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Adaptive Culture: Creating cultural contagions

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February 2017

Introduction

In this brief, we take a deep dive into culture. In October, we focused on culture as a human universal—what October guest Michael Muthukrishna argues is our most fundamental human trait—and on culture in organizations. In February, we'll explore different *types* of culture and the notion of *social networks*, and we'll also deepen our understanding of what makes a culture *adaptive*.

In examining cultural types, we'll ask "what distinguishes one culture from another?" Can we broadly characterize the differences between cultures in a fruitful typology, which would then give us insight into how people, institutions, and organizations within those cultures may differ?

We'll also explore how ideas, behaviors, and emotions spread (via "contagion") through networks. To do this, we'll look at social network theory, asking what is the role of culture in creating both positive and negative contagions across a network. How do you propagate or spread a desired culture from small enclaves into the entire organization (or beyond)? How do organizations amplify or downplay cultural elements depending on the current demands?

Throughout, we'll keep our eyes on the question "what makes a culture adaptive?" How can what we are learning about culture help us create organizations that are better able to adapt to change? How might leaders work to support the most adaptive and efficient cultures?

February LILA Guests

Damon Centola, PhD is an Associate Professor in the Annenberg School for Communication at the University of Pennsylvania, where he is Director of the Network Dynamics Group. Damon's work addresses the theory of how behaviors spread through social networks. His research uses computational models and online experiments to study innovation diffusion, social epidemiology and cultural evolution.

Michele Gelfand, PhD is Professor of Psychology and Affiliate of the RH Smith School of Business at the University of Maryland, College Park. She leads the Social Decision Making and Organizational Science lab, which investigates phenomenon relating to the strength of cultural norms and cultural values, negotiation, conflict, revenge, and forgiveness, diversity, and tightness-looseness.

Organizational culture: a quick review

Before we move on to February's focus, let's make a quick review of what we've learned about organizational culture so far. Organizational culture is "all the values, beliefs and assumptions which organizational members come to hold over time and which are (to some degree) shared" (Galunic, 2013, p. 1). Although culture includes artifacts—"all the phenomena that one sees, hears, and feels when one encounters a new group with an unfamiliar culture" (Schein, 1992, p. 17)—much of culture is invisible. Culture "does not refer to social structures and behavior but, in contrast, to *mental phenomena* such as how individuals within a particular group think about and value the reality in similar ways and how this thinking and valuing is different from that of people in different groups (occupations, tribes, etc.). Culture refers to what stands behind and guides behavior rather than the behavior as such" (Alvesson & Sveningsson, 2008, p. 36).

Therefore, culture is fundamentally about shared meaning and understanding: the shared meaning-making that shapes what we value, or the shared know-how that shapes what we do. Culture includes *values* (what we prefer, hold dear, or desire), *stories* (verbal or written narratives with causally linked sequences of events that have a beginning, a middle, and an end), *frames* (filters or brackets that delimit what we pay attention to), *categories* (social constructions or classifications that define and structure the conceptual distinctions between objects, people, and practices), and *tool-kits* (sets or "grab bags" of stories, frames, categories, rituals, and practices that actors draw upon to construct strategies of action) (Giorgi, Lockwood, & Glynn, 2015).

Culture can also be understood as an independent, dependent, or moderator variable. When we view organizational culture as an **independent variable**, we see it as an antecedent or driver of change. Culture impacts an organization's employees, competitiveness, performance, effectiveness, growth, etc. Culture as independent variable is your lever to

change things—change the culture to change productivity, for example. When we view culture as a **dependent variable**, we instead look to see what other factors are impacting an organization's culture. Industry type, leadership styles, and technology, all influence an organization's culture. When culture is a dependent variable, then you change one of the other levers to impact culture. A moderator variable is a variable that affects the strength or direction of the relationship between a dependent and independent variable**.** When we look at culture as a **moderator variable**, we seek to understand the influence of culture on a relationship between two other variables; e.g. culture moderates the impact of a new technology's adoption on productivity.

It's important to note, however, that when we think of organizational culture, it may not always mean one thing. There are many cultures within an organization:

> People hardly interpret everything in organizations similarly, partly because organizations are characterized by a rather complex differentiation of work tasks, divisions, departments and hierarchical levels that potentially also fosters strong differences in terms of meanings, values and symbols. In addition, organizations inhabit a variety of generations, genders, classes, departments and occupational groups that produce and sustain cultural variety and fragmentation rather than overall organizational cultural unity and coherence. (Alvesson & Sveningsson, 2008, p. 38)

These factions can be productively thought of as sub-cultures within a dominant organizational culture.

But sometimes organization lack a distinct culture, or employees only identify weakly with the organization's culture. An organization that has a strong culture is typically "distinct in terms of *material practices* (production, localization), *symbolic expressions* (architecture, slogans, logotypes) and *values* and that is also experienced as *successful, unique and distinct* from its environment, and sustains *interpersonal interaction*" (p 40). When organizations fail to meet up to those criteria, individuals tend to identify elsewhere, for example, as a member of a specific department, a person who does a specific type of task, or even their hierarchical status. When the organization as a whole feels abstract, ambiguous, or dull—or when cultural elements are disembedded, disenchanted, or disrespected (Hatch, 2017)—identification with the overall culture falters.

Adaptive cultures – an emerging concept

Although we haven't used the term "adaptive culture" before this year's theme, LILA collectively already knows quite a bit about how organizations adapt to change. Organizations with adaptive cultures:

- Juxtapose rather than polarize paradoxes (Tima Bansal)
- Use learning mechanisms to build their dynamic capabilities (Maurizio Zollo)
- Use routines as a source of change (Martha Feldman)
- "Withstand while transforming" (Bahrami & Evans, 2011, p. 24)
- Engage is safe, small-scale experimentation (Jennifer Garvey Berger)
- Operate like complex adaptive systems (Mary Uhl-Bien).

But it's also worth exploring what other literature says about adaptive culture. In the 1992 classic *Corporate culture and performance*, Kotter and Heskett note that organizational *culture strength*—where most members share a consistent set of values and practices—is typically seen to be linked to performance. Strong cultures facilitate goal alignment, high motivation, and provide structure without relying on stifling bureaucracy. In their research, they found this relationship to be real but modest. Another common business "truism" is that *strategically appropriate cultures*—ones where the culture fits the context—are key. This perspective acknowledges that different types of cultures are more appropriate for different kinds of organizations. While the concept of fit is useful and important, it alone doesn't explain why some business perform better than others when conditions change—after all, a strategically appropriate culture stops being appropriate when things change.

Instead, Kotter and Heskett stress the importance of *adaptive cultures*: "only cultures that can help organizations anticipate and adapt to environmental change will be associated with superior performance over long periods of time" (p. 44). Their model of adaptive corporate culture focuses on the role of managers throughout the organizational hierarchy. In adaptive cultures, "managers care deeply about customers, stockholders, and employees. They also strongly value people and processes that can create useful change." These core values are reflected in these common behaviors: "managers play close attention to all their constituencies, especially customers, and initiate change when needed to serve their legitimate interests, even if that entails taking some risks" (p. 51).

In adaptive cultures, managers are focused on external constituencies and their needs. This means they can quickly sense when the competitive context is changing. They value leadership and devise strategies to nimbly respond to these changes. Importantly, they implement new strategies "even if changes must be made in culturally engrained behaviors" (p. 54). Adaptive cultures are typically strong as well as strategically appropriate.

Kotter and Heskett paint a clear and simple portrait of adaptive culture. But it focuses primarily on the role of managers and leadership. A broader view of adaptive culture can be

found in the literature on the *resilient organization*. Hamel and Välikangas (2003) define resilience as "the ability to dynamically reinvent business models and strategies as circumstances change… It's about continuously anticipating and adjusting to deep, secular trends that can permanently impair the earning power of a core business. It's about having the capacity to change before the case for change becomes desperately obvious" (p. 53).

According to Hamel and Välikangas (2003), any organization that hopes to become resilient must address four challenges. Addressing the **cognitive challenge** means letting go of the past and ending any denial about the changes that are occurring. To do this, leaders must visit the places where change is happening, and make sure that people who understand the changes are heard—even if their messages are unpleasant. Leaders must be willing to set aside decaying strategies, even if they have been very successful in the past. Addressing the **strategic challenge** means coming up with a wide variety of strategic alternatives to replace the old. The only way to come up with enough alternative strategies is to pursue "broad-based, small-scale strategic experimentation" (p. 59). Addressing the **political challenge** means being willing to "divert resources from yesterday's products and programs to tomorrow's" (p. 54). Experimenting isn't enough—experimental efforts must be supported with resources and talent, and that takes political will. Addressing the **ideological challenge** means overcoming an organization's natural inclination toward optimization and efficiency in favor of the messier—and riskier!—process of investing in resilience.

In the end, they argue, organizational resilience must be "automatic, spontaneous, [and] reflexive" (p. 63). Just as the body responds automatically to change (e.g. an accelerated heart rate in response to faster movement), organizations must be constantly ready to adapt to change. "Resilience will become something like an autonomic process only when companies dedicate as much energy to laying the groundwork for perpetual renewal as they have to building the foundations for operational efficiency" (p. 63).

Välikangas (2010) also writes about the notion of Resilience I and Resilience II. Resilience I is the capacity to "recover after experiencing a crisis, persist in the face of threat, and survive trauma" (p. 19). Resilience II, on the other hand, is the capacity to "change without first experiencing a crisis, change without a lot of accompanying trauma, and take action before it is a final necessity" (p. 19). An adaptive culture would be characterized by Resilience II or what Välikangas calls *strategic resilience*, "the capability to turn threats into opportunities prior to their becoming either" (p. 20). An adaptive culture, it seems would be one with strategic resilience.

Types of cultures

So far we have explored what culture *is*, how it can be characterized as an important (if not the defining) aspect of the human experience and how it manifests itself within organizations. And we've started to come up with a shared understanding of what an

adaptive culture might look like within an organization. But can we also characterize different culture *types* at a variety of levels? Are there useful ways of characterizing broadly different cultural types, and do these characterizations help us understand individuals, institutions, and nations?

There are certain fundamental paradoxes inherent to collective life at any level of analysis—nation, state or province, organization, or teams. Any time people get together, there is a tension between group cohesion and individual expression, or similarity and individuality. Although every collective has social norms, they will differ in terms of how strict these norms are and the tolerance members have for their transgression. "Tight" cultures have strong norms and low tolerance, while "loose" cultures have weak norms and high tolerance.

In Table 1, you can read more about these two types of cultures. Each culture type has certain institutional types associated with it, and also impacts the people who are part of their culture. Briefly, institutions in tight cultures tend to be more autocratic and controlling, and individuals are more self-monitoring and self-controlled.

October LILA guest Michele Gelfand's research has shown the existence and impact of tight and loose cultures in a variety of settings. In a 33-nation study, Gelfand and colleagues revealed that countries can be characterized as tight or loose in culture. Tight nations have higher historical and current population density, higher projected population increase, a lack of natural resources, and a higher prevalence of natural disasters and communicable disease (Gelfand et al., 2011). Gelfand and colleagues theorize that in nations with few resources and many threats, strong social norms and punishment of transgressors are developed to facilitate the strong social coordination necessary for survival. (Similar results have been found for the 50 United States; Harrington & Gelfand, 2014).

Atkas, Gelfand, & Hanges (2015) studied how cultural tightness and looseness impacts how people perceive leadership effectiveness (for details, see Table 2). Cultural tightness was positively associated with the perception of effectiveness of autonomous leadership and negatively associated with the perception of effectiveness of team-oriented and charismatic leadership:

> This suggests that to be seen as effective, leaders in tight cultures should focus on being a strong confident independent leader who emphasizes stability, whereas leaders in loose cultures should emphasize empowerment and change as well as team orientation. It also suggests that leaders who cross between tight and loose cultures may face difficulty if they attempt to enact leadership practices that were effective in their home culture (p. 11).

Table 1

	Overview	**Environment and resources**	**Institutional level**	**Individual level**
Tight cultures	Rigorously formal and disciplined; clearly defined norms; severe sanctions for norm violations.	Greater population density, dearth of natural resources (e.g. more food deprivation), greater environmental threats (e.g. from natural disasters), greater health vulnerabilities (e.g. from infectious disease).	More likely to have autocratic governing systems that suppress dissent, media institutions with restricted content, criminal justice systems with higher monitoring and more severe punishment. More religious, lower crime.	More focused on preventing risk; higher felt accountability; higher self control; greater need for structure. More cautious, dutiful, and self-monitoring. High situational constraint, viewing only a narrow range of behaviors as acceptable in certain situations (e.g. in a doctor's office it is only acceptable to sit and read a magazine, rather than take a phone call).
Loose cultures	Lack of formality, regimentation, and discipline; loosely defined norms; high tolerance for deviance.	Lower population density, more natural resources, lower environmental threats and health vulnerabilities.	Less likely to have autocratic, suppressive, or strict governments, media, or criminal justice. Less religious, higher crime.	More tolerant of risks; lower self control and self monitoring. Wider range of acceptable behaviors.

Table 2

Leadership Dimension	Description	Hypothesis	Result
Charismatic	Charismatic leaders demand a high standard of performance, use innovative means to achieve their goals, and engage in revolutionary, transformational, and visionary behaviors to motivate followers.	Societal tightness will be **negatively** related to perceived effectiveness of charismatic leadership.*	Supported.
Team-oriented	Team-oriented leaders are loyal to and care for the welfare of their team members. They use their skills to manage the internal dynamics of their team to build a more cohesive group.	Given the close connection of team-oriented leadership to group orientation, we expected it to be more highly related to collectivism than tightness.	Not supported**.
Self-protected	Self-protective leadership focuses on safety and security of the individual leader or group. Such leaders have a desire to succeed among possible competitors for the leader's position and success. These leaders tend to engage in ritualistic, formal, cautious, and habitual behaviors.	Societal tightness will be **positively** related to perceived effectiveness of self-protected leadership.*	Not supported.
Participative	Participative leadership is a dimension that reflects the extent to which the managers involve others in making and implementing decisions. Participative leaders give others the opportunity to fulfill their own needs and to self-actualize. By contrast, autocratic leadership is characterized by highly centralized	Societal tightness will be **negatively** related to perceived effectiveness of participative leadership.*	Not supported.

	decision making and concentrated authority.		
Humane-oriented	Humane leaders are described as unpretentious and reticent to boast. They are empathetic toward others and very likely to offer help and assistance to others.	Humane-oriented leadership represents a person's emphasis on building relationship with others, which is theoretically more related to relationship orientation and collectivism.	Not supported.
Autonomous	Autonomous leaders are defined as leaders who have extreme confidence in their own abilities and less confidence in the abilities and ideas of others. Such leaders tend to work independently, without collaboration or feedback from others. These leaders are theorized to be less innovative and reinforce the status quo.	Societal tightness will be **positively** related to the perceived effectiveness of autonomous leadership.*	Supported.
Even after controlling for in-group collectivism, power distance, and future orientation at the societal and organizational levels.* * However, the results showed that people from culturally tight societies view leaders who are team oriented as less effective than do people from loose cultures.*			

Networks and contagions

While cultural typologies such as tightness-looseness are extremely useful, they don't explain how culture spreads. For that we can turn to the research on *social networks*; cultural beliefs and behaviors spread from person to person across social networks. Understanding these networks can help us shape more effective change efforts within our organizations.

According to social network theory, a social network consists of a set of actors and the relations between them (Katz, Lazer, Arrow, & Contractor, 2004). These relations or "ties" include communication (who talks to whom?), hierarchy (who reports to whom?), affiliation (who likes whom?), resources (who gives money or other resources to whom?), or proximity (who is near to whom?).

Katz, Lazer, Arrow, & Contractor (2004; citing Wellman, 1988) identify five principles that characterize the study of social networks:

1. "People's behavior is best predicted by examining not their drives, attitudes, or demographic characteristics, but rather the web of relationships in which they are embedded.
2. The focus of analysis should be the relationships between units, rather than the units themselves or their intrinsic characteristics.
3. Analytic methods must not hinge on the conventional assumption of independence… interdependence among units is assumed.
4. The flow of information and resources between two people depends not simply on their relationship to each other but on their relationships to everybody else.
5. Groups sometimes have fuzzy rather than firm boundaries. The building blocks of organizations are not discrete groups but rather overlapping networks. Individuals generally have cross-cutting relationships to a multitude of groups." (p. 312)

Social ties also vary in terms of their strength—strong ties are friends and family while weak ties are acquaintances. One of the most striking findings from the study of social networks is the "strength of weak ties." This finding (Granovetter, 1973) explains how weak ties between acquaintances can spread contagions like information or disease quickly and efficiently. These ties are thus *weak* relationally (low amounts of contact and investment) but *strong* structurally: "they provide shortcuts across the social topology" (Centola & Macy, 2007, p. 704). Due to the strength of weak ties, "it takes only a few contagious people traveling between remote villages to make the entire population highly vulnerable to catastrophic

epidemics. It takes only one villager with a cousin in the city to bring news of job openings at a factory" (p. 705). In other words, just a few weak, long ties make highly clustered social networks (those where everyone knows everyone else, but few people outside of the network) behave more like random networks.

However, LILA February guest Damon Centola has shown that the "strength of weak ties" is not universally true. *Simple* contagions—where contagion only requires exposure to a single source—are easily spread through long, weak ties. Even if no one in Village A knows a soul in Village B where an outbreak of a disease is occurring, a single visit from a travelling salesman can spread the illness. But *complex* contagions are different, Centola argues. When behaviors are "costly, risky, or controversial, the willingness to participate may require independent affirmation or reinforcement from multiple sources" (Centola & Macy, 2007, p. 703). Although the travelling salesman may also show the villagers of Village A the exciting new practice of going for a morning jog, the villagers are unlikely to take up the new behavior with just one exposure! It's only when many people in the same network begin to take up jogging that the behavior is likely to spread.

Centola provides evidence for the limited role of weak ties in complex contagions in a variety of ways. In one study Centola & Macy (2007) use computer and mathematical modelling to show that the addition of a random tie to a clustered network is not sufficient to create complex contagions; multiple random ties are required, yet there is upper limit of randomization—beyond this, complex contagions can not occur. This *phase transition* "transforms the network abruptly from one that can sustain complex contagions to one that cannot" (p. 723). These models revealed the key difference between simple and complex contagions: "For simple contagions, too much clustering means too few long ties, which slows down cascades. For complex contagions, too little clustering means too few wide bridges, which not only slows down cascades but can prevent them entirely" (p. 723).

Two other studies provided similar evidence, but based on real people's behavior (Centola, 2010, 2011; see also van der Leij, 2011). Centola (2010) set up a social networking website that promoted health and fitness. The social network gave each study participant 6 "health buddies" and notified them of their actions on the site. One initial dummy subject joined a health forum, which means all of his buddies were notified and asked to do the same. When another buddy registered, all of *his* buddies were notified and so on. Because Centola fully controlled the site, he was able to purposefully shape structure of the social network. Participants were randomly sorted into either clustered networks or random networks. The "strength of weak ties" theory would suggest that the random networks would be more efficient at spreading this behavior, but the opposite was found. The clustered

networks behaved more efficiently. The social reinforcement from multiple neighbors apparently played a key role in triggered behavioral change.
A second study focused on another property of social networks: homophily. Homophily is "the tendency of social contacts to be similar to one another" (Centola, 2011, p. 1269). People are more likely to be influenced by social ties that are similar to themselves. In this study, the network structure was constant (a clustered network) but participants were either placed randomly or placed with health buddies who were similar to them (in terms of gender, age, and body mass index). Participants were able to view their buddies' gender, age, BMI, fitness level, diet preferences, and favorite exercise. As in the prior study, participants were notified of a buddy's action and invited to do the same (in this case, signing up for a diet diary). The diffusion of this behavior was much higher in the networks with homophily.

Centola's research shows that behavioral changes require multiple sources of influence, which means that they spread more readily through a network that is clustered and homophilous. Cultural change agents who wish to inspire behavioral change might ask how they can connect people who are making changes with other people like them, in meaningful shared social settings.

Questions to end with

- What is your definition of an adaptive culture? What characteristics or competencies do you think best describe an adaptive culture?
- What might an adaptive yet tight culture look like? If tight cultures are more risk-averse and less open to innovation and change, does it follow that they will struggle with adaptation? How can leaders support innovation in tight cultures?
- Loose cultures are more comfortable with change, yet tend to exhibit less self-control and discipline. Does adaptation require discipline? If so, how can loose cultures be supported in the parts of change, innovation, and adaptation that they resist?
- What organizational changes can be characterized as simple or complex contagion? How should our tactics be different if we are dealing with either type of contagion?
- How would an adaptive culture or organization use social networks to their advantage?

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