

## Normology: Integrating insights about social norms to understand cultural dynamics



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### ABSTRACT

This paper integrates social norm constructs from different disciplines into an integrated model. Norms exist in the objective social environment in the form of behavioral regularities, patterns of sanctioning, and institutionalized practices and rules. They exist subjectively in perceived descriptive norms, perceived injunctive norms, and personal norms. We also distil and delineate three classic theories of why people adhere to norms: internalization, social identity, and rational choice. Additionally, we articulate an emerging theory of how perceived descriptive and injunctive norms function as two distinct navigational devices that guide thoughts and behavior in different ways, which we term “social autopilot” and “social radar.” For each type of norms, we suggest how it may help to understand cultural dynamics at the micro level (the acquisition, variable influence and creative mutation of cultural knowledge) and the macro level (the transmission, diffusion and evolution of cultural practices). Having laid the groundwork for an integrated study of norm–normology, we then introduce the articles of this special issue contributing theoretical refinements and empirical evidence from different methods and levels of analysis. Managerial implications are discussed.

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### Introduction

In this era of globalization, the models of culture in terms of value orientations (Hofstede, 1980; Triandis, 1990) that have traditionally dominated organizational behavior research increasingly appear incomplete. These models portray culture as carried by traits—stable, general preferences—that reproduce themselves with the socialization of each new generation. But cultural influences on individual judgment and behavior are dynamic and situational rather than stable and general, especially as people increasingly span multiple cultures. Managers today switch between cultural codes from one interaction to the next to mesh with different audiences (Friedman, Liu, Chi, Hong, & Sung, 2012; Hong, Morris, Chiu, & Benet-Martínez, 2000), sometimes defy cultural expectations to be contrarian (Mok & Morris, 2010a, 2010b, 2013), and even combine elements from multiple cultures to generate creative solutions (Cheng, Sanchez-Burks, & Lee, 2008; Tadmor, Galinsky, & Maddux, 2012; Yagi & Kleinberg, 2011). Nor does the trait model of self-replicating cultural systems fully capture cultural phenomena at the macro level. Collective-level

cultural patterns transform and spread across the decades (Grossmann & Varnum, 2015; Boyd & Richerson, 2004) in part because of inter-cultural interactions, which globalization has intensified (Appadurai, 1996; Finnemore, 1996; Griswold, 2012).

While value models served well to portray cultural differences, they do not serve as well to capture cultural dynamics. That is, neither micro-level cultural dynamics—the ways individuals acquire, utilize and mutate their cultural assumptions and habits—nor macro-level cultural dynamics—the ways in which cultural practices and institutions spread and change over time—lend themselves to explanations in terms of self-replicating systems of private value orientations (Morris, Chiu, & Liu, 2015; Weber & Dacin, 2011). Just as globalization has oriented academics toward questions of cultural dynamics, these questions have become equally pressing for practitioners—managers are called upon to acquire new cultural proficiencies and deploy them in contextually sensitive ways (Morris, Savani, Mor, & Cho, 2014) while leaders are challenged to understand and orchestrate collective-level changes in the cultures of corporations, industries and communities (Kotter & Heskett, 1992; O'Reilly, Caldwell, Chatman, & Doerr, 2014; Sturman, Shao, & Katz, 2012).

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An alternative model of culture centers on norms rather than values. Norm models hold that a community's characteristic patterns of thought and behavior emanate not from individuals' inner core selves but from their shared social context. Norms are social patterns that govern behavior. Because norms are conceptualized as context-specific regulators of behavior rather than as traits, they may offer more potential to understand how cultural patterns vary across situations and contexts both for individuals (Bagozzi, Wong, Abe, & Bergami, 2000; Henrich et al., 2005) and for teams (Gelfand, Brett, Imai, Tsai, & Huang, 2013). Models of behavior as hinging on social perceptions of other people offer more insights into how cultural patterns change, such as why some longstanding practices persist while others degrade or spread to new populations (e.g., Berger & Heath, 2008; Gelfand et al., 2011; Kuran & Sunstein, 1999; Richerson & Boyd, 2005).

However, the science of norms—normology—remains underdeveloped. Beyond the central feature that norms are social patterns that govern behavior, scholars disagree about how to define and study norms. Norms fall at the boundaries and interstices of the social sciences. Research is scattered across disparate literatures in sociology (Parsons & Shils, 1951), anthropology (Geertz, 1973), economics (Akerlof, 1976), political science (Axelrod, 1985), psychology (Ajzen, 1991; Cialdini, Reno, & Kallgren, 1990), public health (Neighbors et al., 2008), organizational behavior (Pillutla & Chen, 1999), and marketing (Englis & Solomon, 1995). Some disciplines, such as economics, study norms in the objective patterns of behavior in a social environment. Other disciplines, such as psychology, equate norms with subjective beliefs, perceptions and expectations. Narrow disciplinary views of norms are unfortunate in our view, as normology requires understanding how objective and subjective elements work together. The first aim of this article is to integrate constructs from different literatures into a general framework that captures the important elements of norms and their links to historical and ecological antecedents and behavioral consequences.

While norm research has been scattered across different disciplines, many valuable insights have emerged about processes through which norms influence behavior. These proposals—some overlapping, some distinct—go under a wide array of labels, such as conformity, peer pressure, self-stereotyping, coordination, herding, social proof, and identity signaling (Cialdini & Goldstein, 2004; Hechter & Opp, 2001). The second aim of this article is to distinguish major theories about why people adhere to norms—both classic accounts and emerging theories. As we shall see, there is evidence for multiple mechanisms that operate under different conditions. For each mechanism we suggest ways that it may elucidate the micro level dynamics of cultural acquisition and influence and the macro level dynamics of cultural transmission and change.

To motivate this integration of norm research for understanding cultural dynamics, we start by reviewing some evidentiary limitations of value models. We then review and integrate norm constructs from different literatures into a general framework. Next we make reference to this framework to distil and delineate basic accounts of why people adhere to norms, both classic theories and emerging accounts. Finally we preview the articles of this special issue on norms and cultural dynamics and some of the applied insights gained.

### Limitations of value models

Value models posit that early socialization instills a general orientation to seek particular ends, “a broad tendency to prefer certain states of affairs over others” (Hofstede, 1980, p. 19). Value orientations such as individualism and egalitarianism are proposed to explain international variation in organizational

behavior. However cross-national differences are moderated by many contexts and conditions. Compared to Chinese students, American students attribute outcomes in more individualistic, person-centered ways, but this divergence manifests when the task conditions demand a snap judgment, not when they afford deliberation (Briley & Aaker, 2006; Chiu, Morris, Hong, & Menon, 2000). On creativity tasks, the novelty of solutions is higher for Israelis than Singaporeans as predicted by individualism, but the difference appears when they work in teams, not when they work solo (as cited in Erez & Nouri, 2010). Likewise, Himalayan expeditions are more likely to summit if from more hierarchical cultures, but this is true only for team expeditions, not solo expeditions (Anicich, Swaab, & Galinsky, 2015). If cultural patterns were carried by broad inner values, one would expect them to manifest generally across task conditions and social contexts. If anything, values would be expressed *more* when a person acts solo, without potential influences from others, than when acting as a member of a team. While dimensions such as individualism and hierarchism are useful for explaining *ways cultures differ*, conceptualizing culture as values does not work well to explain *when cultures differ*.

Throughout the 1990s cross-cultural researchers refined value scales, grasping for a version that would mediate effects of national culture on organizational judgments and behaviors, but evidence has been mixed at best (see Oyserman, Coon, & Kimmelmeier, 2002; Morris & Leung, 2000). The GLOBE study, contrary to expectations, found negative associations between cultural values and cultural practices (see Taras, Steel, & Kirkman, 2010). Many important international differences in workplace behavior do not correlate substantially with values (Fischer & Smith, 2003; Kirkman, Lowe, & Gibson, 2006). Recent research suggests that cultural differences may be carried by values only in some behavior domains such as ethical decisions (Fischer, 2006) and under task conditions that focus attention inwards such as privacy and reflection (see Leung & Morris, 2014).

As for the macro question of how cultures reproduce, spread and evolve, value research has assumed a high degree of historical stability. Hofstede (1993, p. 92) proposed that “national cultures change only very slowly if at all.” Huntington argued in *The Clash of Civilizations* (1993) that timeless cultural-religious values drive political conflicts: Islamic Terrorism in the Middle East in recent years reflects the same values that drove the conquest of Spain in the 700s. But empirical evidence challenges the premise that civilizations or even countries hold unchanging values. In World Value Survey data from the early 1980s until 1998, Inglehart and Baker (2000) found evidence that country-level values change with economic conditions. Economic growth precipitated a shift toward more individualist values (secularism and self-expression, in the Inglehart model), whereas economic decline especially in ex-Communist countries precipitated a shift toward more collectivist values (tradition and survival values). Content analyses of books (Michel et al., 2011) show a longer-term trend of rising individualism in the US. Twenge, Campbell, and Gentile (2013) found the increased frequency of individualist concepts (e.g., “independent,” “individual,” “unique”). Greenfield (2013) found that words reflecting a collectivist worldview (“obliged”) declined from 1800 to 2000 whereas those reflecting an individualist lifestyle (“choose”) increased, tracking the population's shift from agrarian to urban lifestyles. These findings challenge the premise that value orientations are homeostatic, self-replicating systems; individualist values arise from affluence and industrialized lifestyles. Grossmann and Varnum (2015) tracked US individualism over 150 years using a number of aggregate measures (book content, baby names, etc.) and investigating a wide array of antecedents—economic change, pathogen prevalence, urbanization—and time-lagged analyses found that changes in economic structure predicted changes in individualism. In sum, the premise of stable,

self-replicating value orientations at the country level is not supported by longitudinal evidence.<sup>1</sup>

## Elements of norms

“Norm” has many meanings in ordinary language and in social science jargon. It can refer to an objective pattern of behavior or a subjective expectation. Following a norm can mean doing what is “normal” or common. Or it can mean doing what one ought to do, the “normative” or prescribed approach. In this section we identify key constructs that figure in theories of social norms and organize them into an integrative framework.

### Objective patterns

Norms can be identified with several objective features of a social environment. At the most basic level, norms exist in widespread **regularities** in a group’s beliefs or behavior. For example, just as people drive on the right in the US and on the left in the UK, the same regularities govern how people walk in hallways and on hiking trails. These patterns or unwritten rules in an environment affect our behavior, as it often works best to mesh with the behavior of the people around us. Experiencing what works and what does not work in a social environment shapes our defaults and expectancies through operant conditioning (Savani, Morris, Naidu, Kumar, & Berlia, 2011). Likewise, widespread beliefs and attitudes in a group perpetuate themselves because we seek common ground when conversing with each other (Kashima, 2014). For instance, workers’ self-efficacy depends on the attitudes of the coworkers with whom they interact (Huselid, 1995; Savani, Morris, de Pater, Wagner, & Ilies, 2015). People’s judgments about social issues depend not only on their personal beliefs but also on the widespread beliefs in their society (Leung & Bond, 2004; Leung et al., 2007). In sum, people mirror the widespread behaviors and beliefs in their environment to succeed in interactions and conversations.

Another relevant feature of social environments is **sanctioning**. People approve of some behaviors and disapprove of others, and they deliver rewards and punishments accordingly. Managers reward behaviors they approve of by recognizing some employees with rewards, resources and promotions. Parents reward and punish children to mold their behavior to be socially acceptable. In everyday social interactions, people get feedback when others disapprove of their behavior (e.g., frowning, distancing themselves, denying exchange opportunities). Such feedback, even if people are not aware of it at the time, shapes their behavior through conditioning and colors their self-regard. In a 20-nation study of self-regard, priorities, and self-perceived accomplishments, Becker et al. (2014) found that positive self-regard depends less on fulfilling the priorities that one personally values than on fulfilling the priorities that prevail in one’s society. Moral norms against selfish behaviors are enforced through retaliation by the affected and also punishment by third party observers (Fehr & Fischbacher, 2004).

Another way that norms exist in a social environment is **institutionalization**. Some patterns and practices come to be treated as rules beyond matters of convention or approval. One way patterns crystallize as institutions is through formal structure. Traffic patterns started as conventions but over time became encoded as laws. Organizations such as police academies and driving schools emerged to enforce and perpetuate these formal rules, lending them

greater permanence (North, 1990). Another side of institutionalization is that arbitrary practices can become taken for granted (Zucker, 1987), construed as group traditions (Hobsbawm, 1983) and upheld as sacrosanct, even nonnegotiable imperatives (Atran & Ginges, 2012). These two processes—formalization and sacralization—do not always go together, but they are both ways through which a practice becomes institutionalized, encoded in a community’s discourse, and embedded within its social structures.

### Subjective representations

In addition to the objective aspects of group regularities, sanctioning, and institutionalization, norms exist in subjective assumptions, perceptions, and expectations. In a classic study of group conformity, Sherif (1936) found participants making judgments about an ambiguous stimulus were affected when they heard the judgments made by others in their group. The **perceived descriptive norm** acts as an interpretive frame that shapes what they see. Jacobs and Campbell (1961) found that the norm persisted through subsequent trials of the task, even as members of the original group were one-by-one replaced with new participants. Increasing evidence shows that perceived descriptive norms account for differences between national cultures in social judgment tendencies. Shteynberg, Gelfand, and Kim (2009) found that the greater tendency for an American than a Korean to blame an individual actor rather than the social context was not carried by value orientations (personal collectivism) but by perceptions of one’s society’s norms. Likewise, Zou et al. (2009) found that the greater tendency of Americans than Poles to comply with a consistency-based persuasive appeal was not driven by differing levels of personal individualism but by differing perceptions of their respective societies, individualism. In such cultural habits of thinking and behavior arise from conformity to different perceptions of “what most people think” or “what most people do.” Individuals within a society vary in their perceptions of its cultural codes because no individual sees the whole public; their perceptions hinge upon their local social networks (O’Gorman, 1986). In cases where public behaviors and statements do not faithfully reflect private beliefs, a society or community can hold inaccurate perceptions of its descriptive norms. Dawes (1974) found that all of the landlords in a community were willing to rent to unmarried couples but they estimated that only 50% of their peers would be willing, most likely because they did not talk in public at the time about doing so. College students hold exaggerated perceptions of their peers’ drinking because drinking is more visible (and audible) than sobriety (Neighbors et al., 2008). Representations of descriptive norms can serve a number of important functions—not only guides to immediate behavior but also bases for predicting others’ behavior, planning future behaviors, and social coordination.

Another subjective element is **perceived injunctive norms**, representations of patterns that evoke social approval or disapproval. Asch (1951) found that participants conformed to an incorrect majority even in unambiguous judgments, so long as answers were given publicly rather than privately. Deutsch and Gerard’s (1955) posited that this “peer pressure” influence is merely overt compliance to avoid social disapproval, whereas the influence on ambiguous tasks involves a genuine shift in participants’ private perceptions. To probe the role of social disapproval, Berns et al. (2005) scanned participants’ brains as they completed an object rotation task in the Asch conformity paradigm. Participants who deviated in their answers from an incorrect group majority showed activation in the threat system (amygdala), consistent with expectations of disapproval and punishment. This suggests how subjects use injunctive norms function independently of actual sanctioning, such as alerting us to others’ possible disapproval so that we cover or account for our action. Knowledge of social injunctions can even

<sup>1</sup> Organizational, occupational, and community cultures, may be able to maintain more value stability than societal cultures, because attraction and attrition are strong forces as well socialization (Schneider, 1987).

be used to avoid prosocial behavior. [Turnbull \(1972\)](#) observed that during a time of famine *Iki* tribespeople went out of their way to avoid receiving gifts (which would trigger expectations of generous reciprocity) and avoid cooperative hunting (which carried expectations of sharing the prey). How people use knowledge of what others approve of likely depends on *which* others are involved. The theory of reasoned action ([Fishbein & Ajzen, 1975](#)) posits that behavioral intentions depend largely on the assumed approval of “important referent others” such as family and close friends.<sup>2</sup>

Another way norms exist subjectively is as self-expectations or **personal norms**. [Schwartz \(1977\)](#) distinguished “social norms,” the injunctive expectations that group members hold about each other, from “personal norms,” the expectations a person holds about his or her own behavior. He argued that people adhere to social norms because they are enforced but adhere to personal norms to express their values. While this account of personal norms loses the sense of norms as regulators of behavior, personal norms can be regulators with a multi-agent view of the self. For example in psychoanalytic models self-expectations are the superego’s *shoulds* that regulate the id’s *wants*. The superego forms through “introjecting” the standards of parents, teachers and other authority figures. In this spirit, [Deci and Ryan \(1985\)](#) proposed that when expectations of significant others are internalized but not fully embraced as one’s own, the motivation to adhere comes from avoiding guilt, an internal form of enforcement.

#### An Integrative framework

A society’s norms exist in objective aspects of the social structure—regularities, patterns of sanctioning, and institutions—and also exist in its members’ subjective representations—descriptive expectations, injunctive expectations, and personal norms. Norms involve combinations of these elements. While each of these elements can affect people’s judgment or behavior, the force of norms in directing behavior is best understood through the inter-relations of these objective and subjective elements. [Fig. 1](#) shows these six elements and traces some of the primary relationships among normative elements and their antecedents and consequences.

In the column displaying the subjective elements of norms, arrows to judgment and behavior illustrate that influence can come from each subjective element: perceived descriptive norms serve as frames that shape judgments and behaviors in ambiguous situations, perceived injunctive norms guide overt public behavior, and personal norms can direct behavior through guilt avoidance or value expression. As we shall see in the next section, major theories of norm adherence disagree on which of these elements are most important and whether they work together or separately. Given that perceived descriptive and injunctive norms are both expectations about the group, a box contrasts these “social norms” that contrast with personal norms, expectations about oneself.

Arrows to subjective representations from the left indicate that they largely reflect the objective social structure: Regularities are registered as perceived descriptive norms, sanctioning that has been noticed gives rise to perceived injunctive norms, and institutionalization of rules can spur people to internalize them. [While this last link is less obvious than the previous ones, various kinds of evidence support it. For example, [Zucker \(1977\)](#) found that [Jacobs and Campbell’s \(1961\)](#) cultural transmission effect amplified under an institutionalization condition wherein their task was framed as a routine in an organization undergoing retirements and new hires.] Other relationships across these three rows could

also be posited, but the key point for now is that because the subjective elements of norms in part reflect the objective social structure, they likely mediate effects of the objective factors. These indirect effects, which are crucial to understand when trying to manage norms and their consequences, are missed by literatures that conceptualize norms solely in terms of objective elements or solely in terms of subjective elements.

The down arrows within the subjective expectations column relate to the notion that people infer *what ought to be* from *what is* (Hume’s is-ought problem). Our model suggests three distinct steps with regard to norms: perceptions of a behavior as prevalent beget ideas of it as socially approved, which in turn beget expectations that one personally should enact this behavior. Of course, the opposite inference from values to facts may also occur: People may induce perceived injunctive norms from personal norms via projection ([Krueger, 1996](#)), and induce perceived descriptive norms from perceived injunctive norms through ingroup favoritism ([Chen, Brockner, & Chen, 2002](#)).

In the column for objective social structure factors, the arrow from left indicates that the normative system in a community or society is shaped by historical and ecological conditions. While each norm evolves through its own idiosyncratic history, a larger point is that societies or communities vary with regard to the overall pervasiveness of norms ([Gelfand et al., 2011](#)). A society’s normative tightness or looseness depends on the background conditions that shaped the society’s regularities, sanctioning and institutions. Population density, scarcity of natural resources, wars, and exposure to contagious diseases are all factors that give rise to tighter norms. For instance, tighter societies feature greater regularity in people’s public behaviors and greater consensus in their beliefs. Individuals in these societies have stronger prevention motivations (avoiding errors and mistakes), indicating more sanctioning of self and others. The priorities of tight societies are also institutionalized in their criminal justice systems, which feature harsher punishments and stricter monitoring of criminals.

The down arrows in the objective social structure column represent that norms typically develop bottom up: conventions turn into injunctions and ultimately institutions. Often practices that a few people discover to have instrumental value can propagate more widely through the tendency of others to imitate and coordinate. These familiar regularities then become markers of the group, which are useful for distinguishing ingroup members and maintaining ingroup cooperation, so groups encourage adherence to these practices through sanctioning. As the practices become imbued with more value, they often get codified, formalized, and celebrated, and this institutionalization can result in practices surviving even when no longer functional for individuals or the collectivity ([Ashforth & Anand, 2003](#); [Kitts, 2003](#)). Theories of the role of norm psychology in *homo sapiens* evolution propose that the psychological adaptations that foster group regularities (such as theory of mind and over-imitation) evolved earlier than the adaptations that enable sanctioning (moral emotions) and institutionalization (symbolic thought) ([Chudek & Henrich, 2011](#)). So the down arrows may suggest the phylogeny of norm psychology as well as the ontogeny through which particular norms develop.

While we posit this bottom-up direction of influence as the primary case, norms of organizations and even societies sometimes change top down, often by a leader’s hand. For instance, in China’s Cultural Revolution, Chairman Mao dismantled key institutions such as universities and at least for a time informal patterns of social sanctioning and behavioral regularities followed. However, such organizational change efforts that begin with institutions—formal structures, mission statements, and rituals—risk insufficient commitment and even reactance ([Kotter, 1995](#)). Leaders fare better by inducing new behavioral patterns first and only later changing institutions.

<sup>2</sup> In later conceptualizations, their construct of subjective norms encompassed both injunctive and descriptive norms ([Fishbein & Ajzen, 2010, pp. 131–133](#)).



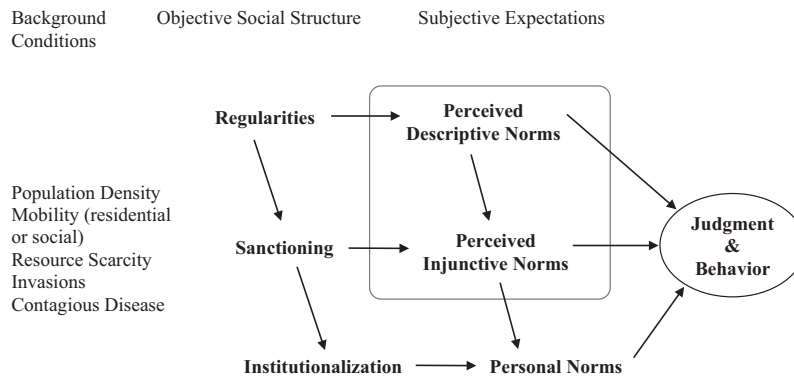


Fig. 1. An integrative model of the elements of norms and some primary interrelationships.

### Theories of norm influence and transmission

The foregoing framework suggests that norms *can* affect behavior in many ways. But people do not always abide by the norms in their environment or in their heads. And norms do not always spread and persist. Normology must ask *when* norms have force in directing behavior and propagate to new generations and populations. Several major theories, incorporating different subsets of the elements that we have integrated in our framework as well as different goals, cognitions and emotions, capture several independent ways that norms operate. These theories elucidate the dynamics of cultural patterns carried by norms—how cultural patterns in individual behavior change across situations, and how cultural patterns in a population spread, diminish and evolve over time.

Along with three classic theories—internalization, social identity, and rational choice—we also describe two theories emerging from recent work on norm psychology and cultural psychology, which we label in terms of metaphors to navigational devices—social autopilot and social radar.

#### Internalization

A classic theory is that people follow the social patterns that they have internalized as personal norms. In terms of Fig. 1, this means that objective social structures—regularities, sanctions and institutions—affect judgment and behavior via the personal norms that they inculcate. Parsons (1951) proposed that personalities and values are internalizations of a society's norms, introjected through participation in sustained role relationships with significant others. Later sociologists dismissed this “oversocialized” view of the person that fails to account for individual differences, attitude–behavior inconsistency, and social change (Wrong, 1961). Schwartz (1977) proposed that personal norms are critical drivers of behavior because they are integrated into one's values. However, studies of situations where personal and social norms conflict found that people's public behavior is often more determined by their perception of what the “society” approves of (Warner & DeFleur, 1969). Behavioral intentions are better predicted by social norms than personal norms (Fishbein, 1967). Recent work returns to the psychoanalytic concept of personal norms as introjected injunctions that may not always control behavior but merely create guilt when one acts otherwise (Deci & Ryan, 1985). In a study correlating various norm representations and emotions with environmental behaviors, Thøgersen (2006) found evidence for two kinds of internalization: introjected norms, which people follow to avoid guilt, and self-integrated norms, which people follow to express their values.

The two forms of internalization make differing predictions about the contexts where cultural patterns of behavior would be

manifest. Self-integrated norms would matter most in contexts lacking strong social cues and decision domains that induce moral reflection, for instance ethical decisions made in private settings (Leung & Morris, 2014). Introjected norms are likely cognitively linked to representations of authority figures and, as such, may be primed by them (Baldwin, Carrell, & Lopez, 1990). This form of internalization may itself differ across societies; after helping a significant other, Indians are more likely to feel satisfied whereas Americans are more likely to feel dissatisfied and “controlled” (Miller, Das, & Chakravarthy, 2011). Savani, Morris, and Naidu (2012) found that for Indians, but not Americans, priming a parent or boss shifted their overt choices towards the options perceived to be favored by the authority figure but did not shift their private evaluations of the choice objects, indicating that priming induced norm adherence rather than a change in preferences or values. In further experiments, priming affected *should* judgments about choice objects but not *want* judgments, and participants who failed to shift their choice after priming reported feelings of guilt. Cultural patterns carried by introjected norms would be manifest, then, in contexts that expose people to relevant authority figures or reminders of them. Photographs of parents displayed in the home or of company founders displayed in the workplace may function in this way to activate norms introjected from these authority figures. Table 1 summarizes these divergent predictions about contexts: self-integrated norms should affect behavior in private contexts and introjected personal norms, in contexts with cues of authority figures.

Internalization theory provides limited insight into the dynamics of cultural transmission and transformation. Internalizing norms (whether introjection or complete self-integration) is a slow process, requiring intensive, sustained socialization experiences. The transmission of customs and taboos across generations can be explained this way. However, it is hard to explain cultural changes: How is it that time-honored traditional can vanish within a generation? How do faded cultural themes re-emerge as salient social movements? How do cultural practices spread to new populations? As we shall see, cultural changes are easier explained by theories focusing on perceived social norms rather than personal norms.

#### Social identity

Social identity theory holds that norm adherence is a means of expressing belonging to a group. When people categorize themselves as members of a group, they undergo a basic cognitive shift and experience themselves in terms of group-typical attributes, the behaviors and attitudes that typify the group, rather than in terms of more idiosyncratic personal qualities (Tajfel, 1981; Turner, 1987). In this model, people who identify with a group act on the

**Table 1**  
Theories of cognitive and motivational processes that induce people to adhere to norms.

Theory	Function	Mental representations involved	Corresponding cultural patterns manifest when
Internalization	Self expression Guilt avoidance	Self-integrated values Introjected standards	Decisions made in private Authority figures primed
Social identity	Self categorization, need for belonging	Ingroup prototype	Collective identity cues, ingroup interaction, outgroup salience, identity threats, existential threats, or leadership aspirations
Rational choice	Utility maximization	Descriptive norms used to coordinate Perceived descriptive and injunctive norms needed for cooperation in mixed-motive games	Doing an activity jointly rather than solo When conditions enable communication and sanctioning
Social autopilot	Effort-free, tactical navigation	Perceived descriptive norms	Cognitively busy, ego depleted, or epistemically insecure
Social radar	Identity signaling and validation	Perceived injunctive norms	Engaged in social metacognition When facing audiences, aspirational groups, or life transitions

basis of a subjective representation called the ingroup prototype, which aggregates descriptive and injunctive norms rather than considering them as independent mechanisms (e.g., Terry & Hogg, 1996). Evidence for the group belonging mechanism comes from experiments that arbitrarily assign strangers to two groups and find that participants begin acting in terms of “us” and “them,” favoring the ingroup in resource allocations and evaluations (Kramer & Brewer, 1984). Group-related motives moderate these tendencies: Consistent with the optimal distinctiveness hypothesis, need for belonging increases conformity to the ingroup, whereas need for distinctiveness heightens differentiation from outgroups (Vignoles & Moncaster, 2007).

Social identity theory identifies many contextual factors that bring out relevant cultural patterns of behavior. Activating the collective self as opposed to the individual self heightens the influence of both descriptive and injunctive norm appeals (White & Simpson, 2013). Communication with fellow members of a group increases identification, and in experiments with social dilemmas, allowing pre-play communication increases the cooperation rate from 34% to 69% (Dawes, 1991). Situations that make an outgroup salient or contain threats to one's identity also heighten adherence to ingroup norms (Elsbach, 2003; Petriglieri, 2011). Halloran and Kashima (2004) found that bicultural Australian aboriginals were more affected by group primes when under the condition of mortality anxiety, consistent with the hypothesis that group identifications buffer people against existential threats. Individuals also engage in prototypical behavior to earn standing within the group, which entitles them to leadership or idiosyncrasy (van Knippenberg & Hogg, 2003). Table 1 summarizes that cultural patterns carried by ingroup prototypes would be predicted in contexts that cue group categorization and motives to express belonging and prototypicality.

Social identity theory offers related insights about how corresponding cultural patterns would change. First, ingroup prototypes are not only activated but also altered by exposure to salient outgroups, as these representations are continually constructed from the data of social perception so as to maximize similarity to ingroup members and contrast to the salient outgroup. A newly salient outgroup should therefore change the way a group sees itself. For example, Hong Kong Chinese shifted, after the handover of Hong Kong's sovereignty from Britain to China, from an ingroup prototype centered on Chinese ethnicity, contrasting with the British, to one centered on cosmopolitan modernity, contrasting with China (Lam, Lau, Chiu, Hong, & Peng, 1999). Second, cultural habits can shift rapidly because the norms are not internalized commitments but malleable perceptions. Third, as individuals' motives concern groups not norms, old practices should be easily abandoned with a change in self-categorization, such as when an individual transitions from student to professor. New practices

would be adopted to the extent that they come to seem group prototypical. Hence, leaders can orchestrate cultural change by making particular outgroups salient, by selectively emphasizing what makes the group special, and then institutionalizing this framing of prototypicality in formal structures, incentives, and public rituals (Haslam, Reicher, & Platow, 2011; Turner, Reynolds, & Subašić, 2008). This implies that a diagonal arrow could be added to Fig. 1, indicating that institutionalization can induce changes in perceived social norms and not merely to personal norms.

#### *Rational choice*

Another classic account is that normative patterns emerge from rational choices in interactions. That is, they result from choosing instrumentally, not expressing internalized norms nor expressing group belonging. Adherence to cultural conventions (e.g. Americans walking on the right side of a hallway) can be understood as rational equilibria in coordination games (Lewis, 1969). In this type of game, matching your interactant's move pays off. There are multiple possible equilibria, but once one of them has been established the incentive is to stick to it. However, many interactions are less coordination games than mixed-motive games, wherein the payoffs from defection are higher than the payoffs from cooperating and so rationality predicts the Nash equilibrium of mutual defection. But people do not always defect in such interactions, which might reflect that consider costs and benefits that go beyond the game payoffs, mentally transforming the payoff matrix (Kelley & Thibaut, 1978). Functionalist sociology posits that groups develop moralized norms against defection in mixed-motive situations (Coleman, 1990). If so, then people may cooperate to avoid the costs of sanctioning. Bicchieri (2006) proposed that if players expect that most others cooperate in this situation (perceived descriptive norm) and that others expect and enforce this norm (perceived injunctive norm), then rational choice can produce mutual cooperation. Evolutionary models capture how different decision strategies fare in repeated interactions with other strategies. Evolutionarily stable strategies resist invasion by other strategies (Maynard Smith & Price, 1973). Historical studies suggest that stable cooperation also depends on clear boundaries and open communication (Ostrom, 2000).

Rational choice accounts offer several predictions about the contexts where norm-based cultural patterns would occur. The coordination game analysis explains conventional behavior in people's interactions, but it does not explain conventional behavior in private contexts or account for conventional thinking. The rational analysis of cooperation in mixed motive games can explain some phenomena that are challenging for the social identity account. In social dilemma studies that vary pre-play discussion, the topic of conversation matters—only when participants discuss the game

and make public promises to cooperate, which shape perceived descriptive and perceived injunctive norms, do the highest levels of subsequent cooperation appear (Bicchieri, 2002; Bicchieri & Lev-On, 2007). As Table 1 summarizes, adherence to conventions would be expected in contexts of social interaction and adherence to moral norms of cooperation would be expected when the communication conditions allow for promises.

Rational choice accounts provide interesting insights into cultural change. Consider subcultural differences in tipping: Blacks and Asians in the US tip less on average than Whites and this contributes to problems such as discriminatory service and a lack of restaurant options in some neighborhoods. Lynn and Brewster (2015) found that ethnic differences in tipping intentions are mediated by perceived descriptive norms (measured by “what amount would your best friend tip?”) and injunctive norms (“what amount does the server expect?”). Tipping levels reflect rational adherence to perceived norms rather than differing values. Inspired by this account, interventions such as tipping guidelines on menus have been found to change tipping levels among customers from these groups (Seiter, Brownlee, & Sanders, 2011). Rational choice accounts call attention to the pivotal role of norm enforcement in cultural change, and also of second-order norm enforcement, rewards a group provides to individuals who uphold its norms (Hechter & Opp, 2001). Social change begins with individuals who cease complying with a norm (activists) but it is greatly fostered by those in positions of influence who cease norm enforcement and second-order enforcement (norm entrepreneurs) thereby reducing the costs for activists and inducing others to join their ranks (Sunstein, 1996). The thousand-year-old Chinese practice of foot binding was eliminated within several decades through a campaign that targeted norm enforcement. Progressives published essays by respected Confucian scholars against the practice and created organizations whose members publicly pledged not to bind their daughters’ feet and not to permit their sons to marry women whose feet were bound (Mackie, 1996). Focusing on the costs and benefits of norm adherence exposes some of the levers through which cultural change movements succeed. Just as the social identity account emphasizes that perceived social norms depend on institutionalization, the rational choice account stresses that they depend on sanctioning.

#### *Norms as navigational tools*

Whereas the social identity and rational choice theories portray descriptive and injunctive norms as working in tandem and serving similar functions, recent research emphasizes their functional independence and qualitative differences. Measures of perceived descriptive and injunctive norms independently predict anti-environmental behaviors such as littering and park vandalism (Cialdini et al., 1990; Reno, Cialdini, & Kallgren, 1993) as well as drinking and smoking behaviors (Larimer & Neighbors, 2003). Cialdini and colleagues have demonstrated that each kind of norm affects behavior when in “focus,” such as when made salient by a persuasive message (Reno et al., 1993). And the functioning of the two types of norms involves different kinds of cognitions and motivations (Jacobson, Mortensen, & Cialdini, 2011). Building on the “focus theory” of Cialdini and colleagues, we propose that these two types of norms both function in social navigation but in different ways. Metaphors are useful in theory development to make explicit the underlying functionalist assumptions (Tetlock, 2002). Hence, the use of descriptive and injunctive norms, respectively, can be compared to a ship’s use of autopilot and radar in navigation.

#### *Social autopilot*

A ship’s autopilot enables maintaining a controlled trajectory without constant ‘hands-on’ control by a human operator. It keeps

the ship at a steady orientation, despite shifting currents or winds, which suffices for the short term to prevent collisions. Autopilots do not replace human navigators but enable them to briefly direct their attention elsewhere, such as checking the weather. Adherence to perceived descriptive norms functions like an autopilot in that it *automatically guides immediate responses in a socially safe direction*. Evidence for automaticity is seen in that descriptive norm messages have more impact when people are under cognitive load, whereas injunctive norm messages have more impact when people have enough attention and time to cognitively elaborate (Kredentser, Fabrigar, Smith, & Fulton, 2012). Moreover, ego-depletion (depleted willpower) amplifies the force of salient descriptive norms but dampens the effect of salient injunctive norms (Jacobson et al., 2011; Yam, Chen, & Reynolds, 2014). The application of descriptive norms to immediate, tactical responses as opposed to long-term strategic planning can be seen in that descriptive norm information affects behavior solely in the present context (e.g. littering in the context about which descriptive information is provided) whereas injunctive norm information affects people across contexts (littering in other settings, Reno et al., 1993). The function of enabling safe responses is seen in that descriptive norm information affects people more in the presence of uncertainty or threat (Griskevicius, Goldstein, Mortensen, Cialdini, & Kenrick, 2006; Tesser, Campbell, & Mickler, 1983).

Autopilot theory yields unique insights about contexts and conditions under which descriptive-norms-based cultural patterns would be manifest. Cultural habits should surface under conditions of stress, danger, or distraction. Need for Cognitive Closure (NFCC) refers to the state of wanting to reach quick and final answers rather than continuing to process information. Some situational factors, such as ambient noise, induce NFCC, and some people are chronically high in NFCC. Either way, people in the state of NFCC should manifest cultural habits that are carried by descriptive norms. Cultural differences in attributional tendencies are carried by perceived descriptive norms (Zou et al., 2009). Chiu et al. (2000) found that cultural tendencies in attribution are most manifest in situations that induce NFCC and among individuals chronically high in NFCC. Culturally traditional patterns of conflict resolution judgments are similarly exhibited most by individuals chronically high in NFCC (Fu et al., 2007). Negotiators develop shared understandings more in intra-cultural than inter-cultural negotiations but especially with high NFCC (Liu, Friedman, & Hong, 2012). Bicultural individuals high in NFCC are more likely to adhere to the descriptive norms of whichever culture they are interacting with (Chao & Chiu, 2011; Zou et al., 2009). As Table 1 summarizes, the view of descriptive norms as an autopilot entails that corresponding cultural patterns would appear under conditions of NFCC or perceived danger and need for safety.

Autopilot theory elucidates some otherwise puzzling aspects of cultural transmission and change. As for transmission, Tam, Lee, Kim, Li, and Chao (2012) found that parents with high NFCC place more emphasis on perceived descriptive norms and less on their idiosyncratic personal values when socializing their children. Immigrants high in NFCC adopt host culture norms more quickly than others, unless they arrive with a heritage culture social network in which case they are slower than others (Kosic, Kruglanski, Pierro, & Mannetti, 2004). People pick up norms automatically and implicitly from television (Weisbuch & Ambady, 2009) and new cultural settings (Kitayama, Duffy, Kawamura, & Larsen, 2003). As for cultural change, the autopilot process explains dramatic changes that elude other accounts. First, people’s experience-based perceptions of descriptive norms are biased by how others’ public opinions and behaviors differ from their private beliefs and behaviors, and practices that are propped up by these mistaken perceptions can be reduced by presenting people with better information. Public opinion surveys—which tell people more objectively what their

peers do and think—have played critical roles in changes such as the repeal of Prohibition (Robinson, 1932) and the civil rights era drop in US racial segregation (O’Gorman, 1986). As current-day shifts in attitudes to gay marriage illustrate, the dependence of an attitude on perceptions of peers’ behavior can lead to cascades; as the percentage of states allowing gay marriage rises (from 10% to 20% to 30% and so on), perceptions of the norm shift, and not only progressives but also moderates join the bandwagon. Third, the dependence of behavior on a judgment about typical beliefs or behaviors helps to understand why some cultural forms are sticky and stable rather than constantly in flux. Sperber (1996) propose that the mutation of cultural forms as they are re-produced is not random; evolution drifts toward “attractors” – ideas or behaviors that are psychologically easier to represent, like round numbers. Kuran and Sunstein (1999) propose that arguments that are easy to express gain rapid currency because they get voiced in media sound bites and this gives rise to availability cascades, misjudgments that the arguments are widely believed and ensuing repetitions of the arguments.

### Social radar

A ship’s radar enables a vision of its location relative to other vessels and landmarks—ships to follow or avoid, reefs to be skirted, and harbors to target. The device sends a radio signal outward that is reflected back and received, a loop that narrows or expands as the ship moves providing feedback to enable course corrections. Radar does not automatically steer the ship; it provides information that a human operator can use strategically. Likewise people use their knowledge of what different identity groups approve of deliberately not automatically; we are not social-approval maximizers any more than utility maximizers. People adhere to the tastes of identity groups selectively and strategically (Bourdieu, 1984; Englis & Solomon, 1995). Like a social radar, acting in line with the injunctive norms of identity groups is a looping process of sending a signal and having it reflected in order to validate one’s position (Belk, Bahn, & Mayer, 1982; Goffman, 1959; Strauss, 1977).<sup>3</sup> It requires effort and willpower, as injunctive norms often entail curbing one’s selfish appetites, overriding *wants* to act on *shoulds*. As noted above, injunctive norm information affects people more when they are not cognitively busy nor ego depleted (Jacobson et al., 2011; Kredentser et al., 2012; Yam et al., 2014) and affects them across situations rather than only in one given behavioral context (Reno et al., 1993). The goal of social approval heightens compliance with injunctive norms and afterwards people feel more conflict and more interpersonal self-awareness than those complying with descriptive norms (Jacobson et al., 2011). For descriptive norms, perceptions of proximal groups (friends) and distal groups (typical students on campus) exerted independent positive effects on drinking behavior; for injunctive norms, perceptions of proximal groups were positively related but distal groups were unrelated or even negatively related (Cho, 2006; Neighbors et al., 2008). Even within a group, people take their signals about injunctive norms selectively from key individuals. Paluck and Shepherd (2012) found that the perceived injunctive norms about bullying in a high school could be changed by targeting key referent individuals, identified through social network structure.

Social radar theory provides some distinctive insights about the contexts in which cultural patterns carried by injunctive norms would be acquired and exhibited. As for acquisition, individuals oriented toward cultural metacognition are quicker than others to learn injunctive norms of a new culture, consistent with a strategic learning process (Morris, Savani, & Naidu, 2015). With regard to

which context-related cultural patterns surface, an obvious condition for a signaling process is an audience. East Asian tendencies to avoid choosing unique options in choice sets increase under conditions that cue an audience and go away when there is no possibility of appearing selfish to others (Yamagishi, Hashimoto, & Schug, 2008). Second, priming identity groups should affect adherence in a way that depends on the dominant identity motives. Priming Chinese-American students with Chinese cultural images increased their cooperation so long as they were playing with friends rather than strangers (Wong & Hong, 2005). Zou et al. (2009) found that biculturals high in dis-identification with one of their cultural groups (the motive for distinction from the group) responded to cultural image primes with a contrast effect (Benet-Martínez, Leu, Lee, & Morris, 2002; Mok & Morris, 2009, 2013). Third, people should respond to outgroups in more variable ways that social identity theory portrays. For aspirational referent groups people hold accurate and complex notions of approved-of behaviors, more so than for groups they wish to dissociate from, dissociative referent groups (Englis & Solomon, 1995). Whereas priming dissociative groups induces contrast effects in consumer choices, priming aspirational groups evokes assimilation effects (Zou, Morris, Carranza, & Fox, 2015). When entering a new career, country, or lifestyle, people provisionally adhere to its tastes and look for validation, negotiating a new identity via injunctive norm adherence (Ibarra & Barbulescu, 2010). Table 1 summarizes these predictions that relevant cultural patterns should arise in the contexts of audiences, aspirational groups, and life transitions.

The social radar account also provides unique insights into cultural transmission and change. The identity negotiation process elucidates why developing a culture in a new organization is difficult; there are no old-timers to validate identity claims. Cultures form more easily and rapidly when members import norms from a prior organization (Bettenhausen & Murnighan, 1985). A cultural change dynamic that social radar theory explains is a group’s abandonment of consumption patterns that other groups have adopted, so as to not to be mistaken for them. Consistent with this, Berger and Heath (2008) found that groups abandon patterns only in consumer domains that are identity relevant (e.g. clothing rather than DVD players) and only to the extent that the misidentification is perceived as costly. This entails strategies for leading cultural changes. Linking a behavior (binge drinking) to dissociative outgroups can induce a group to abandon it (Berger & Rand, 2008).

### Summary

We have reviewed a succession of theories about how norms influence behavior and evolve over time. People follow norms to express their values, to avoid guilt, to feel group belonging and distinctiveness, to maximize instrumental payoffs and to navigate the social environment tactically and strategically. These are all independent ways that various elements of norms portrayed in Fig. 1 take force over thoughts and behavior, and they imply additional links among these elements, beyond the ones portrayed. Each implies different moderating conditions (listed in Table 1) for norm-governed behavior and the cultural patterns they carry. As we shall see, the contributions in this special issue inform a number of these ways that norms can account for cultural dynamics.

### New insights from the special issue

The articles of this special issue push the frontiers of normology and cultural research. While each individual article makes multiple contributions, we will only preview some of them in terms of the three major causal questions illustrated in Fig. 1: how background conditions set the stage for cultural patterns, how the objective

<sup>3</sup> This is not a matter of self-verification, finding others that see your personality in the way that you see it (Swann, 1983), but of cultural validation, making an identity claim and having that claim granted by relevant gatekeepers, people with a legitimate stake in the relevant cultural capital.



structures that carry norms give rise to corresponding subjective expectations, and how these subjective expectations ultimately affect judgment and behavior.

#### *Background conditions*

A major contribution to norm-based cultural research is research correlating normative tightness across countries with historical experiences such as dense population, invasion, and disease (Gelfand et al., 2011). Roos, Gelfand, Nau, and Lun (2015) provide complementary evidence for this macro-level hypothesis and elaborate the relevant mechanism using agent-based modeling. In their simulations, recurrent threats to a group select for tighter norms. Specifically, harsh sanctioning and a greater regularity of behavior promote ingroup cooperation and coordination, and thereby increase the likelihood that the society will survive the recurrent threats.

The evolution of normative systems is affected not only by external threats but internal structural properties such as mobility. Whitson, Wang, Kim, Cao, and Scrimshire (2015) conducted a series of experiments to test the hypothesis that the degree of job mobility in a society affects how people sanction norm violators using social inclusion vs. exclusion. In a low job mobility context such as Korea, where people stay in the same organization for the long term, social exclusion of the norm violator is employed less than in a high job mobility context such as the United States, as low mobility contexts make it difficult and costly to weaken ties with the norm violator. Instead people in low mobility contexts sanction norm violators through monetary punishment. As such, these findings support a rationalistic approach to norms as patterns that arise from maximizing individual or collective utility.

Background factors such as disease may matter not only as historical conditions for tightness but also as proximal triggers for the spread of some kinds of norm-related behaviors. Dutta and Rao (2015) argue that anxiety about disease contagion primes concerns about cultural contamination by outgroups. In a historical study of the 1857 Bengal mutinies against the British Raj, they found that army regiments incidentally exposed to discourse about a contagious disease (cholera) became more likely to mutiny against their British superordinates. Although wedge rumors about British disrespect for local religious practices circulated throughout the country, the precondition of contagion anxiety determined which regiments came to believe and act upon these ideas.

#### *From objective structures to subjective expectations*

While past work on norms has assumed that perceived descriptive norms largely reflect objective regularities (see Fig. 1), there has been little investigation of the psychological processes through which they form. Kwan, Yap, and Chiu (2015) posit that individuals arrive at representations of their peers' familiarity with objects and practices through an implicit process of tallying their exposure to these things in the cultural setting. Their experiments demonstrate that subliminal exposure to an object does not create a sense of personal familiarity but implicitly registers in assumptions about how familiar the object is to others, which can serve as an autopilot for choices that will be accepted by others. This process has important implications for how leaders and activists may be able to redirect people's attitudes and behaviors through changing the prevalence of relevant objects and practices in the environment. However, Kwan and colleagues also advance an interesting argument about when these perceived group tendencies are used as basis for one's judgment. They draw upon social identity theory to show that belonging and distinctiveness motives determine how much individuals are guided by their perceptions of their group.

The traditional wisdom that descriptive norms give rise to injunctive norms is shown in the down arrow in Fig. 1. However, the reverse causal direction is also possible. Eriksson, Strimling, and Coultas (2015) produce consistent evidence from eight studies for a strong association between descriptive norms (what is "common") and injunctive norms (what is "moral"). That people may automatically infer what is approved of from what is common and vice versa suggests that norms may propagate in a society via this mutual inference process—people seek approval by doing what is prevalent, and the practice becomes more common as it takes on approval. This contribution speaks to the possibility of top-down cultural change. As Orwell described, when people are induced to enforce norms they become very motivated to project that others share their attitudes and habits. Once they come to see the habits as widespread, they may adhere to them reflexively via the autopilot mechanism and not just deliberately via the social radar mechanism.

#### *From subjective expectations to judgment and behavior*

Several theories of normative force predict greater adherence to norms in public or the presence of an audience. This factor may be relevant not only to contextual variation within cultures but also to differences between cultures. Savani, Wadhwa, Uchida, Ding, and Naidu (2015) show that the greater Indian (vs. American) propensity to disassociate choices from private preferences arises not only from the greater preference for allocentrism in decision making in Indian culture but also from the greater sensitivity to social cues in Indian contexts. Consistent with the social radar account, Indians made more choices inconsistent with their private preferences in the presence of social monitoring cues (i.e., an image of human eyes). Consistent with the optimal distinctiveness argument of social identity theory, Indians disassociate choices from preferences when social feedback primed need for group belonging as opposed to need for distinctiveness.

A perennial question when considering societal cultures and organizational cultures is what kinds of norms enable people to leverage their talents. Through their analysis of archival data, Swaab and Galinsky (2015) show that the national soccer teams of countries with more egalitarian norms performed better in international competitions. Consistent with the causal chain in Fig. 1, the effect of institutional egalitarianism on behaviors (player development and team success) was mediated by subjective egalitarianism.

Past theories identify contexts of decision making with more or less weight on norms, MacCoun (2015) develops a general, formal model of behavioral decisions as a function of rational, evidentiary proof and social proof from descriptive norms. Exploring models that allow the weight on both of these parameters to vary, MacCoun fits the data from a wide variety of belief transmission situations – from the Ash experiments, to jury dynamics, to historical cases of "tipping point" cultural change. This work is an important conceptual bridge between social learning based models of cultural evolution (Boyd & Richerson, 1994) and models of group decision making in social psychology and organizational behavior.

#### *Transmission across generations*

Finally several articles contribute to our understanding of inter-generational cultural transmission. Whereas memetic accounts of cultural transmission (Dawkins, 1989) suggests that cultural elements spread by replicating themselves, normological accounts entail that cultural patterns are re-produced more variably as people construct imperfect representations of their group's regularities and expectations and act on them inconsistently as a function of motives and situations.

Social autopilot theory highlights that NFCC is a condition that increases acquisition of and adherence to cultural patterns related to descriptive norms. Hence, groups with higher NFCC should have higher levels of cultural continuity and stability across generations. Consistent with this idea, [Livi, Kruglanski, Pierro, Mannetti, and Kenny \(2015\)](#) propose that NFCC predicts a greater tendency for old-timers to “freeze” on a cultural practice and newcomers to the group to “seize” upon established group norms. Accordingly, groups with high (vs. low) NFCC have more persistent and stable norms across generations, although the results indicate transmission mainly through the latter process of newcomers’ seizing upon established norms.

Cultural elements carried by different kinds of norms should exhibit different kinds of transmission dynamics. In an innovative experiment using a joint foraging task in which newcomers learn from interaction with old-timers, [Kashima et al. \(2015\)](#) investigated two aspects of culture with different normological bases: behaviors and implicit attitudes (akin to personal norms). Strikingly, variations in the learning conditions revealed that these two aspects of culture are learned in different ways under different conditions. Behavioral practices are learned through reproducing old-timers’ behavior, a process fostered by explicit instruction. Implicit attitudes are learned through newcomers’ social inferences about old-timers’ intentions, a process fostered when old-timers’ patterns are institutionalized as traditions. These findings suggest that neither cultural behaviors nor cultural attitudes get from old-timers to newcomers through simply replicating themselves, but instead through different ways that newcomers construct subjective representations of the old-timers’ ways.

## Managerial implications

We have proposed a normology framework and delineated processes through which norms take force over thoughts and behaviors, many of which are further elucidated by the articles of this special issue. Descriptive, injunctive, and personal norms operate independently and in conjunction as they are engaged through different motives that operate in different task conditions and social contexts. We have also discussed how norms get propagated to new generations and populations. This knowledge has important applied implications for management and leadership. We close by previewing a few of these that are further elaborated in the articles that follow.

### Directing behavior through norms

To achieve coordination in organizations, managers must direct the behavior of employees. Our enumeration of norm mechanisms (see [Table 1](#)) illustrates that different bases of norm adherence can be induced in different ways and different contexts. In societies where people introject the expectations of authority figures, reminders of these figures (e.g., photos of founders and leaders) can increase adherence to introjected norms. Threats such as contagious disease or conflicts increase compliance with injunctive norms ([Dutta & Rao, 2015](#); [Roos et al., 2015](#)). Managers who rely on norms to regulate employee behaviors and performance also need to be aware of the limitations of and contextual nature of normative influence. Norms affect behaviors and performance ([Swaab & Galinsky, 2015](#)), but norms are not the sole determinants of behaviors ([MacCoun, 2015](#)). Normative influence is stronger within interdependent (vs. independent) societies, and when behaviors can (vs. cannot) be publicly monitored ([Savani, Wadhwa, et al., 2015](#)).

Other times managers seek to change perceived norms. As repeated exposure to practices induces the perception of these

being familiar and typical in the group, managers can do so through shaping the environment, not only the objective behavioral regularities but also the information about fellow employees that people encounter in the workplace and on company intranets. This should be particularly effective when coupled with strategies to increase employees’ motivation for belonging to the group ([Kwan et al., 2015](#)). Perceptions that practices are common in the organization may engender judgments that these practices are approved or morally enjoined by coworkers ([Eriksson et al., 2015](#)). As public health research increasingly shows, sometimes problematic behaviors result simply from group members’ biased perception of descriptive and injunctive norms. When this is the case, making available data about employee behaviors through surveys and other methods suffices to reduce the problematic behavior. This method is low in cost and also more palatable than top-down requirements or fines. To change a more pervasive behavior that has become a norm, a campaign requires employees who cease complying and opinion leaders who cease enforcing, thereby reducing the costs for others to join the movement.

In sum, managers can direct behavior by increasing adherence to prosocial norms and decreasing adherence to antisocial norms. Managing through activating norm adherence (“nudging”) is safer than managing through enforcing requirements (“pushing”) that can induce reactance and resentment, or promising incentives (“luring”) that can induce unintended and unforeseen responses.

### Leading organizational cultures

Managers who seek to sustain a company’s culture must check that they understand it. Predominantly firms have assessed and represented their cultures in terms of values. Values are useful ways of summarizing a company’s priorities but it is the more specific level of norms at which a culture guides behavior. Hence we propose that firms would gain valuable insights from studying their cultures normologically. Specifically, assessing employees’ subjective expectations (perceived descriptive and injunctive norms) could inspire novel insights beyond the generalities of values (see [Cooke & Rousseau, 1988](#)). But, as [Fig. 1](#) illustrates, the prevailing subjective expectations among employees should be interpreted in light of objective patterns in both the formal organization and the informal organization (behavioral regularities, sanctioning, and institutionalization). Subjective expectations primarily reflect the objective social environment.

Old-timers in an organization are important agents for sustaining its culture. Leaders can foster transmission of cultural attitudes by emphasizing the institutionalization of old-timers’ patterns and directing newcomers to actively think about the reasons for old-timers’ behaviors; they can foster the transmission of practices by encouraging explicit instruction by old-timers ([Kashima et al., 2015](#)). Transmission of traditional patterns should be particularly effective when there is a collective need for cognitive closure such as in conditions of threat or uncertainty (financial crisis, market change, etc.) ([Livi et al., 2015](#)).

Leaders who seek to transform organizational cultures can also benefit from a normological perspective. If they want to induce a change in employees’ perceptions of the frequency or approval of particular behaviors in the organization, or employees’ internalization of organizational norms, [Fig. 1](#) offers some tentative suggestions about which changes to the objective social structure might bring about the desired changes in subjective expectations. A normological perspective elucidates that change agents have many levers to pull in transforming cultures. However, as [Roos et al. \(2015\)](#) elucidate, group norms become tighter and less open to change in threatening environments.

Strong cultures help not only for coordination but also for motivation and recruitment. Accordingly, managers can strengthen

consensus about the ingroup prototype by framing what makes the firm distinct from competitors and highlighting these distinctive practices in formal organizational structures, incentives, and public rituals. However, strong organizational identification can make organizational changes particularly difficult. In mergers and acquisitions, managers may need to reduce perceptions of distinctiveness in order to foster integration. A normological perspective reveals how organizational cultures can be malleable and manageable.

## Conclusion

This special issue lays the groundwork for a fuller understanding of culture and its role in organizational behavior. Research on norms in different disciplines offers new insights beyond traditional value models about cultural dynamics: how do conditions and contexts draw out culturally inflected thoughts and behaviors, and how do aggregate level cultural patterns spread and transform over time. We have integrated normological concepts and theories to set the stage for the contributions made by the articles in this special issue. Our hope is that these contributions from different academic disciplines, using different methodologies and levels of analysis, will provoke new insights about culture in organizational behavior and other fields.

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