

## From Nudge to Culture and Back Again: Coalface Governance in the Regulated Organization

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## From Nudge to Culture and Back Again: Coalface Governance in the Regulated Organization

Ruthanne Huising and Susan S. Silbey

### Abstract

The range of organizational responses to regulatory requirements is often explained by observing the organization as a monolithic actor interacting with external agents. We look inside regulated organizations, recognizing them as a web of transactions and norms, to examine *how* formal and informal organizational practices transform regulatory requirements into normalized activity. This paper identifies four levers used at the coalface – or frontline work - of the organization to achieve /encourage compliance in organizations: nudge (individual), bureaucracy (roles, rules and procedures), relational governance (network), organizational culture (assumptions, values, and artifacts). We map the range of research on coalface governance, while displaying the assumptions and implications of each lever often embedded in recommendations to policymakers or organizational managers. We offer this continuum of techniques to invite a richer conversation about ways of pursuing compliance in organizations.

**Keywords:** nudge, bureaucracy, relational regulation, culture, regulation, organizations

### INTRODUCTION

Over the last several decades, regulators have developed new approaches to regulated parties and to regulatory practices, including shifts to responsive regulation (Ayres & Braithwaite 1995), smart regulation (Gunningham et al. 1998), and performance-based regulations (Coglianese et al. 2003; Coglianese 2015; NAS 2016, 2017).

Across these approaches, scholars suggest that the interpretation and enforcement of regulations should be customized, more or less, to the regulated organization. This flexibility transfers much of the work – design, interpretation, and enforcement – from regulatory agencies to the regulated organizations. Government regulators oversee, approve, and audit while the detailed work involved in figuring out compliance is left to the individual organization. The implications of this transfer are considerable for the regulated organization; they are also significant for regulatory scholars. If these trends continue, regulatory scholars will increasingly need to be organizational scholars.

Much of the scholarship examining the regulated organization asks *why is there a range of responses to regulatory requirements and pressures?* These studies treat the organization as *the salient actor*, observing managerial decisions at the interface of the organization and their regulatory environments, at relationships between organizations of government agents. Several theoretical lenses – institutional (e.g. Basu, Dirsmith & Gupta 1999; Edelman et al. 1991; Edelman 1992), legal (Short & Toffel 2010), economic (Amengual et al.

2017), capabilities (Barnes & Burke 2012; Grant et al. 2002; Gray & Shadbegian 2005; Perez-Aleman 2013), and cognitive (Anderson & Bateman 2000; Coglianese & Nash 2001; Gunningham et al. 2003; Sharma 2000) – are used to explain variation in organizations’ responses to regulatory requirements. Managerial attention to and interpretation of the legal environment, competitive forces, strategic issues, and operational factors are said to generate variation in the organization’s responses to regulation. This body of work identifies organization-level variables that predict formal responses to regulations but overlooks the internal processes and mechanisms through which the everyday priorities and work routines, decision-making networks and ways of interacting and talking in organizations coordinate with regulatory requirements (cf. Gray & Silbey 2014).

Because the ostensible goal of regulation is to shape what constitutes routine organizational action, the elision of internal organizational processes presents a challenge to understanding how compliance is actually produced as well as how organizations may improve compliance. Ultimately, the implementation of regulatory requirements at the coalface of the organization, requires governance efforts that normalize activities to meet regulatory goals. The term coalface refers literally to the exposed surface in a coal mine, where the miners’ do their labor. Figuratively, it refers to the work done on any frontline, the everyday work of transforming matter, ideas, strategies, and requirements into actions that achieve them (Barley 2008). For us, it is where the rubber of regulations hits the road of organizational reality. Coalface governance is the work done within the regulated organization to transform regulations into routine action. To protect machine operators, safety guards must be installed and continuously kept in place (Gray 2011). To responsibly treat a premature baby while respecting parent’s legitimate control, consultation must be integrated into every treatment decision (Heimer 1999). To protect the environment, procedures for safely disposing of chemical waste must be adapted by researchers across thousands of laboratories with varying hazards (Huising & Silbey 2011). To ensure equal public access for differentially abled persons, money must be earmarked in capital budgets to create wheelchair ramps (Barnes & Burke 2012). The purposes driving regulations are achievable only when compliance becomes habitual, near-automatic, conventional ways of working; regulatory requirements must become thoroughly integrated and entwined within organizational life. At the same time that compliance needs to become habitual, successful regulation also requires planning and tailoring for local circumstances so that it does not become mindless, counter-productive legalisms (Kagan 2009). But *how*?

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In this review essay, we explore a rich trove of scholarship not usually included within the standard fare of legal and socio-legal scholarship to look *inside* organizations, asking *how* do formal and informal organizational practices transform regulatory requirements into normalized activity? We begin with the sociological observation of the organization as a web of relationships – allocating material resources, distinct roles, distributed authority, and varied expertise – both a single collectivity and many individuals embedded in a larger network of transactions and norms. As we shift attention from the organization as the regulated actor to the organization as a web of relationships through which regulatory work is accomplished, we take stock of what we know about the work in regulated organizations that transforms external regulatory requirements into local expectations (policies, rules, procedures) and into the ultimate goal of compliant routine action. Compliant routines, of course, often include spaces for deliberation offering just that local adaptation that makes compliance both reasonable and effective (NAS 2016,2017). We focus especially on the levers used at the coalface to achieve compliance in organizations, attending to nudge techniques, bureaucratic structures and processes, relational governance, and organizational culture. We consider how the coalface of the organization – the daily work, interactions, and decisions of managers and workers at the ground level– may be altered to align the organization’s activities with regulatory requirements.

We organize scholarship from various fields and disciplines into four categories of coalface governance tactics characterized by differences in the unit of analysis or, the focal source of compliant (or noncompliant) action in organizations. (See Table 1). The four categories with their focal unit – nudge (individual), bureaucracy (roles, rules and procedures), relational governance (network), organizational culture (assumptions, values, and artifacts) – represent a continuum of research from, on the left of the chart, the most individual and discrete techniques to channel individual action to, on the right side of the chart, more holistic and continuous techniques to channel collective action in line with regulatory requirements. We outline these categories of governance tactics in Table 1. For each technique, we identify the *means* of achieving compliance, the intended compliance *ends*, the *site of responsibility* for compliance, the *temporality* of compliance efforts, and the *accountability mechanisms*. We created this heuristic to map the range of research on coalface governance, while displaying the assumptions and implications of each type often embedded in recommendations to policymakers or

organizational managers. We offer this continuum of techniques to invite a richer conversation about ways of pursuing compliance in organizations, with the hope that a mix of techniques will be considered.

-- Insert Table 1 here --

In the following sections, we begin on the left side of the table, with the micro-level research that examines the individual actor as the agent determining organizational compliance. We synthesize the vast theoretical and empirical literature on ‘nudge’, a model of how individuals may be enticed to align their actions with regulatory requirements. Historically, much regulatory literature analyzed incentives for compliance as well as avoidance and resistance, addressing the ways in which organizational and regulatory incentives were negotiated with enforcement agents. Mostly, this literature addressed the organization as the target, perhaps more than the interests of individuals within the organization (Hawkins 1983; Bardach and Kagan 1982; Hawkins and Thomas 1984; Hutter 2001). In contrast, while the nudge perspective is also about incentives, it specifically locates responsibility and control within the individual actor, recommending specific stimuli, interpretive frames, and choice sets to correct patterns of human error enacted in discrete moments of decision and action.

We then turn to literature that focuses on governance techniques within the organizational context rather than within the atomized individual. First, we examine research on the mobilization of bureaucratic levers – hierarchical authority, specialized roles, and the creation of rules and procedures – to achieve compliance in organizations by attempting to couple the formal organization with regulatory requirements. Second, we synthesize research that moves beyond the formal bureaucratic organization to the relationships forged in the interstices of assigned roles. Here coalface/frontline governance is accomplished by teams of employees who go beyond scripted roles, rules, and routines to understand the emergent and contingent nature of regulatory compliance while developing ad hoc, pragmatic solutions for these contingencies. By addressing compliance problems that are more expansive and unruly than a bureaucratic system of divided, specialized labor and prefigured rules and procedures can handle, this network of employees continuously manages the gap between the regulatory requirements and the unpredictable complexity of organizational life. Finally, we describe the scholarship on organizational-culture as yet another approach to promoting compliance at the coalface. By purposively developing a system of signs and symbols that values regulatory compliance and emphasizes the

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importance of learning, managers attempt to alter the subjectivities of employees so that individuals and groups continuously self-discipline and correct their actions in line with the ends regulations seek to achieve. Here, as in relational regulation, we encounter routines that invite deliberation and thoughtful practice in pursuit of regulatory goals. Following our synthesis of these literatures as coalface governance techniques/levers, we discuss the implications for organizations, managers, and employees, and suggest an ambitious future research agenda.

In shaping this review, we chose to examine organizational compliance with regulatory expectations and requirements only, purposely excluding the related literatures about norms, standards, rankings, voluntary programs, and social movement pressures. This is not to suggest that such phenomena operate independently or with notable difference from legal regulations, or are unimportant; there are practical constraints on what can be included in one paper. We also do not discuss the more familiar and extensive literature on the relationships among regulators and regulated parties, the role of formal agents of social control (i.e. inspectors and prosecutors), or the regulators' enforcement policies and strategies. Finally, we do not discuss the literature on whistle blowing or internal reporting, which speaks to enforcement rather than efforts to develop modes and methods of compliance. Each of these could be an essay by themselves.

## **NUDGE AS COALFACE GOVERNANCE**

Discretionary and voluntary behavior is necessary to implement regulations inside and outside of organizations. Recently, much public and scholarly discussion considers how behavior in service of public purposes can be encouraged and directed independently from formal authority (i.e. the state or firm managers). Behavioral economists have appropriated conventional social psychology to promote the notion of nudges: techniques to channel individual behavioral choices to achieve beneficial outcomes for individuals, private organizations and society. Rather than traditional policy levers such as restrictions, penalties, and education, nudge promoters recommend designing choice contexts and arrays to push decisions in desired directions. Thus, nudge enters the panoply of regulatory approaches by addressing individual cognition as the means of aligning our decisions with regulatory requirements and goals.

Beginning with a model of behavior as cognitive, the idea of nudging builds from Tversky and Kahnemann's (1973, 1981) prize winning psychological research and Kahnemann's (2011) more recent extensions documenting the persistent non-rational biases of human decision-making. With empirical field and lab experiments, Tversky and Kahnemann showed how the prescriptions of microeconomic rationality are unsupported by empirical evidence of people's actual choices. Further, they documented patterned cognitive biases – they called heuristics - such as loss-aversion, attention to recent or available information, and contextual framing effects.

Not all cognition is equally subject to these heuristics, which are most often displayed in binary decisions. They are more common in what Kahnemann (2011) calls system 1 or fast thinking in which emerging information is associated with existing categories rather than used to create new categories. This is, of course, the foundation of learning and socialization, providing resources for sociality as well as thinking. Human cognitive processes homogenize across differences so that each encounter or event is not perceived as unique but can be responded to as an example of something familiar for which names, interpretations, and established responses exist. Because of the inclination to draw upon existing categories, action can proceed unconsciously rather than each encounter or event requiring active examination, evaluation and decision. However, categorization and routinization can also efface the particular differences among events that can, and often do, impede rational analysis. In contrast, System 2 thinking is slow, effortful, infrequent, logical, calculating, and conscious, and more often approximating what is conventionally understood as rational.

Working with system 1 fast thinking, nudging is promoted as both an alternative to formalized government regulation and as a set of techniques to be incorporated within regulation. Because humans exhibit cognitive biases that lead to suboptimal decisions, those who shape the decision choices (i.e. choice architects) hope to use knowledge of heuristics to push decisions outcomes in desired directions (Sunstein & Thaler 2003). Labeling these choice alternatives 'nudges' rather than pushes, their proponents suggest gentler, less commanding action than may be required by complex legal regulations, promoting what they claim is a context of human freedom and choice rather than an exercise of state power and legal force.

To count as a nudge, the choice architecture must "alter behavior in a predictable way without forbidding any options or significantly changing economic incentives" (Thaler and Sunstein 2008, p 6), and



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decision makers must be able to easily avoid the nudge without incurring costs. Among the range of nudge tools, advocates include, for example, defaults (options that choosers will obtain if she does nothing); transactional short cuts (e.g. including charitable gifts on credit cards or as part of other purchases); commitments; persuasion, campaigning and counseling to shape decision-making; information mechanisms (e.g. telling decision-makers what others have chosen, announcing social norms or common practices); warnings and reminders (Cialdini, 2003).

Although never mandating action or deploying economic incentives, nudges can nonetheless vary in the degree to which they impact the decision-making autonomy of individuals. Baldwin (2014 p. 835) identifies three degrees of autonomy within the nudging framework, each of which generates a distinct set of practical and ethical issues, while emphasizing that “the degree of nudge is a separate matter from the particular nudging tool that is deployed.” The minimal form of nudge, ‘first degree nudges,’ simply provide information to decision-makers, leaving full autonomy to the individual whether, when and how to use the information. For example, public notices about tax filing deadlines or hazard warnings on public roads would be first degree nudges. ‘Second’ and ‘third’ degree nudges are distinguished by the probability that the decision-maker will discern the influence, assess its extent and with reflection be able to make an informed decision. Thus, in this typology, third degree nudges block or impede the actor’s capacity to evaluate the decision choices. In a third degree nudge, the manipulation of any combination of emotional, cognitive, or volitional influences “is sufficient materially to obstruct reflection or the assessing, on reflection, of the extent, nature and degree of the nudge” (Baldwin 2014, p.837). Subliminal messaging or use of shocking photographs to encourage people to stop smoking or restrict access to abortion are examples of third degree nudging.

While Baldwin’s typology encourages detailed analyses of the ethical, political and legal implications of different degrees of nudge, it also allows us to see that some of the claims for nudging as innovative public policy may be over-stated. For example, for more than a century, regulatory agencies have used informational notices - first-degree nudges - to identify risky products, and warn consumers about possible hazardous side effects or common misuses of otherwise safe products (May 2005; Carpenter 2010). Informational notices are a ubiquitous form of low-level regulation, often the outcome of a negotiated compromise among pro-regulation and anti-regulation interests.

Empirical assessments, using laboratory and field experiments, have examined the conditions under which nudges actually promote the intended behavior. These studies cover an enormous range of phenomena, including but not limited to: bank (Wijland et al. 2016) and automobile marketing (Codagone et al. 2016); female schooling in third world countries (Benhassine et al. 2015); charitable giving (Goswami & Urminsky 2016) and organ donation (Howard 2007; Kessler & Roth 2012; Morgan et al. 2015); retirement savings (Willis 2013); healthy food choices (Miller et al 2016; Tal & Wasink 2015), flu vaccination (Bronchetti et al 2015), and oral health (Altmann & Traxler 2014), to name but a few.

The results are quite mixed with results showing that the ability to nudge behavior in anticipated and desired directions varies widely. The order, amount, and kind of information in the nudge seems to affect its success. Some studies show that actors make decisions about risk by cognitively integrating value preferences with assessed probabilities for each decision, or by making comparisons across multiple decisions (Arieli et al 2011). Further, laboratory experiments show that the order in which this information is provided and acquired affects the quality or benefit of the decisions – more or less risky, more or less benefit, often having greater effect pushing actors in more risky directions, but more so for men than for women (Aimone et. al. 2016). In healthcare, this sequencing of information can affect not only the selection of insurance and drug plans but also treatment protocols (Bergus et. al. 2002).

Consistent with psychological studies, the nudge studies have shown that self-transcending rather than self-interested motives are more effective at increasing pro-social behavior (Grouzet et al 2005; Schwartz 1992). Evans et al. (2012) show that recycling rates are dependent on the information participants receive about a separate environmental behavior, car-sharing (carpooling in the USA), rather than on financial nudges or financial plus environmental nudges. Yet, Costa and Kahn (2013) show that these nudges have this greater pro-social effect on those who are already committed to conservation and environmental sustainability (cf. Barile et al. 2015). Studies also explore how the volume and variety of informational nudges affect actors by offering incentives that displace or “crowd out” existing motivations or pro-social preferences (Deci et al. 1999; Evans et al. 2012; Feiler et al. 2012; Frey & Oberholzer-Gee 1997; Lepper et al. 1973; Wryznieski et al. 2014). For example, in a study of sustainable foresting, Agrawal et al (2015) found that the introduction of economic benefits encouraged farmers to forego environmental motivations for forest protection. However, Amenguel and

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Applebaum (2017) show that “[s]uch crowding out effects may be limited.” In a study of an organization trying to encourage sustainable purchasing practices among its staff, they find that combining instrumental and moral motives achieved the most environmentally conserving outcomes, much more than sustainability messages alone.

Some of the most well cited work on the effectiveness of nudges builds upon the role of norms rather than utility or self-interest. As a fundamental building block of civil society, norms are shared habits, that is, common behaviors deemed appropriate or desirable. Recognizing that the actions of individuals and communities convey information about what they value, individuals take these meanings into account when they orchestrate their own actions whether about downloading music (Salganik), complying with form adhesive contracts (Eigen 2012), or violating the criminal codes (Kahan 1997, 1998; Meares & Kahan 1998). Thus, information about what others are doing is used as a nudge to influence decision-making without necessarily invoking self-interest or pro-social behavior, although these can be usefully combined to achieve what the choice architect is promoting (Cialdini 2003).

Social norms are not only common and more generally approved behaviors, but are also temporally durable within groups and societies while varying across groups and societies as distinctive, identifying characteristics. If social norms can sometimes provide effective nudges, are the nudges similarly durable, likely to become ‘sticky motivations’ and normalized habits? Here again the empirical research provides mixed, often conflicting results. A study of 395 French farmers reported that 43% of those surveyed intend to maintain the recommended sustainability practices for which they had been incentivized even in the absence of financial incentives or knowledge of others’ intentions (Kufuss et al 2016; cf Roberts & Lubowski 2007). However, the research also suggests that low levels of change are more likely to be permanent than major changes, and therefore that long lasting change towards more environmentally-friendly practices in agriculture can be expected to be slow and incremental. A study of water usage in Atlanta Georgia (Ferraro et al. 2011) moves beyond the limitations of the prior study of the French farmers, which relied on stated intentions rather than actual behavior, by using a natural but randomized household field experiment. Ferraro et. al. find that technical advice has a negligible impact on behavior but that including normative appeals and social comparisons leads to significant reductions in average water use in the four months after treatment assignment, thus also confirming

the effect of multiple messages. However, in the two years following the initial study, the authors found that the effect on water use was short-term only.

The empirical literature testing nudges for shaping regulatory compliance and pro-social behavior challenges meaningful synthesis or clear predictions. Information, social purpose, and peer influence appear to matter but questions about the scale and duration of the nudge are open. Further, because nudges are differentiated from and should theoretically exclude economic incentives, experiments that mix economic with other incentives (e.g. Benhassine et al. 2015; Hilton et al 2014; Kuhfuss et al 2016) provide poor validation. Moreover, “what is typically missing,” from the abundant literature critics claims, “is any evidence about the underlying mechanisms through which these policies affect behavior” (Grune-Yanoff 2016 p. 464). Finally, there are few experiments directly comparing circumstances when the nudge is promoted as libertarian paternalism, or conceptualized as informal social control (norm based) rather than formal social control (government regulation).

Among examples of confusing operationalization alongside mixed results from empirical tests, two efforts are nonetheless noteworthy. In a highly regulated environment—retirement savings and banking charges - Willis shows that default nudges are likely to fail under conditions when regulation also often fails. In a second study, reported in an aptly titled essay, “Fudging the Nudge,” Ho (2012) reports on restaurant grading as a nudge for implementing health and safety regulations in the food industry. Ideally a publicly posted letter grade from health and food safety inspection should nudge restaurateurs to greater compliance but the process seems to involve significant noise producing unclear signals both for consumers and for scholars. In some jurisdictions, grade inflation reigns; in others there is little consistency in the application of the grade, or indications of reductions in foodborne illness. Finally, these studies beg the question whether any of these nudges would work without the authority of the state behind them.

Alternatively, some critics suggest that policy makers deploy what they call boosts instead of nudges. Rather than exploiting cognitive biases, the boost paradigm “presents a vision of bounded rationality according to which human reasoning and decision making can be modeled ... [to] produce good and good enough inferences, choices and decisions, which applied in the appropriate context” promote public goods (Grune-Yanoff & Hertwig 2016; Hertwig et al. 2013). Boost is offered as a learning protocol, urging both public and private

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agents to change their representational and communicative practices that currently impede carefully reasoned choices. For example, instead of representing statistical information as rates of change, e.g. percent difference from some current base, which most people misinterpret, choice options should be communicated through frequencies, which are easily comprehended by the human mind (Hertwig & Erev 2009). “The goal is not to push people toward a particular goal (for example, to seek or not to seek treatment), but to help everybody (in this example, doctors and patients) to understand statistical information as the first critical step toward figuring out one’s preferences.” In short, the goal is to improve decisional competence rather than manipulate decisional architectures.

This review of nudge as a form of coalface governance suggests interesting homologies with accounts of conventional state regulation. Just as regulatory approaches fall along a continuum from mandatory and complex requirements at one end of the variation to government’s notices about potential hazards with information about mitigation at the other (May 2005), the capacity of nudge tools to influence decisions falls along a similar continuum from defaults that require action to overcome or change the course, through the invocation of well-established norms experienced as mandatory for social acceptance, to information about potential consequences of different courses of action. “Nudges, and different degrees of nudge, accordingly, can be expected to echo the tendency of traditional regulatory styles to vary in their effectiveness when targeted at different types of regulated concern and at people with different characteristics” (Baldwin 2014, 840).

In sum, as a form of coalface governance, that is, regulation of action on the ground, nudge identifies the individual decision-maker as the focus for achieving compliance. Importantly, however, the nudge literature ignores the role of the individual acting within or for an organization. The organization, regulated or not, is absent from the nudge literature. The individual decision-makers may be more or less socialized, amenable to normative pushes, but are nonetheless treated as atomized units rather than links in networks, whether formally in organizations or informally within communities. How are the decisions of individuals linked in the long chains of action that become the organization’s actions?

## **FROM INDIVIDUALS TO ORGANIZATIONS: BUREAUCRACY, RELATIONAL GOVERNANCE, AND CULTURE**

In contrast to the behavioral perspective discussed just above, the organizational perspective rejects the ideas that : 1) employee actions are reducible to the choices and characteristics of individuals; 2) organizations are simply a context (better or worse) for individual choice and action; 3) compliance observed at the organizational level is the aggregation of these individual actions. Instead, the organization is made up of interactions among people working in roles within an authority structure with rules, routines, and values. At the same time the organization is a polity made up of groups – departments, programs, teams – as well as individuals with often divergent or conflicting interests (Gouldner 1954).

Such polities make a consistent response to one regulator difficult and to several regulators near to impossible (Heimer 2013). Gray and Silbey (2014) show that interpretations of and responses to regulations vary within the organization, depending on an employee's authority, expertise, and frequency of interaction with the regulator. Employees with authority and competing expertise who rarely encounter regulators interpret and respond to them as obstacles. Employees who are middling in terms of authority and expertise and have regular interaction with regulators experience them as allies. Employees with limited authority who encounter regulators through periodic inspections in which identified errors lead to anything from sanctions to a scolding interpret regulators and regulations as threats. These findings suggest that organizational compliance depends on the mobilization and engagement of diverse members across the organization's hierarchy, which may be far more complicated than is often imagined when we think about the organization as a single regulated actor. The organization – both its formal structural design and the stream of ongoing interactions – shapes the interpretation of legal requirements, generating experiences and capabilities that enable or impede regulatory compliance.

### **BUREAUCRACY AS COALFACE GOVERNANCE**

In this section, we focus on how the organization's array of roles, responsibilities, and resource distribution guide the actions of managers, professionals, and other employee groups as they variously resist, transform, and realize regulatory compliance. Here we discuss the role of techno-legal professionals and the influence of rules and processes, turning in the following sections to relational and cultural governance techniques refracted through the informal dynamics of daily organizational life.

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*The Role of Techno-Legal Professionals.* In bureaucracies the management of organizational compliance is delegated to groups of techno-legal professionals including internal counsel, quality assurance managers, risk managers, human resource managers, health and safety managers, etc. These “staff professions” (Dalton 1950) interpret regulations, rationalizing them into bureaucratic procedures, transforming them into organizational policies, operating procedures, and rules that are supported by training sessions, handbooks, forms, checklists, and signs. By making sense of the legal regulations for the organization, techno-legal professionals create a centralized, bureaucratic regulatory program that allows them to prescribe, enforce, and audit compliance. Regulators depend on these organizationally embedded professionals to decipher regulatory requirements, to reformulate them for local circumstances, and to report back on what does not work (Heimer 2013). The locally responsible professional serves as *the* crucial link between the regulators and the landscape of regulated activities and actors. These “regulatory wranglers” (Heimer 2013, p. 141) have to rustle and corral both the regulators and the members of their organization to get somewhere close to compliance.

Techno-legal professionals devote a significant amount of effort to translating legal mandates into language that managers and employees can understand and to negotiating specific courses of action that seem both likely to satisfy regulators and possible to implement. This important “interpretative work” (Heimer 2013) transforms regulations into computer-based auditing systems (Silbey & Agrawal 2011), standard operating procedures (Barnes & Burke 2012; Huising 2014), and work routines (Smith-Doerr & Vardi 2015). While much of the research on compliance in organizations assumes the existence of this translation and negotiation work, this is a topic that has much potential for further study. More work is needed to understand, for example, the relationships between different regulatory approaches and the interpretative work needed, the implications of various translation methods for how internal actors understand regulatory requirements, or the how these negotiations influence compliance outcomes (NAS 2017). Do organizational resources and status shape the extent and content of such translation work? Understanding such processes offers a complement to the extensive literature that demonstrates how this interpretative work shapes how actors external to the regulated organization, including the courts, come to understand what constitutes compliance and evidence of compliance (Edelman et al. 1999; Edelman et al. 2011; Edelman 2016; Talesh 2009).

It is important to note that these interpretative processes go beyond regulatory compliance. Translational and interpretive moments also serve as occasions in which various techno-legal professions compete to increase their authority and resource-base within the organizations. In fact, it is the ambiguity of regulations and the textual indeterminacy and availability for multiple interpretations that provide not just accidental occasions but structured opportunities to construct legal mandates for professional authority to serve their occupational interests in organizations (Edelman et al. 2001; Dobbin 2009). Further, competition among techno-legal professions within and across organizations to control how regulatory requirements are interpreted and made manifest, end up shaping the adopted interpretations. Dobbin and Kelly (2007) detail the competition between human resource professionals and in-house legal counsel to shape managerial understandings of the implications of regulations related to workplace harassment. While in-house counsel proposed that executives handle cases as they emerged, the human resource managers convinced executives that legal risk could be managed in a more stable way by instituting grievance as well as training procedures. Managers ultimately accepted HR managers' approach, convinced these bureaucratic procedures or routines could help reduce legal risk. Similarly, Delmas and Toffel (2008) show how the outcome of struggles between corporate marketing and law departments influence which environmental management practices organizations adopt. Overall, the techno-legal professions shape how organizations respond. Competition among professions to shape the response, and in turn their status and task jurisdiction, may be fierce, creating unintended consequences for organizational responses (e.g. Pernell, Jung and Dobbin 2017).

Despite their mandate to manage legal risks within an organization, techno-legal professionals occupy staff roles marginal to the central organizational product. Sitting outside the production process, professional's influence is limited. Beyond issues of cost and mission, there appear to be three reasons that techno-legal professionals have difficulty persuading organizations to adopt compliance practices: the location of techno-legal professionals in the organizational structure, their relative expertise, and their capacity to capture the ongoing attention of managers and employees. Techno-legal professionals working in staff or administrative roles are tasked with instructing, influencing, and disciplining managers and employees also assigned to staff roles. This is challenging and often ineffective because the techno-legal professionals have no direct or official authority over the managers and employees whose work routines are regulated and because staff roles, which are



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support roles, have lower status than line roles, which create the organization's product (Dalton 1950). Although senior managers normally delegate responsibility for compliance to several techno-legal professionals, these professionals have to figure out how to enact this responsibility with limited formal authority and from a relatively low status position (Heimer & Petty 2010). Because formal authority is limited, techno-legal professionals have been observed creating relational authority with managers and employees by working closely with them on compliance tasks and issues (Huising 2015).

For techno-professional managers, issues of expertise compound the challenges of authority and status. For example, Huising (2014) shows how a lack of knowledge about daily work creates credibility problems for techno-legal professionals. She identifies, however, a situation where these two bodies of knowledge – regulatory and operational – were slowly and successfully combined to produce usable standard operating procedures. Issues of expertise are particularly germane when the regulated work is highly specialized. Regulatory encounters with, for example, scientists (Evans & Silbey 2017), or finance specialists (Ford 2013), or physicians (Kellogg 2011), can be particularly difficult as these professionals believe no other profession can understand their work *and* at the same time these professionals refuse to reveal their work practices and logics to outsiders. In another study, an analyses of internal control dynamics in financial services firms leading up to the 2008 crisis (Martinez-Moyano, et al. 2013), techno-legal professionals were overly deferential to the financiers because the regulatory professionals lacked not only status and managerial support but, importantly, knowledge of the financiers work that would allow them to mount sensible challenges to decisions or arguments. It appears that challenges to techno-legal authority shapes organizational compliance in significant, non-trivial ways.

Given these important authority, status, and expertise issues, there is significant evidence that the formal compliance programs developed by techno-legal experts are resisted by managers and employees, implemented in superficial ways or to variable degrees across the organization. Sandholtz (2013), for example, shows how managers push legal work and requirements back on the human resource departments, avoiding regulatory responsibility. In another study, middle managers in some manufacturing plants have been shown to refuse to take responsibility for health and safety requirements, delegating them to ground/lower-level supervisors who did not have the necessary training or support, facing resistant employees who distrusted management (Gunningham & Sinclair 1999). Thus, factory workers tolerated unsafe assignments because they did not want to

use the formal safety program to confront managers; instead, they attempted to create safe working conditions through informal means. Other studies have shown that surgeons and medical residents resisted the implementation of regulations intended to limit resident hours, which would have improved patient safety, because it was counter to professional surgical norms and traditions (Kellogg 2009, 2011). Scientists resisted changing their bench practices to comply with environment, health, and safety regulations (Bruns 2009; Evans & Silbey 2017, Huising & Silbey 2013). Physicians avoid working with lawyers (and vice versa) in the implementation of the Affordable Care Act (Kellogg 2014).

These are but a few examples showing that several links away from the regulator, beyond senior management and the techno-legal professions, and deep within the machinations of the organization, compliance gets done or resisted, at the ground level of organizational production. We need to focus on the organizations' production processes – whether it is patient care in hospitals, scientific experimentation at the lab bench, milling steel in a fabrication plant, or trucking, to understand how compliance is produced across heterogeneous groups of workers situated in a hierarchy.

*Rules, Routines, and Procedures.* The empirical literature offers several insights for normalizing regulatory requirements as features of the organization's daily operations. For managers, the research shows that normalization requires infiltrating both managerial decision-making moments and processes. Much research has documented the centrality of managers in producing desired societal outcomes including regulatory compliance (Castilla 2011). Documentation of variation in managerial decisions and actions but also status (Briscoe & Kellogg 2011) means, however, that implementation of organizational policies and procedures is uneven. So, while some managers may integrate regulatory requirements within their decisions and actions, the challenge is to create consistency across managers. A line of studies documents the kinds of bureaucratic practices that catalyze managers to implement regulatory programs, showing that different bureaucratic practices produce different effects. Attempts to constrain managerial decision making by imposing simple thresholds or numeric barriers (e.g. hiring decisions constrained by job tests or performance ratings) tend to irritate managers and backfire (Espeland and Vannebo 2007; Kalev 2009). In contrast, involving managers in the changes – engaging them in teams and training – so that they understand the purpose of the change and can have input into the process of making change ends up increasing compliance (Boiral 2007, Kalev 2009). Across several studies

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accountability for decisions and visibility or transparency of decision-making are identified as key levers in producing compliance.

Kalev et al. (2006) show that features of regulatory programs that increase the accountability for and visibility of decision-making such as creating a public action plan, hiring diversity managers, and creating organization wide task forces, are most effective in creating compliance with EEOC regulations. When managers are visibly accountable for a decision and the basis and logic of their decisions are transparent, they are more likely to make decisions that achieve compliance goals (Castilla 2015; Kalev et al. 2006). For example, Kalev (2014) demonstrates that managers are more likely to make decisions that achieve compliance goals when organizational compliance policies and procedures require that they provide an account for their decisions and indicate that decisions will be reviewed by internal legal counsel (cf. Tetlock 1992). Together these studies demonstrate that managers are more likely to implement regulatory requirements when the organizations' own hierarchical bureaucratic system is designed to (1) make managers (versus employees) responsible for compliance, (2) hold managers to account for their decisions, (3) make decisions visible, and ensure that decisions will actually be reviewed. Such a design, consistent with classical Weberian bureaucracy, ensures that decision-making is neither habitual nor arbitrary but instead has a basis and logic that aligns with regulatory considerations.

Heimer's work on the NICU (neo-natal intensive care unit) complicates these findings. Multiple, often conflicting, institutional pressures are at work in most organizational settings and, thus, in decision-making processes. Familial as well as legal and professional concerns influence what might otherwise be enacted differently when interpreted exclusively as legal mandates or medical protocols (Heimer 1999 p.18). When particular groups – physicians, social workers, in-house counsel, risk managers – are given responsibility for applying a particular law, issues will be transformed into organizational problems that restrict solutions to those that are legal, demonstrating not only the varying influence of law but the unpredictability of legal compliance. As a corollary, expanding responsibilities in the decision making processes, often celebrated in terms of democratic empowerment, also provides the means through which legal requirements permeate managerial decisions and, potentially action, in organizations, not always to the benefit of substantive excellence.

In the case of employees whose direct and indirect work tasks involve discretionary application of technical knowledge for specific cases, responsibility for regulatory implementation demands that they now pay attention to some rather than other aspects of what they do or on new things they need to be doing. Attention is displaced from other, non-regulatory dimensions, creating conflicts among goals and responsibilities as well as among different members of the organization who may not agree with this shift in priorities. Heimer (2008) shows how much of techno-legal professional work is a matter of developing methods that direct and focus employees' attention on issues related to legal compliance. This attention channeling work creates significant challenges because what regulators consider important indicators of compliance – detailed reports, labelling, compulsory training – can, to those inside regulated organizations, feel like trivial distractions that do not demonstrate compliance. However, Heimer finds that the attention of employees can be conserved, and compliance enacted, by reworking forms to facilitate compliance with more limited thought and attention, by restructuring meetings and trainings to allow for focused thought, and creating new roles to which compliance responsibility can be delegated (no thought). Other research shows that employees are more likely to enact regulations when the required actions align with their work goals and practice (Bruns 2009) and when work routines are designed to be interdependent and allow peer surveillance (Engahl 2014). Implementation may also depend on political processes in which groups of employees coalesce to develop resources and opportunities to pressure peers into compliance (Kellogg 2009, Huising 2014).

Overall, features of bureaucratic systems are central in facilitating compliance at the coalface. Regulatory requirements must be translated with respect to the organization's operating environment, hierarchy, and distribution of status and resources. Policies, procedures, and rules must be created and diffused. Members of the organization must be convinced to pay attention to several layers of regulation, coming from different agencies, and integrate regulatory issues into their everyday work. This depends on techno-legal professions, groups of workers who carry the regulatory implementation burden in organizations. The complexities, internal to organizations, in bringing regulation to bear on organizational processes has largely be overlooked. However, beyond the role of formal bureaucratic systems, there is a need for more emergent relational governance in organizations.

## **RELATIONAL GOVERNANCE AS COALFACE GOVERNANCE**

The concept of relational regulation emerged from observations of a range of actors whose pragmatic actions managed the gap between the limits of bureaucratic compliance systems (as described just above) and the compliance expectations of regulators (Huising & Silbey 2011, Silbey 2011). Bureaucratic compliance systems - even the most flexible or flat systems - work through the levers of bureaucracy, delegating responsibilities by *roles*, articulating *rules*, and creating new *routines*. As such they are designed to create specialized knowledge and information, to divide labor, and to require minimal daily coordination. Further, even when rigorous in design and enactment, bureaucratic compliance systems are not designed to handle novel problems and unanticipated situations. The implication is that any compliance work that falls between roles, that isn't covered by the rules, or that occurs beyond existing routines is likely to be unattended to and possibly even unidentified.

Relational regulation refers to practices that address these limits of bureaucracy by working beyond one's role, department, formal authority, and individual knowledge to craft pragmatic solutions to compliance issues. The people observed doing this, "sociological citizens" (Silbey et al. 2009), look further than the formal, static organizational arrangements, and focus on the ongoing transactions - including decisions, conversations, disagreements, exchange, coordination, miscommunication - through which get things done in the organization. Similarly, in an earlier work, Heimer and Staffen (1998) describe what they call the social organization of responsibility, eschewing more instrumental conceptions of accountability in the dynamics between hospital staff and parents for the care of critically ill newborn babies. Here responsibility is cogently defined as "human agency flexibly oriented to the welfare of others" (1998, p. 77). Heimer and Staffen identify five key attributes of responsible actors: consider others' interests as well as their own, orient beyond current needs and desires toward the future; and like the sociological citizens define their roles diffusely, use discretion to achieve goals rather than relying on rules and routines and display a willingness to cope with whatever contingencies arise.

Drawing on a broader sociological perspective emphasizing a transactional approach to social organization where "relations between terms or units" are understood as being "preeminently dynamic in nature, unfolding [through] on going processes rather than as static ties among inert substances" (Emirbayer 1997, p. 289), relational regulation sees compliance as an iterative, ongoing achievement. Appreciating the importance of relational interdependence, compliance is attempted by working in and through this fluid network of interactions

to identify, diagnose, and fix compliance practices. For example, Huising and Silbey (2011) show how front-line safety managers developed detailed understandings compliance issues by tracing them through the web of interactions and integrating this knowledge to identify pragmatic solutions that had consistently eluded the organization. This approach to regulatory solutions was also identified for those enforcing regulations including attorney generals (Coslovsky 2011), labor inspectors (Pires 2011), regulatory agents (Haines 2011), and collection agents (Canales 2011).

This relational focus also influences how these sociological citizens understand what constitutes solutions. Instead of crafting general, repeatable solutions intended to avoid further related problems, a relational approach acknowledges that there will always be a continuous stream of problems that defy standardized solutions. Such problems will require experimentation, tinkering with solutions that stray from existing notions and prescriptions. Given this, the goal is not to try to build a bureaucratic system that eliminates all possible problems but to complement the system with a relational regulation approach, addressing outlier problems with novel solutions as they emerge so that the gap between organizational compliance performance and regulatory expectations is continuously monitored and managed. Relational regulation “acknowledges the impossibility of perfect conformity between abstract rules and situated action while nonetheless managing to keep practices within a band of variation surrounding, but not perfectly coincident with, regulatory specifications” (Huising & Silbey 2011, p. 17).

Relational regulation brings an alternative ontology of the organization to bear on our ideas of how compliance can be regularly produced. Rather than solely appropriating formal organizational systems to achieve compliance, the transactional, unfolding interactions must be accessed so that compliance issues that transcend or fall between the formal organizational roles, rules, and routines are identified and managed. For senior managers and regulators, relational regulation implies that bureaucratic systems require reinforcement through the creation of “relational” job roles. Huising & Silbey (2011) identify that relational regulation emerges when front-line managers have freedom to work independently from the established bureaucracy and with slack – both temporal and spatial – to track and solve issues. It seems preferable that the incumbents have a generalist orientation without professional boundaries to defend. Both Heimer (2008) and Kellogg (2014) show the emergence of roles in the organization that “picked up” compliance work which fell between the cracks of

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established roles and routines. Kellogg (2014) shows how community health workers operated as implementation mechanisms for the Affordable Care Act in a hospital. Implementation of the act depended on a new collaboration between physicians and lawyers; however, these two professional groups wanted to take on new tasks involving new information and collaborations. Community health workers facilitated the implementation by taking up the new tasks and buffering both physicians and lawyers from the additional work required. Importantly, the work required to implement the reform required that the community health workers understand the links between each professions work and the reform so that they could manage the information, language, and interests used in relation to and across their work with the physicians and lawyers. Interestingly, the implementation and research continues to focus on workers and professionals' definition of the situation and the problems to be solved. As the access to justice literature has shown, what clients want or need often differs from the package of services the professionals offer (Merry and Silbey 1984; Sarat 1990; Friedman 2010).

Relational governance offers a necessary complement to bureaucratic forms of governance. Moving beyond formal roles, spaces, and practices, those who practice relational governance work at the interstices to attempt regulatory compliance. Its informal, often unrecognized form makes a coalface governance technique that straddles bureaucratic and cultural governance techniques.

### **ORGANIZATIONAL CULTURE AS COALFACE GOVERNANCE**

Culture, "an abstracted system of symbols and meaning, both the product and context of social action" (Silbey 2010 p. 470), is a well-worn concept for anthropologists and sociologists. Although both symbol and action, sign and behavior are empirically and phenomenally entwined, they are examined separately in order to emphasize that a group, an organization, or a society is constituted by what goes on both unofficially as well as officially. What is said to be done and what is actually done together constitute culture. A focus on culture in general and organizational culture in particular begs attention to this gap by emphasizing that while the organization can be described through its actions, it can also be described as a system of signs that are performed and communicated daily through behavioral interactions, that is through practices. This system of signs is a local, emergent phenomenon that is always in the making, evolving through the influx of new members, responses to important events, adaptation to external demands, and day to day innovation among members.

The cultural turn that transformed scholarship in the social sciences during the 1980s also took root in managerial and policy arenas. Culture was labelled simultaneously as the cause and cure of organizational inertia and failure. From positions across the political spectrum, observers argued that the strengths of the bureaucratic form - specialization of labor, hierarchies of control and accountability, detailed rule systems - that permitted increasing scales of production and profit were paradoxically the same characteristics that stifled thought, creativity, and initiative. Analysis of the management texts from this era, show that complex bureaucratic organizations were critiqued for their crushing conformity as well as their failure to offer meaningful work that challenged employees to develop and mobilize their capacities (Boltanski & Chiapello 2005). One of these texts, *In Search of Excellence* (Peters & Waterman 1982) published at a time of major policy change and a concerted effort at de-regulation, garnered significant attention. The book argued that organizational cultures demonstrating decisiveness while also being people oriented (empowering both customers and employees) were more likely to be successful, thereby offering a new managerial ideology that identified organizational culture as a means of fostering individual agency and responsibility with minimal oversight and governance. Managers, consultants, and organizational analysts began to use organizational culture, the system of signs - language, materials, practices - circulating in the workplace that communicates to employees the correct way to act, think, talk, and feel while a member of the particular organization (Meyerson & Martin 1987; Sewell 2005; Smircich 1983), as a lens to better understand and manage complex organizations. If bureaucratic cultures constrained innovation and empowerment, a new and different culture would be needed. In response senior managers began to self-consciously design new cultures and attempt to transform the culture of their organization (Kunda 1992). Ironically, while there is some recognition that cultural signs and practices do not necessarily circulate perfectly or universally and thus there are likely to be multiple sub-cultures, the reforms are driven top-down rather than emergent bottom up.

At the same time, the idea of culture was being mobilized as the cause and cure of organizational regulatory failures or technical failures that lead to regulatory breaches (Silbey 2009). Identifying a broken or otherwise damaged safety culture as an explanation of regulatory failure while promoting safety culture as a means of more effective compliance with regulations is now common (ACS 2012, APLU 2016, NAS 2016, 2017). The earliest uses of safety culture in newspaper and popular media invoked the term primarily in



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discussions of nuclear power, energy generation, and weapons production to describe within organizations an “ingrained philosophy that safety comes first.”<sup>1</sup> Although this talk about safety culture emerged during the more general cultural turn, it was also a time when major accidents at Three Mile Island, Bhopal, and Chernobyl weakened public confidence in government regulation to oversee complex technologies. In professional and scholarly literature rather than the public press, the phrase safety culture first appears in a 1986 report of the International Atomic Energy Agency (IAEA) on the Chernobyl accident. Three years later, a second reference by the American Nuclear Regulatory Commission states that plant management “has a duty and obligation to foster the development of a ‘safety culture’ at each facility and throughout the facility, that assures safe operations” (54 Federal Register 3424, 1989). After five years in common usage, an IAEA report defined safety culture as “that assembly of characteristics and *attitudes in organizations and individuals* which establishes that, as an overriding priority, nuclear power safety issues receive attention warranted by their significance” (1991,8; 1992,1 authors’ emphasis; Rees 2009)..

This conception of culture – as a set of attitudes shared by organizational members that cognitively drive and shape action – is a common (mis)interpretation of the notion of culture that Silbey (2009) identifies in her review of over 2250 articles in newspapers, magazines, scholarly journals and law reviews published between 2000 and 2007. One non-nuclear reference to a British railroad accident is illustrative because, even in this less common venue, a deteriorating safety culture was offered as the explanation for what went wrong and should be improved to prevent future accidents (Associated Press 1989). Mechanical errors, compounded by lax management processes, were named as the cause of the accident. Nonetheless, the judge heading the accident inquiry focused his recommendations on improving the safety culture. However, rather than recommending fixes to key aspects of culture including leadership, the communication processes within the railroad hierarchy, the norms of compliance with regulations, or the reliability of the regulatory enforcement, he focused on the laborers, calling for “radical improvements in recruiting and training and an end to excessive overtime.” This is notable because the term safety culture is invoked not as a system but as individual responsibility. The conception of organizational culture located in individual failures and employee attitudes, represents a

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<sup>1</sup> New York Times, October 27, 1986, p. 1, Stuart Diamond, “Chernobyl Causing Big Revisions in Global Nuclear Power Policies.”

misunderstanding of the relationship between culture and action and how culture might be leveraged to increase the likelihood that employees' choices and actions align with regulatory requirements.

From a sociological and anthropological understanding, issues of regulatory compliance or safety are merely aspects of the general organizational culture. "Safety as a form of organizational expertise is ... situated in the system of ongoing practices...safety-related knowledge is constituted, institutionalized, and continually redefined and renegotiated within the organizing processes *through the interplay between action and reflexivity*." Safety practices (behaviors and signs) have "both explicit and tacit dimensions, [are] relational and mediated by artifacts,... material as well as mental and representational" (Gherardi & Nicolini 2000 p.329). From this perspective, an organizational culture or sub-culture shapes the way in which members interpret and respond to regulatory requirements (Howard-Grenville 2006; Howard-Grenville & Hoffman 2003). Socialization and cultural membership signals an understanding of what issues are worth attending to, and what constitutes a problem and an appropriate solution (Howard-Grenville et al. 2008; Heimer 2008).

What is specifically missing from popular accounts of organizational culture as a lever for increasing compliance or safety is attention to the mechanisms and processes that produce the systemic meanings. For example, linguistic schema, formal categories, embedded norms, familiar artifacts provide both fixed and flexible frames of reference with which people apprehend and interpret information, individual and organizational performances, risks, and safety (Heimer 1988; Huising 2014; Kahneman & Tversky 1982). Further information that might shape more cautious and responsive interpretations is often missing, sometimes actively buried (Sagan 1993), or discredited (Vaughan 1996, 2003). Knowledge is removed or segmented by the distributed work processes and organizational norms of secrecy that impede communication or understanding vital for our safety (Galison 2004). Dangers that are neither spectacular, sudden, nor disastrous, or that do not resonate with articulated fears can remain ignored and unattended, and as a consequence do not get interpreted nor responded to as safety hazards (Glassner 1999). Finally, organizational structures, roles and routines shape interpretations so that different organizational routines produce very different understandings of risk and error (Gray & Silbey 2014).

Thus, to address regulatory compliance in terms of organizational culture demands that researchers attend to every nook and cranny of the organization ranging from the highest leadership as it sets both an agenda

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and a tone distributed throughout the hierarchy of roles to all members of the organization, paying attention to both forms and content of communications as well as formal decisions and material allocations. Although organizations themselves, as well as scholars and regulators, may seek to increase compliance with regulations using culture as a lever, organizational culture is not an entity that can be easily changed. “Although specific attempts to challenge and reshape existing culture are important for ‘seeding’ the opportunity for change, actually achieving cultural change requires persistent day-to-day interactions ‘infused into rather than separated from everyday organizational life’” (Howard-Greenville et al 2011, p. 522).

Thus, embracing compliance or safety as part of an organization’s culture demands an unusually public, active, and continuing commitment. As with all aspects of organizational culture, this is both challenging and ironic because safety, as our example, is neither a commodity whose worth, nor an event whose probability, can be calculated but a dynamic value that infuses all aspects of practice. The terms *compliant or safety culture* ostensibly draw everyone’s attention to ongoing processes - from the very top of the organization to what we are calling the coalface, ground level - so that what is important to an organization is aligned with how things actually work and what is routinely done.

However, this essential alignment between what is claimed to be important – those public commitments and legitimization efforts – and what is routinely done can remain elusive. Both compliance and safety are inspirational asymptotes, and more often only one of a number of competing organizational objectives. Most importantly, efforts to achieve regulatory compliance that focus on organizational culture often ignore just those features of complex organizations from which cultural schemas and interpretations often emerge: normative heterogeneity, competitive and conflicting interests, as well as inequalities in power and authority. The very same processes that enable collective and coordinated action through the habitual routines of daily life must be disrupted and reconfigured to create a new normal, consistent with newly articulated values and aspirations. To challenge the processes of normalization that constitute organizational cultures, research needs to identify the processes that successfully unsettle organizational routines to make space for a new normal. Where does this come from and how does it infuse the capillaries of organizational action? From the top of the organization, the coalface, or distributed throughout?

Finally, if the inequalities of resources, authority, and autonomy constituting organizational hierarchy are ignored, talk of organizational culture returns us to where we began: a reversion in the allocation of responsibility for regulatory failures by focusing on the collective (system of) while relying on individual contributions/ participation. By assuming a similarity of interest, rather than conflicts of interest and preference, reliance on culture can fail to address the differential positions, and more importantly, fail to recognize the differential resources workers contribute in the service of compliance. The differential interests of upper-level managers and lower level workers are systematically elided when talk of regulatory compliance treats culture as an ephemeral, unstructured yet manageable residue of human intercourse, something akin to noise in the system. Whatever the limitations of the more traditional work on organizations and informal practices with regard to acknowledging the systemic cultural forces, that literature often attended to the different interests and local cultures of workers in different levels in organizations. The contemporary work on safety culture seems to have lost this important insight.

## **DISCUSSION**

Given the several decade-long trend of shifting more and more regulatory work to the regulated organization, scholars are late to consider coalface governance techniques. As the regulated organization becomes the epicenter of regulatory work, governance managers and techno-legal professions become as important to regulatory compliance as regulators, inspectors, and lawyers. However, regulatory compliance ought not to be conceived primarily as commands issued to recalcitrant recruits. Ultimately, regulations are intended to normalize specified actions within prescribed boundaries, to become what happens most of the time, what is expected, what is normal. Here, normal connotes both variation around a mean, a central tendency, and a valued preference, what is the right thing to do. How do the required performances of regulated organizations come to be the unthinking habitual legitimate routines? Eventually the regulatory authority fades; the work is no longer compliance work but maintenance.

In this essay, we organized four bodies of contemporary scholarship not often in conversation with the socio-legal literature on regulation. Each of these sub-fields identified a different focus of compliance work: the individual, the bureaucratic array of roles, rules and responsibilities, the network of relationship, and lastly the

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organizational culture. For each of these the means of achieving compliance varied from individual cognition, standardized rules and processes, agentic interactions, and communication. For each body of literature, we identified the definition of the ends sought, we noted the temporal pace, and the location of responsibility. We offer this matrix as an invitation to work across sub-fields so as to move away from the narrow notion of regulation as command and control, although we have noted throughout the ways in which efforts to decentralize authority and responsibility can be undermined by persistent inequalities of resources and authority. There is much to be done and future research should fill in the missing details in this tentative scheme.

If the goal of regulation is to shape the normal ways of working that sustains organizations and institutions in politically negotiated directions, clearly, stasis and change are entwined. Reviewing this range of perspectives on organizational action, helps place in productive juxtaposition, forms of analysis and understandings too often kept separate, attending simultaneously to ways in which organizations change and how their processes are sustained over time. Much of this has conceived of and focused on regulation as intrusion – how to get organizations to do what they have not been doing rather than seeing regulation as a path to better ways of working. In this essay, we extended the compass of regulatory requirements from instructions to do things differently to assumptions about the way things are done. Taking a longer view, as we have suggested, *regulation is a process of becoming normal, not a matter of compliance but normative conformity*, the basic expectations of a well-functioning organization that coordinates action for production, any kind of production.

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Table 1 Continuum of Coalface Governance Techniques

	<b>Nudge</b>	<b>Bureaucracy</b>	<b>Relational Regulation</b>	<b>Organizational Culture</b>
Unit of Analysis/Focus of Compliance Work:	Individual	Roles, rules, and procedures	Network of actors	Assumptions and values, and artifacts that make these manifest
Means of Achieving Compliance:	Individual Cognition: Framing choice sets and providing information.	Bureaucratic System: Standardization of expectations via formal roles, rules, and procedures.	Interactions: Work beyond official role to understand compliance issues and craft local, pragmatic solutions.	Subjectivity: Socialization and communication through human resource practices and leadership example.
Compliance Ends Sought:	Align individual decision making with regulatory requirements	Couple employee practice to regulatory requirements	Manage the gap between employee practice and regulatory requirements	Create a culture that emphasizes regulatory compliance, learning, and resilience
Responsibility for Compliance:	Distributed: all actors who inform, shape, and make decisions	Techno-Legal Professions (Specialists)	Team of Employees (Generalists)	Distributed: all members of the organization
Temporality of Compliance Effort:	Discrete Individual Decisions	Repetitive Actions	All Interactions	All Communications
Accountability Mechanism:	Metrics	Managerial Oversight	Periodic Reporting	Metrics