is not fully determined by the attitude proper. It also depends on the individual’s awareness of his/her attitude as well as on the willingness to reveal that attitude, on social desirability, and self-presentation concerns. Researchers have recently developed more indirect measures of attitudes.

There is currently limited open source literature on attitude measurement in Afghanistan. Available research appears to have involved considerable monetary and human resources, but the outcomes of the studies appear to be fairly limited and appear to ignore the most recent advances in attitude measurement. The political reception of the attitude research further suggests that attitude research in Afghanistan is, at present, difficult to interpret. Research outcomes are easily neglected or reframed in strategic and political context, and generally accompanied by a significant lack of western researchers’ understanding of the social, cultural, and historical context of Afghanistan.

RECOMMENDATIONS

Invest in a broader overview of available measures to assess the population’s attitudes, and their use for short-term and long-term planning. There are many measures of attitudes. Some are obvious, others less so; some are more effective, others less so. Recently, NATO’s Research and Technology Organization (Task groups HFM-160 and HFM-183) published a report

on “measuring the effectiveness of activities that influence attitudes and behaviours”. The report contains an impressive overview of the strengths and weaknesses of a considerable number of measures to assess attitudes. While this seems to be a good start, the report does not contain any description of the cognitive architecture of attitudes, and consequently fails to specify the psychology of the local population before measuring. This makes it difficult to determine which measure is most suitable. Additionally, the NATO report discusses measurement techniques in quite general terms (e.g. the merits of “interviews”), but these techniques come in quite diverse forms, and one technique to assess, for example, attitudes from behaviour, may be quite different than another. Thus, we should still invest in a broader overview of available measures to assess the population’s attitudes, while also specifying the relevant cognitive mechanisms involved in attitude formation, and how the measures can be tailored specifically for NATO purposes.

Develop a framework to more effectively interpret the outcome of attitude research in a NATO context. Next to attitude measurement techniques and data, it is critical to specify how the data should be used. And here, interpretative frameworks are critically important. If there is, for example, an increase in the number of people who are positive towards NATO, what does that mean? First of all, what is an increase? And then, are all increases good? These are all essential questions of the results of data are to be used effectively. Frameworks should be developed to effectively interpret the outcome of attitude research.

Use advances in technology to improve the quality of attitude data gathering and analysis. Things have changed over the years. Attitude research is no longer a matter of a personal face-to-face conversation, or filling out a paper questionnaire with a pencil. There are now of many computerized techniques that can be useful (many of the techniques have been discussed in the chapter). Clearly, advances in technology enable more efficient and precise measurement. What is more, the technology available to NATO seems to be much more advanced than that available to psychologists. Here, NATO could fruitfully collaborate with science to develop even more sophisticated techniques.

NATO troops should be trained to identify, interpret, and use these attitudes. It should be apparent that whatever technology is available, observing, measuring, properly interpreting, reporting and planning, still are, and likely will be, human endeavours. Attitudes research cannot exist without people, people filling out questionnaires, but also, people doing the research. Training people in identifying, properly interpreting, and using attitudes, may thus be critical to in improving the efficiency of measurement to detect the local population’s attitude towards NATO.

Current doctrine should be revised. The existing work of NATO’s Research & Technology Organization (Task groups HFM-160 and HFM-183) should be leveraged as a starting point. A NATO working group should be established to consider and pursue institutional change to NATO doctrine for Human Aspects of the operational environment writ large, and the use of measuring attitudes of the local populations in particular.

IMPLICATIONS

NATO must develop a framework and tools for systematically collecting attitude research data and establish a pool of experts able to analyse and interpret the results.

7. Transforming NATO Capabilities to better adapt to Human Environments

Recent NATO operations in Kosovo, Afghanistan and Libya demonstrate that both understanding the human environment in a conflict zone and comprehending the motivation behind a local population's active or passive support of a NATO opponent are key aspects to consider when developing NATO capabilities.

Within both military and civilian realms, experts agree that human aspects (alternatively referred to as human dimensions, human factors, human dynamics, human elements, or human environment) are a key element in military operations, particularly in irregular warfare and stability, support, transition, and reconstruction operations.

FINDINGS

Regardless of the term used to refer to human aspects of the operational environment, despite universal recognition of its importance, it is insufficiently addressed within NATO publications, both with respect to definition and to transformation of NATO capabilities to address it.

Understanding the human aspects of the operational environment is an essential factor in planning for success across the full spectrum of military operations. While the adage that "*warfare is political conflict by other means*" is widely recognized, combatants who underestimate the impact of the human element in military operations do so at their own risk. During the Second World War and the reconstruction that followed, as well as during the Cold War, understanding human aspects of the operational environment was considered essential.

As an organization, NATO must make substantial improvements in understanding human aspects. In particular, NATO must make long-term investments by building upon improvements in capability achieved in recent operations. It must institutionalize the best of current programs and processes so that this capability is available across the full spectrum of military operations, including increased emphasis on operational planning activities that seek to mitigate the likelihood of armed conflict.

Coalition forces have come to understand that key to operational success lies in the hearts and minds of the population, but have created misguided campaigns aimed at winning hearts and minds by focusing on trying to change opinion or attitudes instead of changing

behaviour.²⁷ Even more than achieving the desired behaviour in the target audience, a clearly defined mission and achievable end-state are essential for an operation's success. A precise end-state definition derives from proper understanding of both NATO capabilities and the operational environment.

Effectively utilizing subject-matter experts (SMEs) has often been a challenge for NATO due to:

- Lack of framework, procedures and funding for effectively engaging and sharing expertise within academia and think tanks.
- Insufficient training of military personnel and key advisors in the area of human aspects, mainly with respect to cultural/social studies, network analysis, and human dynamic models and simulations.
- Lack of a pool of military SMEs and an attractive career path for military personnel in the human aspects area.
- Obstructive security rules and Intelligence/information/documents classification and "releaseability".

Considerable human aspects databases already exist within a number of NATO bodies and Nations, but they are independent of each other and were created for use by specific elements of NATO or the international community.²⁸ Furthermore, no common formats, metadata, or ontology have been established. The majority of these databases are not properly maintained, fully populated, updated, or interoperable. Because they were tailored to specific users, when accessible to others, they are of limited utility. In addition, some data, such as that related to trends, attitudes, and beliefs, is difficult to extract from open source documents, is proprietary and held by corporations that conduct polls, or do not exist in regions or at levels of granularity necessary for operations.

Recent operations have proven that winning in combat does not constitute success, and that on a local or global scale, strategic objectives can be achieved without engaging in combat actions. Instead, NATO can gain a population's support by developing a thorough understanding of the real needs and expectations of the local population and implementing an appropriate strategy to communicate the mission's goals with respect to those needs and expectations.

²⁷ Andrew Mackay and Steve Tatham with a chapter by Rowland, Lee, *Behavioural Conflict: Why Understanding People and Their Motivations Will Prove Decisive in Future Conflict*, 2011. In their book, MG Andrew Mackay and Cdr Steve Tatham demonstrate that the defining characteristic of resolving armed disputes will be people's behaviour, and our ability to understand and modify that behaviour. Relevant in understanding the importance between beliefs, attitude and behaviour, the authors mention a field experiment conducted by Harvard-trained psychologist Elisabeth Levy-Paluck, on Hutu and Tutsi ethnic tensions in Rwanda. During a yearlong field study she used dedicated, purposefully crafted radio programmes in an effort to change beliefs, perception of social norms, and behaviour. Paluck's conclusion was that while the study did little to change the personal beliefs of the subjects, it was very effective at instilling social norms, which drove observed measurable changes in behaviour.

²⁸ Defense Science Board (DSB), *Report of the Defense Science Board Task Force on Understanding Human Dynamics*, March 2009.

If appropriately managed, the transitions between different phases of operations offer opportunities for advancing NATO's strategic interests. If they are not, they become opportunities for the enemy or for the failure of the intended objectives. Management of transitions in recent NATO operations had shown:

- Flaws in preparation, faulty assumptions, and inadequate breaches and sequels.
- Disconnects between military and civilian planning efforts.
- Insufficient resourcing of key transitions.
- Lack of guidance and unity of effort from strategic leadership.

NATO doctrine, training, and equipment are often poorly suited to operations other than major combat, forcing extensive and costly transformation, and in the process, negatively affecting the mission. Similarly, NATO forces are traditionally trained to win against another nation's armed forces and are not prepared to combat adaptive insurgencies such as that in Afghanistan.

NATO's current and future missions cannot be open-ended; the success of NATO operations will ultimately be determined by local forces and institutions. Partnering is an inherently interagency activity, but there has been a lack of unity in partnering efforts. Partnering between NATO and host nations is essential for NATO to achieve its strategic goals and promote a number of key objectives. Partnering enables the host nation to develop a sustainable capacity to provide security and counter threats, which provides an exit strategy for NATO and offers an alternative to sustaining a large NATO footprint on the ground. Partnering also enhances the legitimacy of NATO operations and freedom of action; it offers NATO a way to advance its objectives through influence rather than through direct action.

Current NATO and National training for traditional military units (army, navy, marine, air force, and special operations forces) is focused mainly combat and combat support skills while doctrine and procedures are primarily guide these forces' actions in quick entry and decisive combat. But, these traditional skills and principles are contrary to what is required in peace support operations and stability operations. Because NATO forces must be prepared to perform both combat and peace support operations which generally require contradictory skills, it may be useful to establish specially designated stabilization forces, particularly in the army and special operations forces, focused solely on developing peace-keeping skills and abilities and working peace-keeping and stabilization-type missions.

Due to the nature of human beings, analyzing the processes that shape attitudes, opinions, and beliefs in different cultures involves a large number of dependent and independent variables. It is therefore critical for NATO to improve its analytical capabilities by providing focused, in-depth training for analysts and specialized software capable of integrating the scientific methodologies of the social sciences and humanities with Intelligence analysis.

RECOMMENDATIONS

NATO must develop an overarching human aspects concept and implement human aspects as an integrated force capability by adapting mindsets, procedures, decision-making processes, training, and education.

IMPLICATIONS

Transforming NATO capabilities to understand and effectively use human aspects of the environment requires consideration of the principles of the Comprehensive Approach²⁹. A significant number of NATO capability areas regularly interact with local populations or are affected by them and could benefit from an improved understanding of human aspects – information operations; civil-military cooperation, human Intelligence, operational mentoring and liaison teams, key leader engagement teams, provincial reconstruction teams, reconnaissance, and special operation forces to name just a few.

The adoption of human aspects-focused capabilities may necessitate NATO reconsider its traditional areas responsibility and expand its cooperation with additional national or international organizations and nations. The Alliance must focus on core capabilities and turn to non-NATO entities for support in non-core areas.

Because of the large number of organizations and Nations involved, revising existing NATO doctrine and TTPs to include human aspects of the operational environment will be a long and tedious process.

²⁹ According to *AJP 01(D) Allied Joint Doctrine*, the Comprehensive Approach requires effective collaboration between military and non-military actors, across both NATO and a broad range of multinational institutions, agencies and organizations. Although the implementation of the Comprehensive Approach may vary between the levels of operation (strategic, operational and tactical), and from one crisis to another, a number of guiding principles apply:

- a. The need for proactive engagement between all actors, before and during a crisis.
- b. The importance of shared understanding engendered through cooperative working, liaison, education and a common language.
- c. The value of collaborative working base d upon mutual trust and a willingness to cooperate – institutional familiarity and information sharing are key.
- d. Thinking focused on outcomes, ensuring that all actors work towards a common goal (or outcome), and ideally mutually agreed objectives, underpinned, even in the absence of unity of command, by unity of purpose.

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CHAPTER III

ENHANCED CAPABILITIES FOR FUTURE OPERATIONS

Overarching Considerations

The operational environment encompasses not only the threat but also the physical, informational, social, cultural, religious, and economic elements of the environment. All these are essential for understanding the causes of conflicts, developing an appropriate approach, and anticipating subsequent effects. Proper understanding of the operational environment by NATO in recent operations was influenced by the prevalence of a conventional approach to operations (i.e. operations planning, Intel support). Furthermore, a comprehensive understanding of operational environment requires adequate capabilities (HUMINT, interpreters, SME support or fused Intel) that have often proved to be insufficient in recent operations.

Engaging in a coherent effort to enhance the human aspects awareness has a significant potential to increase NATO's long-term effectiveness. This will be directly reflected by the increased flexibility of headquarters and troops in adjusting and adapting rapidly to facing security challenges anywhere in the world; playing "catch-up" has proven to be an inefficient option.

Sound and comprehensive strategic and operational planning encompassing clear objectives, missions and tasks for all stages of an operation, as well as a clearly defined end-state will allow NATO to exploit the opportunities offered by transitions between the different phases of operations for advancing its strategic interests. This will prevent shortfalls and gaps like disconnects between military and civilian planning efforts; flaws in preparation, faulty assumptions, and inadequate branches and sequels; insufficient resourcing of key transitions; and lack of guidance and unity of effort from strategic leadership. To be effective, strategic planning should define clear and achievable strategic objectives based on a proper balance between what is desired, what is feasible/possible, and what can be accepted by the key actors in the theatre of operations.

Although establishing a separate military social science structure would probably not contribute much to fostering cultural awareness in NATO, an interagency coordination structure for preparing teams of IOs, governmental agencies, academia, think-tanks, and possibly NGOs

representatives for stability operations would be more effective in preparing for future engagements. Such a structure would not only provide both socio-cultural knowledge and human aspects astuteness but it would also foster interagency participation enabling the implementation of the Comprehensive Approach Strategy in military operations.

A single NATO body or structure should be appointed for coordinating all existing efforts in this field (Socio-Cultural Capabilities Panel (SCCP)/JINTWG, IGeo WG, MCDC 13-14³⁰, etc.) and for developing a comprehensive strategy to provide human aspects awareness for future NATO operations, to include among others knowledge management and sharing, directives on education and training, human aspects cells and advisors, and other requirements that may be deemed necessary.

Identifying the appropriate methods and means for exploiting the considerable expertise in human aspects knowledge and the willingness to share and constantly improve this expertise already existing within academia, think-tanks, and even NGOs could have a significant impact in enhancing military capabilities during stability operations and in providing a thorough human aspects understanding.

Establishing a permanent, functioning framework with other IOs, governmental agencies/bodies and NGOs by expanding the Alternative Analysis Concept developed by ACT will fully connect National and international capabilities to meet operational requirements and will prevent an eventual uneven interagency coordination generated by inconsistent participation in planning, training, and operations; policy gaps; resources; and differences in organizational culture.

Finding the appropriate solutions for interconnecting the existing human aspects related databases³¹, for establishing common formats, metadata, and ontology for these databases, as well as for overcoming access limitations would significantly contribute to improving the available level of knowledge to be exploited within the planning process of stability operations.

Social sciences and humanities add value to ongoing efforts providing new perspectives for NATO to study and understand the human dimension of an operational environment and their synergy enhance NATO continuous transformation to shape better capabilities for future.

³⁰ Some focus areas of the “Understand to Prevent” panel of the “Combined Operational Access” Multinational Capability Development Campaign 2013-2014 cover human aspects related topics.

³¹ Defense Science Board (DSB), *Report of the Defense Science Board Task Force on Understanding Human Dynamics*, March 2009, states that within different NATO bodies and NATO nations there are considerable human aspects databases, but they are independent of each other and have been created for use by specific elements of the NATO and the international community.

Capabilities Transformation Proposals

Possible solutions identified by the HAOE project team for transforming NATO capabilities to better adapt to the human aspects of a given environment are presented here according to the elements of the Joint Capabilities Integration Development System:

DOCTRINE

1. Development of an overarching concept under Bi-SC coordination regarding HAOE and subsequent revision of the existing doctrines to include HAOE in order to provide the framework for oversight and coordination of activities related to human aspects in NATO HQs as well as in TOs. (Existing national concepts, doctrine, and studies, including those on human dynamics, human terrain, operational culture, and cultural aspects, already provide a wealth of information);
2. Revision of AJP-3.4.5 *Military Support to Stabilisation and Reconstruction* to ensure that human aspects are properly reflected within the promulgated document;
3. Revision of Comprehensive Intelligence Preparation of the Operational Environment (CIPOE) to reflect all relevant human aspects, not just culture, that can have a significant influence on military operations;
4. Revision of Comprehensive Operations Planning Directive (COPD) to include consideration of human aspects in operational planning as part of CIPOE and to include human aspects and its own annex to the operational plan (OPLAN);
5. Modification of the role, core missions, and tasks of Intelligence personnel to better reflect the importance of human aspects for understanding the OE and to build the common operational picture by focusing not only on the enemy or opposing force but also on the local population. (It may also be useful to assess the utility and feasibility of developing Sociological Intelligence (SOCINT) capabilities for NATO).

ORGANIZATION

1. Appointment of a NATO body/structure for coordinating all existing efforts and initiatives regarding human aspects of the operational environment within NATO;
2. Establishment of a specialized structure within NATO HQ or subordinate Strategic Commands (ACT/ACO) to act as a coordinator and centralized body for human aspects knowledge, as well as dedicated cells within peace establishments of subordinate commands and crisis establishments of theatres of operations;
3. Expansion of the areas of expertise of personnel assigned to the above-mentioned structure to include: military experts, socio-human sciences professionals

(psychology, anthropology, sociology, history, and linguistics), security and public safety advisors, medics, civilian engineers, and possibly even personnel from IOs, GOs, and NGOs. Clearly define responsibilities for each position in order to avoid duplication of effort or conflicting advice:

- A multi-disciplinary body could assist military and civilian personnel in preparing for stability operations and could also form and train multi-disciplinary teams to augment other NATO forces or teams.
4. Inclusion of deployable civil-military SME teams to act as a Comprehensive Advisory Cell for commanders and/or an alternative analysis team:
 - The commander's Comprehensive Advisory Cell (Civilian Advisory Cluster)³² can improve organizational synergy by enabling political and development advisors to cooperate closely with military commanders in the field;
 - Although this cell should incorporate existing advisors (e.g. political advisor, cultural advisor), it requires the addition of some new advisors (e.g. anthropologist, psychologist, sociologist, linguist).
 5. Establishment of a Civilian Planning Element:
 - High Readiness Forces (HRF) HQs must be able to effectively 'plug and play' with a cadre of civilian experts built around a dedicated Civilian Planning Element (CPE) embedded in the civil-military planning and civil support elements of a headquarters³³;
 - The CPE must be able to pass on knowledge and the know-how to preserve continuity of the campaign.
 6. Enhancement of existing crisis management capabilities:
 - HAOE should be included among civilian crisis management capabilities established at the NATO HQ and ACO;
 - HAOE should be incorporated as a branch or section into the already existing NATO Civil–Military Fusion Centre (CFC), and the Centre's teams and focus areas and number of remote interim research support organizations should be extended. CFC's current focus is on Afghanistan, the Middle East/North Africa region, and anti-piracy but could be extended to include potential conflict areas.
 7. Establishment of a Socio-Cultural Intelligence (SOCINT) cell:
 - A SOCINT cell should be integrated into the Intelligence staff (J2) structure at strategic and Joint Forces Command level;

³² Allied Rapid Reaction Corps (ARRC), Commanders Initiative Group (CIG) - Programme Paper: ISP PP 2010/01, *Operationalizing the Comprehensive Approach*, March 2010

³³ Ibid.

- SOCINT’s primary role should be direction and control of collection efforts in socio-cultural and human aspects areas, analysis of data acquired data, and production of relevant Intelligence products;
 - Alternatively, the SOCINT function could be established in an organizational structure that would place the discipline within a knowledge development structure from which it would coordinate its activity with the J2.
8. Assessment of the feasibility of creating a pool of specially designated stabilization forces within NATO.

TRAINING

1. Support the NATO Bi-SC in modifying the standard curriculum at NATO training organizations and urge modification of National curricula to incorporate various types of training in human aspects and where possible tailor that training to unit roles and missions;
2. Provide human aspects education and training in professional military education programs and advanced academic degree programs available to military personnel;
3. ACT should recommend NATO Nations develop E&T programmes for their armed forces that enhance knowledge of human aspects in anticipation of participation in NATO stability operations and non-traditional partnerships with non-NATO organizations including IO, NGOs and non-NATO nations;
4. Consider planning and organizing an annual NATO joint military and civilian exercise focused on implementing the Comprehensive Approach Strategy;
5. Invite interagency and NGO representatives to fully participate in mission readiness exercises;
6. Establish intensive human aspects education and training specifically for Intelligence analysts.

MATERIAL

1. Create a human aspects architecture that enables user-friendly and quick access to all dedicated human aspects-type databases and allows users to easily and securely share data;
2. Define and implement a more robust research effort to explore the potential of relevant science and technology efforts in cross-cutting human aspects research, linking dynamic network analysis to findings and models with direct military relevance;

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3. Develop an Operational and Cultural Network in support of Intelligence analysis as a graphical and digital based on the categorization of the elements of a society in accordance with their self-representation (supra-systems, systems and sub-systems);
4. Assess the utility and feasibility of establishing a material capability—on the model of US HTS—that would provide connectivity to a reach-back centre and allowing access via that centre to a subject-matter expert network.

LEADERSHIP

1. Educate the leaders on the importance of Human Aspects in the Stability Operations, acquiring awareness and skills to manage intercultural factors in Multinational Military Operations. The key abilities necessary for leaders in regard to the HAOE should address overcoming cultural barriers to effective teamwork, generating and promoting trust and mutual respect, as well as dealing with communication, conflict resolution, diplomacy, mediation and negotiation;
2. Operational commanders should generate both general and specific requirements for data collection to populate human aspects databases with regional, sub-regional and local information. Commanders should provide relevant human aspects guidance, direction, and support to forces deployed in their areas of operations
3. Establish joint education and training and exchange opportunities with leaders from different services, departments, governmental agencies, and civilian organizations;
4. Instil in leadership an understanding of the importance and role of information management in current and future operations. Ensure communication strategies consider the instruments of power of all relevant actors, cultural, religious, and other social and demographic factors, and employ innovative, non-traditional methods and sources.

PERSONNEL

1. Identify the skills, knowledge and competencies needed in the field of human aspects and expand and develop the current force to include personnel with necessary peacetime and wartime skills;
2. Develop innovative processes within military for recruiting and rewarding human aspects expertise;
3. Establish a pool of SMEs in the social sciences and humanities that can support and assist NATO in the human aspects field when required, and develop a suitable framework for their cooperation.

FACILITIES

1. The existing NATO infrastructure (at HQs, within NATO bodies, in TOs, etc) supports the implementation of HAOE requirements related to DOTMPLI elements.

INTEROPERABILITY

1. Implementing HAOE as part of the Comprehensive Approach Strategy, within a military organization requires improved interoperability based on the partners' willingness to cooperate. Internal institutional prejudices between different military services, branches, and disciplines must be put aside to build up a cooperative environment;
2. A broad range of common standards must be developed, agreed upon, and implemented between military and civilian actors. As far as it is practical, an agreement on the common use of language and standardization of terms should be achieved. A key issue in achieving interoperability is describing in common terms what each participant does.

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CONCLUSIONS

History proves that human aspects have always shaped military conflicts. Although awareness of this realm cannot guarantee success in current and future conflicts, a lack of awareness can certainly solidify resistance of local actors, result in unintended repercussions, and generate, if not a self-defeating policy, then a failing one.

Lessons learned from current operations and the efforts made to address them must not be overlooked. To capture and make the best use of these lessons learned, NATO needs an enduring capability, one that extends beyond the focus of current military operations and institutionalizes human aspects considerations into conceptual frameworks, doctrine, training and planning.

Realizing that the battle space of the future may be the human mind, this study considers implementation of human aspects related subjects as a new force capability requiring a new mindset, new procedures, new decision-making processes, and revisions to education and training programmes.

Findings and recommendations presented in the executive summary and throughout the report will not be addressed again in this closing chapter. Instead the paragraphs below summarize the key recommendations grouped according to a possible implementation horizon.

Short term implementation:

- Designating a single NATO body to coordinate different working groups and panels dealing with human aspects within NATO;
- Establishing a designated body/structure responsible for human aspects knowledge within NATO;
- Establishing a pool of subject matter experts in the social science and humanities that can support and assist NATO in human aspects field;
- Defining a suitable framework for partnering with external subject matter experts, international organizations, non-governmental organizations, academia, and think-tanks;
- Designing a human aspects database architecture;
- Assessing the utility of establishing socio-cultural capabilities for NATO;

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- Assessing the feasibility of assigning and training specially designated stabilization forces.

Medium term implementation:

- Developing a Bi-SC Capstone Concept on Human Aspects of the Operational Environment;
- Revision of draft AJP-3.4.5, *Stabilization and Reconstruction Operations*, to address human aspects as key part of the operational environment;
- Establishing deployable civil-military advisory teams with extensive expertise on social sciences and humanities;
- Revising the Comprehensive Intelligence Preparation of the Operational Environment process to properly reflect the human aspects;
- Revising the Comprehensive Operational Planning Directive to reflect human aspects as a separate Annex or Appendix or other appropriate manner;
- Revising the missions and tasks of Intelligence to include human aspects-related responsibilities;
- Establishing a SOCINT cell under J2 at Strategic and Joint Forces Command level;
- Developing E&T curricula for training SOCINT analysts;
- Developing interdepartmental, inter-agencies & inter-organizations common E&T programmes;
- Adapting the TTPs and training programmes of combat units to include human aspects awareness;
- Considering an annual NATO combined joint military and civilian exercise focused on implementation of Comprehensive Approach Strategy.

The findings and recommendations presented in this report will provide the foundation for enhancing NATO capabilities in respect to Human Aspects of the Operational Environment. Although all implications presented are of some significance to NATO, the Alliance will eventually have to decide how it will adapt, considering that the implementation of decisions taken now might become effective only in the medium and long term.

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LIST OF ABBREVIATIONS

ACO	Allied Command Operations
ACT	Allied Command Transformation
AJP	Allied Joint Publication
AO	Area of operation
AOR	area of operation responsibility
CIMIC	Civil military cooperation
DOTMLPFI	Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities, Interoperability
ESCD	Emerging Security Challenge Division
EU	European Union
GO	Governmental organization
HAOE	Human Aspects of the Operational Environment
HCOE	NATO HUMINT Centre of Excellence
HQ	Headquarters
HUMINT	Human Intelligence
INTEL	Intelligence
IO	International Organizations
ISAF	International Security Assistance Forces
NA5CRO	Non-Article 5 crisis response operations
NATO	North Atlantic Treaty Organization
NGO	Nongovernmental organization
OPLAN	Operational plan
OSINT	Open source intelligence
PSYOP	Psychological operations
RECCE	Reconnaissance
ROE	Rules of engagement
SACEUR	Supreme Allied Commander Europe
SACT	Supreme Allied Commander Transformation
SHAPE	Supreme Headquarters Allied Powers Europe

SME	Subject matter experts
SOF	Special operations forces
SOP	Standing operating procedures
STANAG	Standardization agreement
TO	Theatre of operation
UN	United Nations

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