

# ORIENTATION: KEY TO THE OODA LOOP – THE CULTURE FACTOR

**Dr. Donald A. MACCUISH**

Associate Professor  
Strategy, Leadership, and Military Ethics  
Air Command and Staff College  
Maxwell AFB, AL 36112

*The late Colonel John Boyd developed what he called the OODA-Loop as both a learning and decision making model to help us better understand how we make decisions and learn. His OODA-Loop model consists of non-sequential elements: Observe – Orient – Decide – Action. He contended if one could cycle through these phases quicker and more accurately than one's adversary you could then get inside your adversary's OODA-Loop and "win". The key to the OODA-Loop he noted is Orientation. He only drew one diagram of his OODA-Loop. Only in the Orientation phase did he elaborate component elements. These elements are: Cultural Traditions, Genetic Heritage, Analysis/Synthesis, New Information, and Previous Experience. All of these elements he contended are interconnected. Thus, the interaction of all these factors effects how we orient ourselves to the situation at hand. In this article I will share my view of the "Culture Factor" in Orientation.*

**Key words:** *OODA-Loop, cultural traditions, genetic heritage, analysis/synthesis, new information, previous experience*

## 1. INTRODUCTION

By way of introduction I want to first discuss what the OODA-Loop is and then what it is not. You will make numerous assumptions based on your mental image of it. I suggest that if you visualize the OODA-Loop as Boyd diagramed it your accompanying assumptions will be quite different from all other depictions. To those readers who have studied Col. Boyd and have seen his depiction of the OODA-Loop I apologize for I do not want to come across as condescending.

For those who are not as familiar, the distinction between the two diagrams is significant.

As you can readily see from the diagram in **Figure 1** the OODA-Loop is both complex and dynamic. Boyd drew his diagram once and figure 1 is how he illustrated it. As human beings we constantly go through this OODA-Loop process every minute we are awake. Perhaps our minds continue while we are asleep. That notion on my part is only speculative. When you drive a car you are constantly, and unconsciously, looping and looping and looping. Your orientation is on

your driving but you are constantly observing, gathering, and filtering information from your surroundings. Usually your driving habits improve as you gain more experience behind the wheel.

Military training and education, for example, helps you learn new skills and improve those you already have. Simulators help pilots perfect

their knowledge of the aircraft, hone flying skills, develop better situational awareness, etc. In a previous issue of this Journal Dr. Laurian Gherman stated that the OODA-Loop is a learning model[1], and it is. But it is also much more than that. In the same issue, Dr. Cezar Vasilescu wrote that the OODA-Loop is a decision-making model.[2] He too is correct.

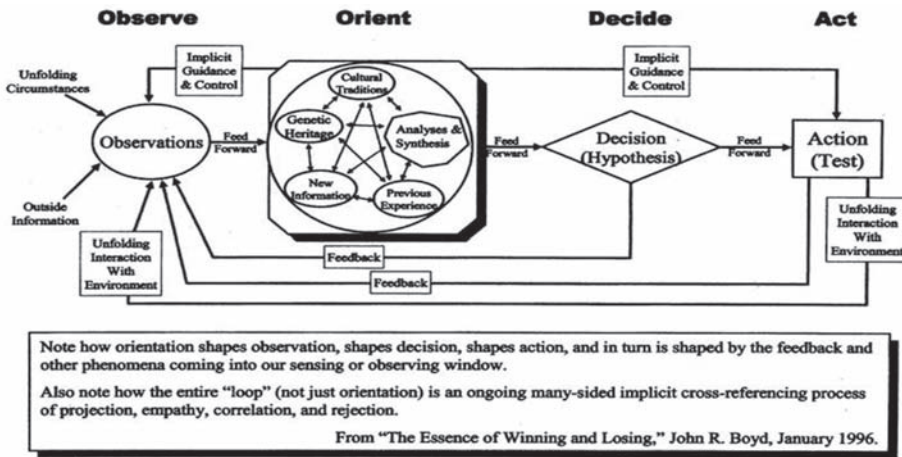


Figure 1. Boyd's OODA-Loop[3].

Unfortunately too many researchers, educators, military professionals, and others do not use Boyd's illustration, rather they have opted for a representation that overly simplifies the OODA-Loop, see Figure 2.

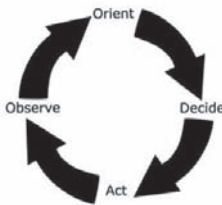


Figure 2: Simplified version of Boyd's OODA- Loop

One reason this depiction is so misleading is it grossly over simplifies the OODA-Loop.

Second the Figure 2 representation suggests that the OODA-Loop is based on stage theory, which definitely is not the case. A stage model approach means that the individual first Observes an event, then Orients to it, Decides on a course of action, and thence Acts on that decision.

Then the process is repeated. If one understands the OODA-Loop from this perspective the only conclusion one can reach is that the person who makes faster decisions wins. Nothing could be further from the truth. If you

are improperly oriented you make wrong decisions faster and thereby dig your hole deeper more quickly.

Let me provide two examples to clarify the point I am trying to make. During the Vietnam Conflict senior US military leaders were incorrectly oriented to the situation. They expected and wanted to fight a conventional war. As a result the Army and Air Force each had two matrices to measure success. These were body count and battles won (Army) and target sets bombed and bomb tonnage dropped (Air Force). It was not until Ambassador Ellsworth Bunker, General Creighton Abrams, and William Colby replaced the old breed and formed a Department of State, Military, and CIA triumvirate. This new triumvirate changed our orientation and we started fighting a population centric counterinsurgency type of war [4]. But, by then the American home front had been lost leading us to withdraw with our tails between our legs.

A more recent example is Operation Iraqi Freedom (OIF). In this case the Bush Administration and General Tommy Franks were focused on fighting Desert Storm II. During the months and weeks leading up to the launching of OIF, Saddam Hussein showed off his military prowess with parades and other types of military demonstrations that were air on television. Among the forces always present were the white clad Saddam Fedayeen. No one took notice.

When the American units finally met the Fedayeen on the battlefield it took a little time to adjust, but the young soldiers on the ground as well as

their immediate commanders quickly reoriented themselves. Battalion and Brigade commanders told their superior officers that we were fighting an insurgency, but were not believed. Lieutenant Generals Scott Wallace and John Conway were the first two senior officers to recognize that there was an insurgency going on inside of conventional military operations. Unfortunately for Wallace he shared this information during a joint interview with the New York Times and Washington Post [5]. It was only because of Lieutenant General McKiernan's intervention with General Franks that he was not relieved of his command for stating in his interview *"The enemy we're fighting is a bit different than the one we war-gamed against, because of these paramilitary forces."*[6]

To emphasize again if you are not oriented to a situation correctly, whether it is in the military, business, politics, etc., it makes no difference how quickly you learn because you will not observe the situation or process new information correctly. If you are not oriented properly it makes no difference how quickly you make decisions. Although other factors, as depicted in figure 1, are involved as well your cultural traditions are a significant factor in interpreting your observations and thus the decisions you make.

## 2. CULTURE IN ORIENTATION

In his depiction of Orientation in his OODA-Loop diagram Boyd included cultural traditions interacting with the other factors genetic heritage, previous experiences, new

information, and analysis/synthesis in a dynamic fashion. Yet the only explanation he gives about this is in his briefing titled Organic Design for Command and Control slide 11 where he states *“Interactions, as shown, represent a many-sided implicit cross-referencing process of projection, empathy, correlation, and rejection.”*[7] Two slides later he notes: *“Orientation, seen as a result, represents images, views, or impressions of the world shaped by genetic heritage, cultural tradition, previous experiences, and unfolding circumstances.”*[8] In his seminal text on the OODA-Loop Colonel Frans Osinga, Ph.D. contends that *“Boyd has developed the argument that orientation is the center of gravity for command and control.”*[9] Later in his presentation Boyd states *“Orientation is the schwerpunkt. It shapes the way we interact with the environment – hence orientation shapes the way we observe, the way we decide, the way we act.”*[10]

What is it then that Boyd trying to tell us? He is saying the orientation is a factor of the dynamic interaction of one’s genetic heritage, cultural traditions, new information, previous experiences, and our analysis and synthesis of all these factors. The process is such that this interaction is constantly and rapidly cycling over and over again. Additionally, we do it unconsciously. And, if we understand this process there are many ways we can influence it – education and training for example.

With regard to culture we need to know what it is and why it is important. The Canadian Foreign Service Institute (CFSI) is helpful in this matter. CFSI contends:

*“Culture rules virtually every aspect of your life and like most people, you are completely unaware of this. If asked, you would likely define culture as music, literature, visual arts, architecture or language, and you wouldn’t be wrong. But you wouldn’t be entirely right either. In fact the things produced by a culture which we perceive with our five senses are simply manifestations of the deeper meaning of culture – what we do, think and feel. Culture is taught and learned and shared – there is no culture of one. And yet, culture is not monolithic – individuals exist within a culture. Finally, culture is symbolic. Meaning is ascribed to behaviour, words and objects and this meaning is objectively arbitrary, subjectively logical and rational. For example, a “home”, is a physical structure, a familial construct and a moral reference point – which is distinct from one culture to another.*

*Culture is vital because it enables its members to function with one another without the need to negotiate meaning at every moment. Culture is learned and forgotten, so despite its importance we are generally unconscious of its influence on the manner in which we perceive the world and interact within it. Culture is significant because as we work with others it both enables us and impedes us in our ability to understand and work effectively together.”*[11]

If we simply look at our cultural traditions we need to ask ourselves how these traditions help us learn and make decisions? Schein reminds us that there are three levels of culture – Artifacts (visible structures/processes and observable behaviors), Espoused Beliefs and Values (ideals and goals,

ideologies, rationalizations, etc.) and Basic Underlying Assumptions (unconscious, taken-for-granted beliefs and values) [12]. The CIA World Factbook 2012 may be helpful and a good starting point. The book reports that according to the 2002 census there were more than 7 ethnic groups in Romania specifically Romanian, Hungarian, Roma, Ukrainian, German, Russian, Turkish, and other [13]. Each of these ethnic groups has its own cultural traditions. If we include the element of religion, Eastern Orthodox, Protestant, Roman Catholic, Muslim, none, etc. [14] as an additional factor we see how one's cultural tradition becomes more robust. Each ethnic group has the three levels that define how members observe their environment. The three levels of culture of each religious group add yet another cultural heritage dynamic.

Schein further notes that every organization has its own culture. Thus a person of ethnic group A with a religious background of X becomes a member of an organization, such as the military, they adapt to that organization's cultural dynamics. Builder tells us that military services and institutions have their own distinct and enduring personalities (cultural traditions). Thus we cannot simply assume that all members of a nation's military view their environments in a similar fashion [15]. These factors and others as well, affect how people from different nationalities, organizations, military services, etc. can observe the same situation and have quite different interpretations that result in their making different decisions.

If you are trying to sell your program to a staff member from a

different service, or a politician, or the public you might become quite frustrated because they may be perceiving things quite differently because of their cultural tradition. Although these differences may be intuitive they may be more dramatic than that.

Several years ago I was conducting some research on culture. My Google search identified the Canadian Foreign Service Institute (CFSI) web site among others. As I worked my way around the site I hit upon a short presentation about a man visiting a foreign country. He could not understand why he could not communicate well, interact with the local people, or integrate himself into the community. After reflecting on the situation he realized that every one of the locals wore green glasses. He therefore concluded that if he purchased green glasses then his orientation would be like that of the locals. When he put the green glasses on not much changed because he failed to consider that the people from his country always wore yellow glasses. He simply put the green glasses over his yellow ones.

My point here is that even if we know and understand our own cultural traditions that may not be enough to succeed in a joint staff assignment, working with political leaders, or even succeeding on the battlefield. As I noted previously the American experiences in Vietnam and Operation Iraqi Freedom may be illustrative. In Vietnam, our senior military leaders wanted to and expected to fight a conventional war. Why was this so? It was because they all fought in World War II and Korea – two conventional wars.

Army doctrine supported force on force conflict and this was reinforced because we were focused on the ‘real’ war and expected confrontation with the Soviets in Europe. Air Force leaders were wedded to the culture of the Strategic Air Command which was built upon the foundation of the WWII Bombing Campaign and Japan’s surrender after dropping two atomic bombs on Japan. Furthermore Air Force leaders believed that had they been allowed to employ airpower properly we would have easily won. [16] So that is how we fought – a strategic air campaign. If they had studied the cultural traditions of the Viet Cong and North Vietnamese things may or may not have been different. Our opponents saw us as colonial occupiers. Their cultural tradition in fighting occupiers was by fighting unconventionally as insurgents.

In Operation Iraqi Freedom General Tommy Franks and his boss Secretary of Defense Donald Rumsfeld believed they were going to fight another Desert Storm type of war. In spite of evidence to the contrary they never deviated from this belief. Their orientation influenced all their decisions. Unfortunately their orientation, partially influenced by cultural traditions, was flawed and today we are paying the price for that error.

### 3. MITIGATING THE CULTURE FACTOR

What can we do rather than simply putting on different colored glasses?

Boyd’s message to us about orientation on slide 18 of the same

briefing maybe helpful: *“Expose individuals, with different skills and abilities, against a variety of situations -- whereby each individual can observe and orient himself simultaneously to the others and to the variety of changing situations.”*[17]

I believe that Boyd may be suggesting things such as Joint Professional Military Education schools to include attending service schools of one’s allies, joint assignments, participating in cultural exchanges, and so forth. Studying foreign languages, reading books about culture, watching foreign television programs and listening to foreign radio programs may also be helpful. But I do not think that goes far enough if we want to mitigate our own cultural prejudices.

The CFSI publishes a number of materials that provide insight into this difficulty. One publication states that people need to become interculturally effective. Such a person has three main attributes: an ability to communicate with people of another culture in a way that earns their respect and trust. Has the capacity to adapt his/her professional, technical, and managerial skills to fit local constraints; and has the capacity to adjust personally so that they can make themselves at ease in the host culture [18]. Although this publication does not discuss its course on to develop the attributes mentioned it does contain a list of competencies and behavioral indicators [19]. Knowing what these are it is not too difficult to develop educational and training programs to teach the necessary competencies from the lowest ranking service member to senior leaders.

In a different publication the CFSI discusses the issue of self-monitoring behavior [20]. Citing research on cultural values CFSI noted *“that national cultures vary in main dimensions – power distance, uncertainty avoidance, individualism and masculinity – and that these differences ‘have profound consequences for the validity of the transfer of theories and working methods from one country to another.’* [21]

Recently Lesenciuc and Codreanu wrote an article for the Romanian Journal of Defense Resources Management emphasizing the point. They use the term cultural competence meaning the ability to *“adequately perform in a given environment”*. [22] In addition, Lesenciuc and Codreanu note the importance of communication competence which *“refers not only to the capacity to adapt to the surrounding environment, but also to the physical and psychological features of an individual that enable the latter’s communicative performance in a given environment.”*[23]

Training and education are but two important ways we can mitigate our own cultural prejudices. But it takes time and effort on each individual’s part as well. A formal process needs to begin when one enters, in our case, military service. The individual needs to understand why being culturally effective is important. We need to learn the self-monitoring behaviors and practice them until they become an unconscious way of life. Some will have us believe that the youngest and less educated soldier cannot master these skills. This is not true.

When General H.R. McMaster learned that the 3rd Armored Cavalry Regiment (3rd ACR) he commanded was tasked to deploy to Iraq he organized and implemented a comprehensive training regimen that included cultural effectiveness. Upon deployment to the Iraqi city of Tal Afar which was an insurgent hot bed his soldiers immediately began utilizing the skills and knowledges they had learned in their pre-deployment training. They successfully eradicated the insurgents from the city helping the locals establish law and order.

We may not always have the lead time General McMaster and his 3rd ACR had. This is especially true when it comes to peacekeeping, Responsibility to Protect (R2P), and similar missions. But if we start now and make being culturally effective a priority then we will be able to mitigate our own cultural prejudices. Our self-monitoring will become one of our cultural traditions.

Cultural effectiveness is not limited to conflict or conflict-like situations. Cultural competence and effectiveness will help us work better and more closely with colleagues from different services and specialties. For example, consider representative from each of the military services along with several legislators having a discussion perhaps about the need for new items of equipment. Have you noticed that it is difficult for them to comprehend what each other means? Perhaps they lack both cultural knowledge and the cultural communications competence skills to be understood.

In addition, cultural and communication competence or effectiveness will help us in working

with allied and coalition partners. It will also help us in working with our political leaders. Cultural effectiveness is important in other fields as well such as business, education, and interaction with our neighbors.

In summary, cultural traditions affect how we orient ourselves to a particular situation so we can observe it more accurately. We can mitigate some elements of our genetic heritage through medicine and good health. We can do the same with our cultural traditions.

## REFERENCES

- [1] Gherman, Laurian (2011). “The Second Revolution in Military Affairs” in *Journal of Defense Resources Management*, No. 1(2). Brasov, Romania: Military Technical Publishing Center. pp. 57-66.
- [2] Vasilescu, Cezar (2011). “Effective Strategic Decision Making”, in *Journal of Defense Resources Management*, No. 1(2). Brasov, Romania: Military Technical Publishing Center. pp. 101-106.
- [3] From Boyd’s briefing “The Essence of Winning and Losing” (1995). Source is Dr. Chet Richard’s briefing “Time as a Competitive Weapon,” 2000.
- [4] See Sorely, Lewis (1999). *A Better War the Unexamined Victories and Final Tragedy of America’s Last Years in Vietnam*. Orlando: Harcourt, Inc.
- [5] Gordon, Michael R. and B.E. Trainor (2006). *Cobra II the Inside Story of the Invasion and Occupation of Iraq*. New York: Pantheon Books. pp. 307-314.
- [6] *ibid.* p. 311.
- [7] Boyd, John R. (1987). *Organic Design for Command and Control*, slide number 11.
- [8] *ibid.*, slide 13.
- [9] Osinga, Frans (2005). *Science Strategy and War the Strategic Theory of John Boyd*. Delft, The Netherlands: Eburon Academic Publishers, p. 237.
- [10] Boyd, slide 16.
- [11] Centre for Intercultural Learning, <http://www.international.gc.ca/cfsi-icse/cil-cai/whatisculture-questlaculture-eng.asp>.
- [12] Schein, Edgar H. (2010). *Organizational Culture and Leadership*, 4th ed. San Francisco: Jossey-Bass Publishers.
- [13] Central Intelligence Agency (2011). *The CIA World Factbook 2012*. New York: Skyhorse Publishing. p. 538.
- [14] *ibid.*
- [15] Builder, Carl H. (1989). *The Masks of War American Military Styles in Strategy and Analysis*. Baltimore: The Johns Hopkins University Press. p. 3.
- [16] Clodfelter, Mark (1989). *The Limits of Air Power the American Bombing of North Vietnam*. New York: The Free Press. p. 25.
- [17] Boyd, slide 18.
- [18] Vulpe, Thomas, D. Kealey, D. Protheroe, and D. MacDonald (2000). *A Profile of the Interculturally Effective Person*. Ottawa, Canada: Centre for Intercultural Learning. p. 6.
- [19] For more information about CFSI’s Centre for Intercultural Learning the reader is referred to <http://www.international.gc.ca/cfsi-icse/cil-cai/index-eng.asp>.
- [20] Kealy, Daniel J. (2001). *Cross-cultural Effectiveness*. Ottawa: Centre for Intercultural Learning. p. 28.
- [21] *ibid.*
- [22] Lesenciuc, Adrian and A. Codreanu (2012). “Interpersonal Communication Competence: Cultural Underpinnings”, in the *Journal of Defense Resources Management*, vol. 3 No. 1(4). Brasov, Romania: Military Technical Publishing Center. p. 128.
- [23] *ibid.*