



Cognitive Dimension: A Culture General Framework

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Date: 24 January 2020

Distribution: UNLIMITED

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BLUF:

This paper outlines a cognitive dimension framework designed to guide curriculum developers and analysts in structuring and evaluating learning events that introduce Marines to the cognitive dimension of a population in any area of operations. The framework includes a range of issues and topics organized thematically and aims to enhance Marines' ability to anticipate and influence the actions and decision-making of various populations in the operating environment to achieve desired outcomes. The paper also places the framework in the context of Marines Corps' understanding of the cognitive dimension of the information environment and describes how the Center for Advanced Operational Culture (CAOCL) supports those actions.

Introduction

The current information environment sees the growing impact and proliferation of stratagems employed by state and non-state actors to control the narratives surrounding their operations while aiming to influence, disrupt, and take control over the decision-making and behavior of adversaries and other groups. The trend is facilitated by the proliferation of technologies and the growing use of the internet and social media as well as the changing human habits of acquiring and using information. Many more individuals are now able to access information from anywhere at any time, thus increasing human interaction, while social media and other technologies enable the rapid mobilization of people and resources. Accordingly, the *2017 National Security Strategy of the United States* and the *2018 National Defense Strategy* highlight threats to U.S. security stemming from the use of information by adversaries. Both U.S. society and military forces are vulnerable in and through the information environment. The information environment (IE) includes not only the physical assets supporting the collection, storage, dissemination, and use of information but also decision-making processes, perceptions, behavior, and will of populations. In other words, the information environment has an important technical dimension, including physical infrastructure and cyber, and a psychological dimension. This psychological dimension is also called the cognitive dimension.

The Cognitive Dimension of the Information Environment

The *Department of Defense Dictionary of Military and Associated Terms* (JP 1-02) defines the information environment as "the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information."¹ The same publication does not mention the cognitive dimension. However, other publications discuss its nature. The U.S. Department of Defense's *Strategy for Operations in the Information Environment* (SOIE) characterizes the cognitive dimension as "composed of the attitudes, beliefs, and perceptions of those who transmit, receive, respond to, or act upon information."² The cognitive dimension is further identified as a constituent dimension along with the physical and informational dimensions. The document goes on to point out that "effects in the physical and informational dimensions of the IE ultimately register an impact in the human cognitive dimension, making it the central object of operations in the IE."³

¹ Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*. 8 November 2010 (as amended through 15 February 2016), p. 110.

² Department of Defense, *Strategy for Operations in the Information Environment*. June 2016, p. 3.

³ Ibid.

JP 5-0 *Joint Planning* includes a figure entitled “Holistic View of the Operating Environment” in which the information environment includes physical, informational, and cognitive dimensions.⁴ However, the publication provides no definition and discussion of the cognitive dimension as part of the information environment. Similarly, JP 3-13 *Information Operations* describes the information environment as consisting of the human-centric cognitive dimension, the data-centric information dimension, and the tangible physical dimension.⁵ It goes on to explain the cognitive dimension encompasses “the minds of those who transmit, receive, and respond to or act on information.”⁶

The Marine Corps’ Approach

The Marine Corps is taking steps to advance its position in the information environment. It established a new Deputy Commandant for Information, a three-star position that oversees all aspects of information warfare, and a new Marine Expeditionary Force Information Group (MIG) at all three Marine Expeditionary Force (MEF) commands. The *Marine Air Ground Task Force (MAGTF) Information Environment Operations Concept of Employment* (IEO CoE) lays out the approach to fighting and winning in and through the information environment.⁷ Using the JP 1-02 definition of the information environment, the document operationalizes the IE as a maneuver space. As one of the dimensions of the information environment, along with the physical and informational, the cognitive dimension includes “the knowledge, attitudes, beliefs, and perceptions of people.”⁸ The document characterizes Influence Operations as “heavily focused on the cognitive dimension of the information environment.” In the same section, elements of the cognitive dimension are represented as a list of possibilities, “such as the decisionmaker’s culture, life experiences, relationships, outside events, ideology, and the influences of those inside and outside of decisionmaker’s group.”⁹ These areas – language, regional expertise, and culture (LREC) considerations – make up the core of CAOCL’s mission to shape policy and the training and education continuum.¹⁰

Another document, the *Marine Corps Operating Concept* (MOC), calls for aligning the Marine Corps’ efforts with the Joint Information Environment concept. Most notably, the MOC calls for an agile force that “can navigate the physical and cognitive dimensions of complex situations and seize the

⁴ Joint Publication 5-0, *Joint Planning*. 16 June 2017. Figure IV-5. p. IV-12

⁵ Joint Publication 3-13, *Information Operations*. 20 November 2014. Figure I-1, p. I-2.

⁶ Ibid.

⁷ United States Marine Corps, *Marine Air Ground Task Force Information Environment Operations Concept of Employment*. 6 July 2017, p. 22.

⁸ Ibid.

⁹ Ibid, 24.

¹⁰ The Marine Corps’ IEO CoE is not alone in identifying LREC considerations when discussing the cognitive dimension. JP 3-13, *Information Operations* points out individuals’ or groups’ information processing, perceptions, judgment, and decision-making are “influenced by many factors, to include individual and cultural beliefs, norms, vulnerabilities, motivations, emotions, experiences, morals, education, mental health, identities, and ideologies.” See, JP 3-13, *Information Operations*, I-3. Similarly, JP 3-13.4, *Military Deception*, points out that understanding decision makers’ cognitive biases – cultural, organizational, and personal – is essential to any attempts to predict future behavior. Cultural biases are caused by interpreting information “through one’s own cultural knowledge, beliefs, morals, customs, habits, and cognitive styles acquired as a member of a specific social environment or group.” Organizational biases are the “potential outcome of the goals, mores, policies and traditions” of the organizations in which decision-makers affiliate. And finally, personal biases “come from personality traits, education, and first hand experiences that affect a person’s world view.” See, JP 3-13.4, *Military Deception*. 14 February 2017, p. IV-4.

initiative.”¹¹ For this purpose the document calls for the development of the cognitive capabilities of Marines to enable them to read the human terrain and navigate the social domain.¹² It points out that “cognitive capabilities, especially critical thinking-based approaches such as negotiating skills and problem-solving methods, are highly valuable”

It must be pointed out that the Marine Corps’ approach to influencing the cognitive dimension stands distinct from the approaches by the other military branches. The Marine Corps has shifted its terminology from “information operations” to “operations in the information environment.” While the former implies an action separate from all other actions a commander may take, the latter suggests that all actions Marines take, and their effects, must take into consideration the information environment.¹³ In other words, the cognition of decision-makers and populations are affected not only by information specifically intended by Marines to target them but also by any other action Marines take, whether intentional or not. Logically then, understanding of the information environment and, more specifically, of the cognitive dimension should be of interest not only to those Marines who traditionally have seen themselves as involved in information-related activities – information operations, psychological operations, public affairs, civil-military operations, etc. – but to all Marines as their decisions and actions have informational value and intended and unintended affects in the minds of targeted and non-targeted decision-makers and populations.

CAOCL’s Approach

CAOCL’s contribution to the Marine Corps’ approach to fighting and winning in and through the information environment is addressed in the concept of the cognitive domain. The concept addresses the Marine Corps’ attention to the role of LREC in equipping Marines with knowledge to address the cognitive aspect of the adversary and other actors as well as the development of key cognitive skills in Marines. In other words, the concept emphasizes not only the cognitive dimension but also the development of Marines’ cognitive capabilities as called for by the MOC. Together, these two elements – LREC-focused knowledge on cognitive dimension issues and the preparation of Marines with cognitive skills – are what CAOCL refers to as the cognitive domain. The two elements may be addressed separately or combined according to the requirements of a particular education or training event. For example, an LREC-focused class covering cultural factors that shape perceptions, logic rules, etc. might also introduce skills such as perspective-taking or suspension of judgement. CAOCL’s approach involves shifts in focus and emphasis of particular education and training materials from its existing learning areas rather than development of a new learning area.

Cognitive Dimension Framework

The rest of this paper is devoted to outlining a framework for the study and presentation of the cognitive dimension of a population in any information environment. The framework includes concepts and knowledge organized thematically and aims to enhance Marines’ ability to anticipate, influence, and think about the actions and decision-making of populations in the operating environment to achieve desired outcomes. The framework establishes a basic range of issues and topics to consider when designing training events, education materials, and other CAOCL products. The framework is not

¹¹ United States Marine Corps, *The Marine Corps Operating Concept: How an Expeditionary Force Operates in the 21st Century*. September 2016, p. 4.

¹² Ibid, p. 25.

¹³ Megan Eckstein, “Marine Corps Information Community Growing in Capability, Trying to Find Its Place in Joint Operations,” *USNI News* (January 7, 2020).

intended to include the entire range of issues and topics related to the cognitive dimension but rather those that are related to all the learning areas included in CAOCL's approach to LREC – culture general concepts, culture-specific knowledge, and regional knowledge that are particularly applicable in addressing aspects of the cognitive dimension. Since the most important aspects of the cognitive dimension vary across regions and missions, the framework is constructed as a set of possible topics rather than a fixed structure that must be used across all learning events. The framework represents the cognitive dimension element in CAOCL's Cognitive Domain Concept; it does not include concepts and skills related to training and educating Marines about cognitive skills. Nevertheless, such concepts and skills may be included by curriculum developers and analysts to meet the requirements of a learning event.

The development of the framework was informed by the writing of a Russian Culture and Cognitive Dimension Brief developed by CAOCL's European Command (EUCOM) desk analysts. The framework and the brief were created simultaneously, and challenges, issues, and solutions were shared across the two projects. Therefore, the cognitive dimension framework presented below is influenced by Russia-specific cognitive aspects. Due to the relatively significant political, economic, and social influence and control of the Russian state over its citizens, the resulting cognitive dimension framework is currently heavily state-centric. In other words, it provides a way to analyze cultural aspects of the cognitive dimension across an entire state or large population. This is a useful starting point, but it has limitations if one is seeking insights into the cognitive dimension of a single group within a larger population. The framework is a tool to gain insights into how the state – meaning state's institutions, strategies, policies, and behavior – both purposefully and unwittingly shapes the cognitive dimension of its diverse population and populations beyond its borders. The state-desired cognitive results, however, are not patterns universally shared across groups and individuals in the population. How aspects of an individual's or a specific sub-group's cognitive dimension may be affected is beyond the scope of this framework. Nevertheless, the framework is open to the inclusion of other topics and issues that add to the understanding of a cognitive dimension of a single group rather than populations in a state. For those interested in methods to explore the cognitive dimension of a sub-group in a larger population, we recommend CAOCL's *Culture General Guidebook for Military Professionals*, which provides concepts and skills for understanding how groups create, maintain, and change – sometimes contrary to state-desired outcomes – shared patterns of understanding about how the world works, how to behave, and how to interact, ideas of logic, problem-solving processes, what constitutes legitimate evidence, and so forth.¹⁴

Another note of caution, this time on the utility of this framework, is in order. The attention to the cognitive dimension is understandably spurred by an interest in anticipating and influencing the decision-making processes and behavior of populations. This framework, however, does not claim to predict how, or what, groups in the populations think and how they will behave in any given situation. There is great variation in how groups and individuals within groups behave when in similar situations. Instead, the framework provides a tool that might be used to gain insights and clues on the ways of thinking, likely and probable decision-making processes, and concomitant behavior patterns among groups in a state when processing new information.

Doctrinal publications identify the cognitive dimension as one of the three dimensions of the information environment. However, they provide very little discussion of what it is and how to operationalize it. The treatment of the cognitive dimension ranges from JP 1-02 and JP 5-0, which provide no definition of it, to the DoD's SOIE and the MAGTF IEO CoE, which define it as “composed of the attitudes, beliefs, and perceptions of those who transmit, receive, respond to, or act upon

¹⁴ Kerry Fosher, et al. *Culture General Guidebook for Military Professionals* (Quantico, VA: Center for Advanced Operational Culture Learning, December 2017). Available at <https://apps.dtic.mil/dtic/tr/fulltext/u2/1062577.pdf>

information,” and “knowledge, attitudes, beliefs, and perceptions of people” respectively. JP 3-13 is even less specific by defining it as “the minds of those who transmit, receive, and respond to or act on information.”

A dictionary definition of cognition is “the mental action or processes of acquiring knowledge and understanding through thought, experience, and the senses.”¹⁵ While this definition focuses on the mental processes of individuals, it is somewhat lacking in explanatory detail. The DoD understanding of the cognitive dimension focuses not only on these mental processes but also on the cultural factors that shape these mental processes, e.g. knowledge, attitudes, beliefs, and perceptions of individuals. In other words, the cognitive dimension as understood by DoD is an attempt to understand both the thought processes of a population and other factors that may explain and impact these processes.

In the past, anthropologists believed populations’ cognition was a process of categorizing elements of the world around them. Modern cognitive anthropologists, in contrast, have learned that rather than fitting new information in already existing categories, individuals’ understanding of and attitudes toward new situations and elements of the world emerge by associating them with their perceptions of similar situations and elements.¹⁶ This is not always a fully conscious process. For example, an individual’s positive or negative feelings about their government are built up over time and through experience with that government. Accordingly, when an individual receives and processes new information about the government, he or she is likely to filter it with already existing attitudes, beliefs, and feelings about the government. This is important because, as DoD’s SOIE points out, “effects in the physical and informational dimensions of the IE ultimately register an impact in the human cognitive dimension, making it the central object of operations in the IE.” ***In other words, for Marines to anticipate the likely responses of specific populations to their actions, they need to understand the factors that shape the mental processes (cognition) of these populations. All of these factors are inherently cultural,*** and as such, part of CAOCL’s focus in the cognitive domain centers on these underlying cultural building blocks of understanding and behavior upon which human cognition is built.

In addition to the larger generally shared factors that shape the cognitive processes of a group, there are other factors that may affect the cognitive processes of individuals within the group. Alcohol, drug use, fatigue, and stress (to name a few) may drag a person’s thoughts down or otherwise negatively affect their thinking. A recent string of victories, good news from the family, or particularly nice weather can impact people’s thought processes in a different way. However, all of these modifiers are applied on top of an individual’s enculturated ways of thinking about and understanding the world.

It is important to reiterate that the goal of educating Marines on the cognitive dimension is not to enable them to know what individuals in adversarial and other groups are thinking. It is not possible to know exactly what is going on in the minds of others. We can, however, talk about the ways in which the thought processes of others may diverge from our own and think through how that might impact decision-making and understanding of situations. In this context, understanding the cognitive dimension is about discerning patterns of shared beliefs, knowledge, attitudes, and perceptions within a culture group and the way they may affect the problem-solving and decision-making processes of individuals in that group.

¹⁵ Lexico: Powered by Oxford. “Cognition.” Lexico.com. <https://www.lexico.com/en/definition/cognition> (accessed August 22, 2019).

¹⁶ Jon R. McGee and Richard Warms, eds. *Anthropological Theory: An Introductory History* (New York: McGraw-Hill, 2012).

The Culture General Themes of the Framework

Knowing the salient elements of the cognitive dimension of a group – an adversary, military partner, civilian population, etc. – enhances the Marines' ability to anticipate, think about, and influence the decision-making process, actions, and reactions of the target population. In short, it gives Marines a cognitive advantage. The cognitive dimension, however, is the most complex dimension of the information environment.

Following are six broad themes that, taken together, operationalize the cognitive dimension as defined by Department of Defense's doctrinal publications. They include: 1) identity; 2) worldview; 3) narratives; 4) acquiring and processing information; 5) education and socialization; 6) ways of thinking/perceiving.

1. Identity

Identity exists both at the level of individual identity and at the organizational, group, and national levels as a collective identity. In the cognitive dimension, we are talking about the macro-level collective identity present within a state. This is the identity framed, promoted, and supported by the state. It might or might not be the dominant identity among people in the state. Various people might have positive or negative feelings about the particular type of identity the state promotes, but it is the one the state presents as dominant. The state supports this identity through education, socialization, propaganda, and other means, while discouraging or suppressing alternative ideas about national identity. This collective identity is reflected in official state documents, the rhetoric of political leaders, and the state-dominated information space.

In this paper the 'state' is defined as an independent, sovereign government, exercising control over a bounded area, whose borders are internationally recognized by other states. It also defines 'nation' as a group of people who see themselves as a cohesive unit based on shared cultural and historical criteria and who either govern themselves in an independent state or seek to create their own independent state. States almost invariably claim to speak and act on behalf of the nation. Accordingly, the state's visions, policies, and actions are presented as those of the nation.

States tend to be actively engaged in shaping the identity of the nation. Individuals and groups in the state, however, have varying attitudes toward the particular national identity promoted by the state. Some embrace it, others do so only partially, and yet others not only reject it but embrace identities that the state discourages or seek to eliminate. Accordingly, people and groups have varying attitudes and feelings about the identity promoted by states. Nevertheless, all individuals and groups are familiar with the state-promoted identity through education, socialization, and other processes and have varying feelings and reactions when exposed to information, knowledge, and situations related to this identity.

Nations often have a central over-arching narrative that informs a people of their past. These histories may be highly selective, as they form the backdrop for the modern national identity. These selective histories can be re-invented or tweaked to mobilize populations to support certain agendas or resist others. These narratives usually frame the ideas about the origin of the nation, its struggles with adversity and adversaries, and the foundational ideals and values of the nation at the time of its birth. The state usually presents the nation's past as a source of modern inspiration and guidance but also as a lesson and a warning related to modern challenges. In many cases the past is presented as sacrosanct, beyond criticism and revisionism as it embodies the nation's foundational values and aspirations. The presentation of the past is often used by the state to frame modern agendas and challenges. In fact, the nation's history is simply the modern interpretation of the past.

When analyzing a national identity's historical aspects, one should consider the following questions:

- a. What does the state see as the values and aspirations associated with the emergence of the nation and the state?
- b. According to the state, what made the new nation unique compared to all other nations? Does this uniqueness still hold true?
- c. What challenges and adversaries are associated with the emergence of the nation and the founding of the state? How might these entities be perceived by the state's population?

Who are we now?

What is the current state of the nation? Does it need to be defended from internal or external threats? Where the "we" of any nation are in the "now" is extremely subjective and certainly varies wildly based on who you ask. However, national governments may craft a specific idea of where a nation is at the present to set up their vision of the future and where the nation *should* be going.

When analyzing a national identity's relationship with the present, one should consider the following questions:

- a. According to the state, is the nation living up to its highest ideals and aspirations? Is it following the path it has drawn for itself?
- b. Is the nation safe physically, culturally, and spiritually, and if not, what are the internal and external threats?
- c. How does the nation relate to what the state defines as the existing international order (distribution of power among states in the system, international institutions, prevailing international norms and principles, variations in values)?
- d. Does the nation see the international system as a just and safe place for its national identity? In other words, is the international system a safe place not just for the territorial integrity of the country but also for the national identity of its society?
- e. What national values and goals might be perceived as being under threat domestically and internationally?
- f. How is the nation unique compared to all other nations, and is this uniqueness under threat?
- g. Are there any current national values, aspiration, and goals that seem to be new, not necessarily associated with those of the past? If yes, how is their appearance framed?

What do we want to be?

Many governments have guiding documents that project their desires into the future. This image of the future can also be found in the rhetoric of national and cultural leaders.

National identity is instrumental in framing a state's agenda for the future. In other words, state policies are presented as founded on the nation's values, aspirations, and goals. Not surprisingly, a state's different governments might have different policies, yet make reference to the same national values, aspirations, and goals.

When analyzing a national identity's relationship with the future, one should consider the following questions:

- a. What are the nation's goals according to the state?
- b. Where does the state see its place in the community of states, and how can it reach this place?
- c. Is the state seeking to alter/keep the international environment to make/keep it safe for itself and how?
- d. What are the conditions and risks the nation sees as unacceptable in the future?

2. Worldview

Nature of the international system

States have markedly different views of the nature of the international system and how it functions. Some states view the international system as inherently conflict and violence prone. In such a system, there is no global authority to enforce rules and keep the peace. Although there are international organizations, such as the United Nations, which exist for the purpose of settling international conflicts and preventing wars, and there is international law created to ameliorate conflicts, these organizations and institutions are powerless to prevent aggression against states. Therefore, conflicts and wars between states are frequent. Since there is no global authority to keep peace and stability, states have no choice but to rely on their own devices to survive and maintain security. They devise different mechanisms, including accumulating power, especially military power, and forging military alliances, to ensure their survivability and security.

Conversely, some states see the international system as relatively peaceful, and, while conflicts are frequent, they are mostly handled peacefully, and wars are relatively rare. Those states see international organizations and institutions as significant players in the international system, promoting conflict-resolution, stability, and peace. There is a growing number of international institutions and laws and norms that increasingly bind states together and not only facilitate conflict-resolution but also bring tangible political, economic, and social benefits to participating states. In addition, there are trends in the international system – globalization, international trade, social media, democratization – that further bind states together and make potential conflicts between them less likely to escalate into war.

These two views represent the two opposite extremes of a continuum. Almost all states fall somewhere in between. The view of the international system is the lens the state uses to interpret events and the policies of other states. It is also the foundation of its own policies. In other words, these views have strategic and political consequences; they are translated into policies.

Discerning where the state stands on the nature of the international system can be difficult. Today even the states that subscribe to the pessimistic view of the system tend to pay at least lip service to the virtues of cooperation and international law. The same states also tend to engage in cooperation. However, they also share a deep-seated distrust of cooperation and international law and institutions as a solution to their security dilemmas and challenges. Thus, only careful reading of national security documents (national security strategies, national defense strategies, defense doctrines, etc.) and statements by members of the political and security elite can reveal dominant assumptions and attitudes regarding the nature of the international system. National security documents usually have a section describing the international security environment and the challenges, risks, and threats the state is facing. The description reflects the state's views on the nature of the international system. It also makes sense to study the evolution of these documents over time to discern patterns of thinking about the international system. This approach also identifies how significant events in the international system affect the state's thinking about its security.

When analyzing a state's view on the nature of the international system, one should consider the following questions:

a. How does the state describe the general state of the international system? Do various national security documents – national security strategies, defense strategies and doctrines – see the international and regional security environment as posing consistent and long-term challenges to national interest and security or as traditionally benign and peaceful? Where do these documents place the state on the continuum?

b. How do political leaders and national security officials describe the security trends in the international and regional environments?

c. How much space do national security documents devote to international law, rules, and norms? Are they seen as enhancing national interests and security?

The nature of competition in the international system

States also differ in their views on the nature of inter-state relations in the international system. At one extreme, the state sees relations between states as a constant competition for power and influence. Even when states are not actually engaged in direct armed hostilities, they are constantly engaged in competition short of armed conflict trying to shape the strategic environment in their favor and accumulating power and influence at the expense of potential and actual adversaries. In fact, such a state sees any other state as a threat or a potential threat in the future. There are no permanent allies and enemies. Cooperation with other states is possible but only temporary while security concerns always override any potential benefits from political and economic cooperation. The only way such a state can ensure its survival and security is through the accumulation of power, especially military power, and influence.

At the other extreme, the state sees the international system as increasingly peaceful and conducive to international cooperation. Such states are increasingly engaged in political, economic, and social cooperation facilitated by the proliferation of international institutions and norms that promote conflict prevention and resolutions while enhancing mutually beneficial political, economic, and social arrangements. International institutions and cooperation between states create global norms and rules that further decrease the utility of force for solving international conflicts. The process of globalization and the spread of global values and rules delegitimize war as a tool of statecraft. States that tend to subscribe to a variation of this view make a clear distinction between war and peace and generally ignore the gray area between the two states of affairs.

Just like the state's view on the nature of the international system, states tend to fall in between the two extreme views on whether the nature of state-to-state relations is one of constant conflict and competition or one of relative peace and cooperation. The two outlooks, and their variations, lead to distinct state policies and approaches. States close to the first view tend to be constantly on "war-footing" – seeing relations with other states as a constant struggle, engaging other states in zero-sum games, seeing other states' actions as threats when there are none necessarily, keeping its populations constantly mobilized to defeat perceived threats, and privileging military power over other sources of power. The states close to the second view, on the other hand, see armed conflict as an aberration and strive to create the conditions favorable to peace, including forging economic prosperity, political, economic, and social integration of like-minded states through the creation of supranational institutions (the European Union, for example), and the spread of universally accepted values, norms, and institutions. These states tend to see cooperation between states as a win-win game – mutually beneficial and leading to long-lasting interdependence that makes violent conflict less likely. These states tend to speak of enduring alliances based on common values (NATO, for example) and of a community of states that share common values, outlooks, and goals.

Questions to consider:

- a) Do national security documents and statements by national leaders make a clear distinction between peace and war? How do they describe relations between states in terms of conflicts, competition, and cooperation?
- b) Do national security documents and national leaders identify group of states that share common values and engage in cooperative and integrative efforts? How do they identify groups of states – as enemies, adversaries, competitors, and accordingly, a threat to national security?
- c) Do documents characterize armed conflicts as inevitable in the future?

- d) Do documents see international trends making wars frequent or less frequent? Do they identify trends that make cooperation and integration between states more or less possible?
- e) Is conflict viewed as continuous or episodic, and what contributes to that viewpoint?

Status-quo vs revisionist states

States can be divided into status-quo and revisionist states. States that accept the existing international order, including the order in their immediate region, and do not make attempts to change it fundamentally are called status-quo states. These states consider the existing order to be just and aligned with their interests. They participate in the maintenance of the order and resist attempts by other states to fundamentally alter it. Conversely, states that do not accept the existing order and seek to remake it are called revisionist states. These states see the existing order as unjust and contrary to their vital interests. They either welcome changes to it and/or actively seek to remake the order, including through the use of violence. It must be kept in mind that not all states that reject the existing regional or international order take steps to remake it, as this action in most cases requires capabilities beyond what is available and risks to spur the opposition of many states. Even when states do not seek to change the system, their self-declared goals and interests reveal important information about what drives their policies and actions.

Questions to consider:

- a. Does the state see the international or regional order as either just or unjust to its interests? Does it see the order generally to be aligned with or contrary to its interests?
- b. Does the state seek to maintain the existing order or seek to alter it?
- c. What does the state see as just regional and international orders?
- d. If the state sees the regional and/or international orders as unjust, what are its policies to create just orders?
- e. If the state does not possess the power to change the regional order, would the state lend support to outside powers poised to change it?

3. Narratives

Simply put, narratives are the stories that people tell themselves and each other to explain what is happening, why things are the way they are, and how things should be. Narratives are not always interpreted in the same way throughout a population and sometimes have glaring inconsistencies or overlook certain events. It is also important to know that narratives are constantly evolving as they are retold and new events occur.

While the previous sections, Identity and Worldview, explore the narratives and outlooks at the state level – the ones that are formulated and promoted by state authorities – this section explores narratives and outlooks that exist within the state at the group level. Some of them are embraced and promoted by the state, while others the state either ignores or actively suppresses.

Identity narratives

Identity narratives are the commonly held stories and histories that tell a population who they are as a collective body. Different sections of a population will often have different identity narratives that may share or disagree on certain aspects. This is often informed by popular ideas of the history of the nation and people, which do not necessarily line up perfectly with the objective facts of what happened.

Questions to consider:

- a. What are the alternative identity narratives, especially those that are not promoted by the state?

- b. What are the groups in society that embrace identity narratives different from the ones promoted by the state? Are any alternative identity narratives more dominant than the ones promoted by the state?
- c. Are identity narratives compatible or incompatible?

Mobilizing narratives

Mobilizing narratives are stories/sets of beliefs about events (past, present, or future) that cause groups of people (either intentionally or unintentionally) to take action (or not). Mobilizing narratives can be exploited to rally one group of society against another or to rally a group for political purposes. Mobilizing narratives are of special interest in operations in the information environment.

Questions to consider:

- a. What are the narratives the state has traditionally exploited to mobilize the population or particular groups within it?
- b. How effective is the state in exploiting mobilizing narratives?
- c. What narratives in a society have the potential to mobilize the entire population or certain groups?

Clashing narratives

Often times, the narratives that groups within a society tell themselves about who they are and why things happen run counter to one another. One group in the state may believe a completely different set of 'facts' than those held by another group. These differences of perspective may create rifts between groups. However, because humans are often more rationalizing than rational, it is not at all uncommon for individuals or groups to believe in multiple conflicting narratives, emphasizing where the narratives agree and selectively dismissing or ignoring where they do not.

Questions to consider:

- a. What are the narratives that are incompatible and have the potential to mobilize significant groups in the population against each other?
- b. What events and conditions in the past have led to conflicts based on clashing narratives?

Creating/exploiting narratives

Because narratives help both to inform who a people are as a collective group and to explain what is going on in the world, the manipulation of narratives can have a widely felt impact on populations. This may be especially true when navigating the parts of narratives that contradict each other. The ever evolving nature of narratives also leaves them susceptible to drastic change, both intentional and unintentional.

Questions to consider:

- a. How has the state or an elite in the state traditionally exploited/created narratives to support their interests? For what purpose?
- b. How effective is the state or an elite in the state in exploiting/creating narratives?
- c. What are the narratives that have traditionally been used to mobilize society at large and groups within the state? What groups in the state are easily mobilized?

4. Acquiring, Processing, and Communicating Information

How people acquire, share, and process information differs from state to state and from group to group within a state.

Formal vs informal sources of information

Different nations and cultures will draw different lines between what is considered a “formal” source of information versus what is considered an “informal” source of information. The formal sources might include news media, official announcements, state-sponsored or sanctioned education, scientific publications, etc. while informal modes could include gossip, sermons, ad hoc gatherings, daily conversations, etc. It is important to remember that just because a source is informal does not mean it is not useful. In fact, such a source offers insights into what matters to people.

Questions to consider:

- a. What are the formal and informal sources of information available to the population in question? What are people’s means to get information? Do they use mass media, word of mouth, or other means to get information?
- b. What groups in society use formal sources of information and what groups use informal ones? What groups use both? What explains the differences?
- c. Who dominates the formal sources of information (state, independent outlets, mixed system, etc.)?
- d. Who dominates the informal sources of information?
- e. When do people switch between formal and informal sources of information?

What is a legitimate source of information?

Understanding what people in a given area consider a legitimate source of information is important. Some cultures pass on important information through word of mouth or generational storytelling. Other groups, however, may look at word of mouth news passing as unreliable or unverified. They may prefer that their information come from “verifiable” or “credentialed” sources or perhaps even government-sponsored sources.

Questions to consider:

- a. What is considered to be a legitimate source of information?
- b. Is the legitimacy strong or fluid (do people change their minds about the legitimacy of sources)?

Trust vs truthfulness (veracity)

Do the people in the state trust the sources of the information presented to them, and in turn, is that information actually trustworthy? Some nations have a stranglehold on public information and control what news makes it to the people and what is censored. The people in these nations may or may not know that the information presented to them has been manipulated (or in some cases, outright manufactured.)

Questions to consider:

- a. Do people trust the sources of information available to them (Remember, consumption of information is not necessarily a sign of trust)?
- b. Which sources are trusted, and which are not (government vs. public vs. private, etc.)?
- c. How do people verify truthfulness?
- d. Is the information environment free or restricted?
- e. How might people/groups differ in their trust and why?

Alternative sources of information

Another consideration is in what other ways might people receive information. While this is a relatively self-explanatory category, it may include anything from access to the dark web to ‘underground’ radio broadcasts or balloon-dropped informational leaflets.

Questions to consider:

- a. What are the alternative sources of information?
- b. Do people use alternative sources of information to supplement their knowledge or a main source of information?
- c. Who dominates the alternative sources of information?
- d. What is the reach of the alternative source of information?

Legal controls on information

Questions to consider:

- a. How does the state (or other influential parties) try to control access to information?
- b. Is there a relatively unregulated free flow of news and information, or are there groups that attempt to control the information access of parts of the population?
- c. If those controls exist, do they apply evenly across the nation, or do some groups have greater access than others?

Communicating information and conveying meaning

States, groups in the state, and individuals use distinct forms of communication styles including verbal, nonverbal, and paralinguistic cues as well as objects, space, and behavior to convey information and meaning. Individuals can communicate using language, gestures, facial expressions, tone, pitch of voice, and various behaviors. The state, too, has multiple ways to communicate information and convey meaning. If it wants to demonstrate intent and resolve to an adversary, for example, it can issue verbal declarations, deploy troops, conduct large military exercises, test a new weapon system, make an alliance with another state, mobilize the population and national institutions for action, etc. States differ in the way they communicate. Some states prefer direct verbal communication, while others might prefer to do it mostly through behavior, and all use combinations of both.

Questions to consider:

- a. What is the preferred style the state uses to communicate with the outside world? Is there a difference in how the state communicates with different outside actors?
- b. What is the preferred style the state uses to communicate with groups and individuals inside the country? Is there a difference in how it communicates with different groups in the state? How effective is the state's communication with groups inside the state? How and why might this effectiveness vary from group to group?

5. Socialization and Education

Socialization

Socialization is the process of the transmission of socially acceptable formal and informal knowledge and culture either between different or within same generations. It is a continual process where individuals learn about the roles, status, and values that they should have in society. The agents of socialization include the family, schools, peer groups, mass media, workplace, religion, and others. States have different degrees of control and influence over the agents of socialization. Some states have a relatively limited role either by having little influence and control over the agents of socialization or by having influence over some of them. Other states have a relatively extensive role in socialization by having influence and control over all agents. A state, for example, can exert influence over workplace socialization through various means, including being the employer, issuing state regulations, instilling a particular workplace culture, and using incentives and punishments to encourage desired behavior. Similarly, a state can exert enormous influence over socialization by dominating mass media and being able to promote desired news and messages while suppressing others.

When one analyzes the role of the state in socialization, one should pay attention not only to the degree to which the state is engaged in the process but also to the type of values, norms, attitudes, and behavior it is trying to instill among the citizens and to the degree it succeeds.

Questions to consider:

- a. What is the state's role in socialization practices?
- b. Is there an overarching ideology that shapes the state's influences and practices in citizens' socialization? How might national narratives affect this?
- c. If state institutions have limited or no role in the socialization processes, what institutions have influence over that process? What are the ideological foundations of these institutions? Do these institutions have explicit programs and goals in socializing individuals and groups in the state? How effective are they?

Education system

Education is part of the socialization process in the state. Education transfers formal knowledge to people and teaches them to learn on their own while preparing to participate in social life. States have varying degrees of control and influence over the education process. A state can have almost complete control over education through a centralized system that controls the curriculum and budgets, sets uniform education standards and goals, prepares the educators and directly hires them, evaluates acquired knowledge through state administered tests and exams, and controls student participation.

The formal education process has both education and socializing functions. In fact, the education process can enable the state to attempt to eliminate cultural variation among students and re-socialize others. When analyzing a state educational system, one must pay attention to the following: a) the degree of a state's control and influence over the educational process, b) the characteristics of the knowledge and culture the state is trying to promote among the participants in the education system, and c) the effectiveness of the state to promote desired knowledge and culture. In addition, the analysis must identify the degree of variation in the educational system, especially when the state, either by design or because of institutional weakness, has less control and influence over the process. The educational system might be decentralized and controlled by local authorities. A share of the student population might be outside the formal education system (think home schooling), or a share of the student-age population simply might not participate in the education process.

Societies have different orientations toward and beliefs about developing knowledge. Some kinds of learning are perceived to be the responsibilities of the family and/or the larger community, while other kinds are seen as the responsibility of the formal education system dominated by the state. In some cases, the state might see itself as the dominant player in developing knowledge and orientations in the society, but various social groups might resent the state's role and develop knowledge not sanctioned by state authorities.

Questions to consider:

- a. How is the education system structured (centralized, decentralized, etc.)?
- b. What is the extent of the state's control over the education system?
- c. If the state has limited control over education, what institutions have control?
- d. What kind of citizen do the institutions in control of education seek to create?

Arts and literature

In addition to aesthetic functions, arts and literature also transmit values, norms, and attitudes. The state can potentially exploit arts and literature for its own purposes. The state can have a hands-off policy towards the arts including very limited financial support. The state can also have very intrusive policies in the arts while leaving little space for autonomous art free of government control.

A state with large control and influence in this area has multiple instruments at its disposal: a) direct financial support for the arts, b) state-owned art institutions, c) prosecution of what it sees as dissident voices in the arts, and d) financial incentives to and state promotion of artists and authors who toe the government line.

When one analyzes the role of the state in arts and literature, one must pay attention to: a) the extent of the state's control and influence, b) the effectiveness of the state's control and influence, and c) the characteristics of the culture and messages promoted by the state through arts and literature.

In addition to the state's role in this sphere, one must consider the following: a) the existence of an autonomous sphere in the arts and literature, wherein artists and authors preserve creative freedom regardless of the state's attempts to control social activities, b) the extent of the reach of the independent artists and authors to the wider society and specific audiences, c) the characteristics of the culture and messages promoted by independent artists and authors (general trends), and d) the appeal of the culture and messages promoted by the independent artists and authors.

Questions to consider:

- a. What is the state's role in arts and literature?
- b. If the state has a role in arts and literature, does it seek to promote certain values, attitudes, and narratives? How successful is the state in doing so?
- c. What are the narratives, values, and attitudes promoted by dissident artists and authors? How successful and influential are those authors? What are the groups in the society that are particularly receptive to the work of those dissident authors? What external influences and discourses may affect such works?

State control over what people learn and do

States have varying degrees of control over what people learn and do. States with extensive control over its citizens are capable of creating a society where dissent is suppressed and variations in beliefs, knowledge, attitudes, and perceptions are discouraged and punished. Conversely, states that, intentionally or due to lack of institutional capacity, have relatively lax control allow societies in which such variations can be significant.

Questions to consider:

- a. What is the state's extent of control over what people learn?
- b. Does the state have an effective system to punish and correct deviations from state-desired ends?
- c. What is the extent of commitment people have to the state's declared goals in the socialization process? Are there any groups in the state that openly or tacitly reject the state's declared goals in the socialization process?

6. Ways of Thinking/Perceiving

While worldview, as discussed in a previous section, generally captures what the government of a state thinks about the state of the world, this section addresses what various social groups within the state see as important, consider as good and bad, see as the explanation of why things happen (ideas of cause and effect), and determine as legitimate evidence when trying to figure things out. These inform those groups' views and their understanding of the way the world functions. These questions are related to the ideas of what groups in society believe to be logical and rational. Considering these areas will deepen understanding of how the other elements present within the information environment are perceived, form, and change over time.

Ideas of logic and rationality

Societies and groups have different beliefs and ideas of what is logical and rational in explaining ordinary things as well as of complex and abstract issues. Some groups believe in the scientific method and dispassionate arguments as the best approach to explaining things simple and complex. Other groups, in contrast, might use a mix of supernatural explanations, myths, and emotions to explain things. It is important to point out that most groups use a mix of the two approaches depending on circumstances and context. For example, an oncologist at a research hospital may pray to a god asking for guidance in finding an effective cancer treatment.¹⁷ On the other side of the same coin, a cancer patient may go to a doctor for chemo radiation treatment and also put in a prayer request for healing at a weekly prayer group. Seemingly ‘opposite’ logic/belief systems might actually end up being complementary.

Questions to consider:

- a. Who can answer questions about life and the world?
- b. What counts as proof or evidence?
- c. How might local ideas of logic and reasoning clash or contradict each other? How are those clashes reconciled?

Ideas of fate/predestination

Some groups believe that people have little control over their destiny regardless of their efforts and that their fate is predetermined by forces beyond their control. Others believe that people can be masters of their own fate. Yet others believe that, although history has a certain direction, people and groups can figure out the natural laws of history and actively navigate its course.

Questions to consider:

- a. Does the population generally think of the future as pre-determined, or do individual actions affect the outcome of events (master of your own fate *vs inshallah*)?
- b. To what degree do individual actions and contributions impact the future?
- c. Is there an overall goal or end state that history is working toward? If there is an overall end state that history is working toward, what are the rules and laws that govern this process and how can people affect it?

Ideas of self-other relations

Most individuals identify in some way with larger groups based on factors such as ethnic origin, nationality, religion, occupation, etc. Membership (or lack of membership) in these groups can drastically affect what kind of access and influence individuals may have.

Questions to consider:

- a. What are the prominent group identities in the state, and what does it mean to be an insider?
- b. How easily can people shift in and out of these groups?
- c. Who is part of the ‘in-group?’ Who falls under the category of ‘other?’
- d. What are the parameters for group membership? Are they fixed, or can they change?
- e. How does being a member of a group vs. being an outsider impact relations and perceptions?

Scalability and interconnectedness of events

How people tend to look at global events across space and over time is another factor to consider. Some groups tend to interpret events in a narrow context looking at its immediate causes and

¹⁷ *Culture General Guidebook*, 84.

look at world occurrences as individual, discrete events. Others, on the other hand, tend to place events in a larger historical, political, economic, and social context and thus establish causation that includes multiple factors and dimensions. It is akin to looking to figure the deep roots of an event or an occurrence rather than its immediate causes.

Questions to consider:

- a. Do the politics of long past events hold any sway in the public mind?
- b. Are there always reasons for the occurrence of events? Or do things sometimes happen for no reason? Are there random, accidental events or is everything caused by design, even if not necessarily an obvious one?
- c. When facing a particular situation, do people consider how it may be linked to and impact other situations?
- d. How does the significance/magnitude of an event change over time and physical distance?

Time orientation

Time is not an absolute concept, but a relative one that is culturally conditioned. Some people, particularly in the West, perceive time from the physical aspect, underscoring its regularity, objectiveness, and linear progression. It is believed to be definite and valuable, used to measure achievements and profits. Accordingly, social norms encourage action and discourage waste of time. Accordingly, people tend to divide time into accurate segments, along which routines are organized. On the other hand, some people conceive time to be subjective, relative, and flexible. Time is not viewed as linear but cyclic. Each day repeats itself, the seasons follow one another, the planets seem to revolve in repeating patterns, people are born, grow up, age, and die, and another generation repeats the process. In this conception, time is of unlimited supply and cannot be wasted. This attitude to time does not favor quick decisions and constant action. It also encourages the consideration of the past as the appropriate context of the present as it provides valuable experiences for analogous situations in the present and the future.

Questions to consider:

- a. Do punctuality and timelines matter to the population in question?
- b. Are people spending time getting to know their interlocutor before proceeding to discuss the business at hand or do they go straight to business?
- c. How might different ideas of time complicate planning and the execution of operations?

Temporal dimension of thinking about goals

People differ in what they consider as a reasonable amount of time to achieve their goals. Some groups are set on achieving goals quickly and discard courses of actions that either require attaining their goals in some undetermined time in the future or do not guarantee success in the foreseeable future. Other groups tolerate the unpredictability of the future and choose courses of action that either require substantial amount of time or do not necessarily guarantee success but seem as reasonable in the long run. For example, the U.S. way of thinking favors quick attainment of goals and frequently shuns courses of actions that in the short run might be costly and are lacking the obvious guarantee of returns in the distant future. Managers of publicly traded U.S. companies, for example, are constantly under pressure to provide evidence of profitable operations each financial quarter lest shareholders question their management philosophy and style. The same could be said of the application of military force.

Questions to consider:

- a. Do people spend efforts creating timelines and deadlines? Do they create plans, including goals, resources, budgets, timelines, and deadlines? Alternatively, do people define goals

without necessarily creating resourced plans and timelines? Consider state budgeting practices.

- b. Are people afraid of failing to attain goals in the short run?
- c. Are people willing to incur costs in attaining goals in the long run?

Conclusion

Knowing the cognitive dimension of a cultural group enhances the Marines' ability to anticipate and influence the decision-making process, actions, and reactions of the target population. It must be underscored once again, however, that no matter how deep the knowledge one gains of the cognitive processes typical for a group, there is no way to be certain what members of a group think at any given time or accurately predict what they would think or how they would behave in any situation. Even if people in a group have been exposed to the exact family, group, social, educational, and state influences in their lives (something that is impossible), members of that group will not make identical decisions nor exhibit the same behavior. However, knowing the cognitive process of that group can certainly enable Marines to identify plausible and likely decisions and behaviors that are consistent with the group's ways of thinking about problems and situations learned through education, socialization, and personal experiences.

One can take the Marine Corps as an example to illustrate this point. A Marine goes through boot camp or Officer Candidate School/The Basic School, training and professional military education events, deployments, and other professional and personal experiences through which the Marine Corps, as an institution, seeks to instill a certain way of thinking and behaving in Marines. For this purpose, the institution creates and maintains a social context – supported by doctrine, policies, and desired values, rules and norms – with a dynamic and reciprocal interaction of the individual Marine, environment, and behavior. Ultimately, the institution seeks to create a Marine whose thinking and behavior best serve the purpose of the Marine Corps. However, although the individual Marine might have gone through a rigorous and constant process of internalizing the cognitive skills and processes desired by the institution, there is no way to confidently predict what exactly the Marine will think in any given situation – thus, the variations in individual Marines' behavior in similar situations.

Of course, the example with the Marine Corps should not lead to the belief that this is *how* states, or cultural groups, shape individuals' cognitive processes (most states do not have Marine-like doctrines, policies, education and training institutions, and sets of rules and regulations governing the daily life and functions of their citizens). Rather it is to point out that states, and cultural groups, to varying degrees *do* shape the thinking and behavior of individuals. Accordingly, this framework seeks to reveal how states, or cultural groups, create the social context in which individuals acquire and maintain knowledge, values, and norms that shape behavior. However, what the individual would think in a specific situation is impossible to predict. Instead, the most we can hope to accomplish is to anticipate likely trends in thought based on the understanding of the social environment that shaped and continually informs the thinking of the individual.