Culture—at the national, organizational, group, and personal levels—can have a powerful impact on decision making and leadership approaches.

A Psychological Theory of Culture

Balancing the Conscious and Unconscious Mind to Improve Leadership

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The concept of culture is an important consideration in leadership. Various mechanisms combine to create an organization's culture, and leaders within the organization must take that culture into account to achieve success. This article proposes that culture is based on two concurrent systems that reflect the conscious and unconscious minds. The work of several researchers is used to support this framework and provide insights for leaders.

The Effect of Irrational Decisions

Daniel Kahneman's Nobel Prize-winning research[1] on this area describes decisions as being made based on two systems. The first, called System 1, is unconscious; it occurs without our awareness of the process. Kahneman drew his conclusions on System 1 through the study of decisions that were irrational. Although this may at first seem like an unusual research approach, a simple example can help illustrate that illogical decisions are made constantly, and they don't appear unfounded at the time they are made.

Suppose that the rationale for a worker's behaviors was being considered. Linda is 31 years old, single, outspoken, and very bright. As a student, she was deeply concerned with issues of discrimination and social justice. She also participated in anti-nuclear demonstrations. Which of the following would be more likely accepted as a statement regarding her personal culture? Linda is a bank teller, or Linda is a bank teller and active in the feminist movement.

Approximately 80 percent of undergraduates at elite colleges and more than 30 percent of graduate students in statistics chose the first premise—even through it's not the correct answer. The category of bank tellers is much larger

than and totally contains the category of bank tellers active in the feminist movement, so it is the logical choice based on the limited information provided. According to Kahneman, this is System 1 in action; it is leaping to a conclusion based on impression rather than logic.

System 1 is not simply a source of irrationality, however. It recognizes danger, mobilizes immediate action, and is a repository of skills. For example, driving a car on a road with little traffic is done by System 1. When a centerfielder instantly recognizes where a fly ball is going to land, that also is System 1. If System 2, our conscious minds, had to be engaged in addressing these situations, it might take hours to make decisions that were required in just seconds. System 1 is automatic and fast, and although it may sometimes be irrational, it is not stupid. The sidebar, "Characteristics of System 1," describes Kahneman's conclusions regarding the effects of the unconscious mind on decision making.

CHARACTERISTICS OF SYSTEM 1

Kahneman's research has identified the following characteristics for the system associated with decisions made by the unconscious mind:[1]

- Generates impressions, feelings, and inclinations.
- Operates automatically and quickly with little or no effort and no sense of voluntary control.
- Links a sense of cognitive ease to illusions of truth, pleasant feelings, and reduced vigilance.
- Infers and invents causes and intentions.
- Neglects ambiguity and suppresses doubt.
- Is biased to believe and confirm.
- Focuses on existing evidence and ignores absent evidence.
- Generates a limited set of basic assessments.
- Computes more than intended.
- Is more sensitive to changes than to states.
- Over-weights low probabilities.
- Responds more strongly to losses and gains.

The Link Between the Unconscious Mind and Culture

What is culture? The three statements below contend that culture can be defined in the following manner:

- The set of predominating attitudes and behaviors that characterize a group or organization.[2]
- The sum of attitudes, customs, and beliefs that distinguishes one group of people from another.[3]
- A way of thinking, behaving, or working that exists in a place or organization.[4]

All three definitions indicate that culture relates to a particular group or place, and the second description probably fits the general perception of organizational culture. Once the term culture has been clarified, it makes sense to ask, "Why is culture an important concept—particularly to leadership?"

Culture is a mechanism of social control. It probably evolved when the earliest humans started living in larger groups rather than small bands of hunter gatherers. The behaviors of group members had to be somewhat predictable to enable coexistence. Behavior could no longer be controlled solely by a dominant individual, so a set of behavioral norms or expectations was assimilated; along with an understanding of the importance of each norm. Violation of some norms might result in minor criticism, but violation of others could lead to exclusion from the group, punishment, or even death.

This sounds like a formal list of rules for the group, but that usually isn't the case—particularly at the organizational level, where the culture generally is amorphous—perceived but not well-described. Culture is about what feels right in the organization, and it is not based on thought. Rules and laws are not culture; they are a higher level of social control. Culture gives us a feeling of what's right and what's wrong. It operates automatically. We don't have to invoke it; it's always there. It's not something we're likely to doubt. This is why culture is associated with System 1. It has an unconscious, but powerful influence on decisions.

For instance, consider college students' use of profanity. In private conversations, their language is more irreverent, but they refrain from using profanity when in class. The culture of the classroom is quite different from the culture of the dorm room. The students' unconscious minds automatically adopt the appropriate behaviors.

When compared to the characteristics of System 1, it is easy to see how organizational culture is connected. Culture is based on impressions, feelings, and inclinations; it serves as an

automatic and quick decision-making framework that feels safe because it has illusions about what is true. Decisions rely on theories of causation that are based on history and may not be applicable to the current situation; the decision makers assume that taking a particular approach will lead to a specific result. False confidence in the culture reduces doubt without the support of a reasonable risk analysis.

The Development of Culture Over Time

Julian Jaynes theorizes, however, that what we know as consciousness or self-awareness did not exist prior to sometime near 1000 BC. He makes an elaborate argument based on historic literature, showing that there is no evidence of consciousness prior to that era.[5] The online supplemental article shares some of Jaynes' basis for his conclusions.

Jaynes contends that prior to development of the conscious mind, behavior was controlled by inner voices that spoke to people and were obeyed. This bicameral notion comes from the idea that one part of the brain provided the inner voice, usually thought to be a deity, and spoke to another part of the brain, which performed the required actions. The attributes that might be ascribed to consciousness, such as reflection, self-awareness, conflict, and thinking, only began to appear in stories in later times. If Jaynes' hypothesis is correct, culture, which would have existed long before the advent of System 2, initially would have been based solely on System 1. Only at later times would culture have been tempered by conscious considerations.

Because culture is influenced so much by local conditions, the advent of large communities and nations added a need for culture on a broader scale. Laws were developed, beginning with the code of Hammurabi in the period 1750–1792 BC. Laws may encompass multiple cultural groups, and sometimes aspects of the culture, such as those associated with local religious groups, are co-mingled with the law.

Culture, Conformity, and the Conscious Mind

Over time all groups will develop a culture that results in a set of acceptable behaviors for operating with other members. This does not replace the culture that people bring to the group, however. Initially, individuals may have widely divergent attitudes and beliefs; but they need to assimilate the culture of the group to thrive. The group culture is internalized so that accepted behavior becomes automatic. The group culture does not replace the initial personal culture; it supplements it.

Individuals, therefore, may have numerous cultures affecting their behaviors at the same time. The norms associated with those different cultures may be applied separately according to the current situation or as an overarching combination. In other words, some degree of discretion can be applied to the application of culture to decision making, and that involves use of System 2, the conscious mind, in overriding System 1, the unconscious mind.

To the extent that culture is associated with a set of behavioral norms, then conforming behaviors would appear to be an adaptive approach for enhancing interpersonal relationships within groups. Research from the field of social psychology demonstrates a proclivity to assimilate group norms and to align personal perspectives with those of the groups—groupthink. For instance, the famous compliance experiment of Solomon Asch provides almost amazing evidence of this natural tendency.[6] Several subjects were brought into a room and were told they were going to compare the lengths of several lines on a chart. All but one of the subjects were shills. A series of conditioning-based initial comparison charts caused the experimental subject to gain a false sense of confidence in the other group members' credibility. Then the actual test chart was displayed; one of its lines clearly was longest, but the shills all said the lines were the same. About 40 percent of the time the subject would agree with the group rather than express a dissenting opinion. Other similar studies have indicated that groupthink can exceed 80 percent of the members of groups with long histories and substantial positive experiential histories. Whereas conformity to the group culture can have the positive effect of enabling coexistence, it also can have the negative effect of leading everyone in the group off the same cliff.

Irving Janis and Leon Mann describe eight symptoms of groupthink.[7] They are very similar to the symptoms of System 1 processing, as shown in Table 1, which compares the groupthink symptoms and corresponding characteristics of System 1. Clearly, groupthink is relatively common and is an aspect of an organization's culture that can lead to suboptimal—or even destructive—decisions.

One way in which groups conform is to ignore evidence that contradicts decisions and may even

Table 1: Comparing Groupthink to System 1

Characteristics of Groupthink	Characteristics of System 1
Illusion of invulnerability: Creates excessive optimism that encourages taking extreme risks.	Neglects ambiguity and suppresses doubt. Links a sense of cognitive ease to illusions of truth, pleasant feelings, and reduced vigilance.
Collective rationalization: Members discount warnings and do not reconsider their assumptions.	Neglects ambiguity and suppresses doubt. Is biased to believe and confirm.
Belief in inherent morality: Members believe in the rightness of their cause, and, therefore ignore the ethical or moral consequences of their decisions.	Links a sense of cognitive ease to illusions of truth, pleasant feelings, and reduced vigilance.
Stereotyped views of out-groups: Negative views of "enemy" make effective responses to conflict seem unnecessary.	Generates impressions, feelings, and inclinations. When endorsed by System 2, these become beliefs, attitudes, and intentions.
Direct pressure on dissenters: Members are under pressure not to express arguments against any of the group's views.	Represents actions based on the conclusions of System 1.
Self-censorship: Doubts and deviations from the perceived group consensus are not expressed.	Focuses on existing evidence and ignores absent evidence.
Illusion of unanimity: The majority view and judgments are assumed to be unanimous.	Is biased to believe and confirm, over-weighting low probabilities.
Self-appointed mind guards: Members protect the group and the leader from information that is problematic or contradictory to the group's cohesiveness, view, and/or decisions.	Represents actions based on the conclusions of System 1.

predict terrible consequences. This predilection arises from the unconscious mind and, therefore, is associated with System 1. Margaret Heffernan recounts scores of examples where the tendency to conform to a group, in spite of powerful and obvious evidence that the group was wrong, has led to thousands of deaths.[8] One of her first examples is the case of fetal x-rays, which doubled the risk of childhood leukemia. In spite of clear evidence that these x-rays were extremely harmful, physicians continued the practice for 25 years, leading to the unnecessary deaths of thousands of children.

There is also some neurophysiological evidence supporting that compliance to group norms is regulated by System 1. Gregory Berns and his colleagues recorded brain activity during experiments similar to the Asch experiment. They found that when subjects made irrational choices, the brain activity did not occur in the prefrontal cortex, which is the primary area of the brain associated with rational decision making.[9]

Culture as a Leadership Framework

In the modern organization, leaders are expected to ensure that performance requirements are achieved on time and within budget constraints. This occurs within an environment that is influenced not only by the organization's unique culture, but also the relevant national and local cultures, internal group cultures, influential external groups' cultures, and the myriad personal cultures of the people carrying out or affected by the work. Obviously, this is a complex situation, and it is not surprising that the balance between System 1 and System 2 thinking frequently can slide too far to one side or the other. Whereas "gut decisions," which largely stem from the unconscious mind and are based primarily on past experiences, may be appropriate in some circumstances, it is better for the conscious mind ("head decisions") to be engaged in the process—particularly when the ramifications associated with a poor decision are risky.

If culture could be measured and monitored easily, leaders would be able to calibrate their styles to the results obtained for different approaches, but it is very difficult to track and evaluate System 1's inputs/factors. Culture is inferred from behavior; it is not measured directly. In fact, even tools such

as surveys, which would appear useful for collecting culture-related information, actually can be influenced by the culture itself, e.g., a culture that is biased from providing candid feedback and leans toward sharing only favorable comments. A case study related to how culture affects safety practices appears in an online supplementary article.

Under these circumstances, it might seem easy to conclude that considering culture as a factor in decision making is too cumbersome to be worthwhile. Fortunately, most leaders today recognize that they must understand the cultures that are at work in their organizations and must adapt their approaches to fit those cultural constraints. When the leader's style does not align with the prevalent culture, change is certain to be difficult to manage effectively and efficiently. Communications are likely to be challenging, and developing a shared vision may be almost impossible. Although precisely measuring the existing organization and other cultures that are present may not be feasible, careful observation of approaches that have been successful—as well as those that have failed—can provide a valuable source of insight.

Savvy leaders will invest the effort to monitor the connections among leadership style, change management approach, and results—both tangible and intangible outcomes. These leaders will apply what they've learned to make better decisions in the future. Of course, they'll have to recognize when their unconscious minds are overtaking their conscious minds because the learnings that become a foundation for future decisions may turn into a form of System 1 autopilot, if vigilance is not maintained.

More Online

Two supplemental articles are available online—"A Biblical Basis for Culture" and "Case Study: The Effect of Culture on Safety Performance," Go to **http://www.asq.org/pub/jqp** to read them now.

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