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Source: *Organization Science*, Vol. 22, No. 5, New Perspectives in Organization Science (September–October 2011), pp. 1240–1253

Published by: INFORMS

Stable URL: <https://www.jstor.org/stable/41303116>

Accessed: 30-10-2019 15:24 UTC

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# Theorizing Practice and Practicing Theory

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**T**his paper describes the emerging field of practice theory as it is practiced in relation to organizational phenomena. We identify three approaches—empirical, theoretical, and philosophical—that relate to the what, the how, and the why of using a practice lens. We discuss three principles of the theoretical approach to practice and offer examples of how practice theory has been used in the organizational literature and in our own research. We end with a discussion of the challenges and opportunities that practice theory affords organizational scholarship.

*Key words:* practice; practice theory; genres; resourcing; routines; technology in practice; sociomateriality

*History:* Published online in *Articles in Advance* February 23, 2011.

## Introduction

In this paper we discuss the value of practice theory for issues of concern to organization theorists. We are motivated to write this by our own experiences, primarily our experiences as researchers and teachers but also our experiences as editors and reviewers of papers that investigate practices empirically and use practice ideas theoretically. Central to a practice lens is the notion that social life is an ongoing production and thus emerges through people's recurrent actions. We have become intrigued by the capacity that such a lens affords for analyzing social, technological, and organizational phenomena, and we write this piece with the intent of sharing our understanding and interest in that capacity.

We believe that a practice lens has much to offer scholars of organization. And we believe this is especially the case today. Contemporary organizing is increasingly understood to be complex, dynamic, distributed, mobile, transient, and unprecedented, and as such, we need approaches that will help us theorize these kinds of novel, indeterminate, and emergent phenomena (Barley and Kunda 2001, Child and McGrath 2001, Ciborra 1996, Law and Urry 2004, Stark 2009). We believe practice theory, with its focus on dynamics, relations, and enactment, is particularly well positioned to offer powerful analytical tools to help us here.

We begin by positioning the practice lens as a specific approach to understanding the world. We discuss a number of core principles of practice theory and offer a few illustrations of current organizational scholarship that is informed by these principles. We then describe some experiences of using practice theory in our own research practice so as to ground its use in the details of specific projects and intellectual histories. We end with a brief discussion of some of the challenges faced by

practice scholars, as well as the value that can be derived from engaging in practice scholarship.

## Positioning a Practice Lens

In our consideration of practice theory, we situate it in relation to three ways of studying practice (Orlikowski 2010): an empirical focus on how people act in organizational contexts, a theoretical focus on understanding relations between the actions people take and the structures of organizational life, and a philosophical focus on the constitutive role of practices in producing organizational reality. All three of these foci are salient for organizational scholars using a practice lens, though in any particular piece of scholarship researchers may emphasize one focus over another.

The first *empirical* approach to practice recognizes the centrality of people's actions to organizational outcomes and reflects an increasing recognition of the importance of practices in the ongoing operations of organizations. This approach answers the "what" of a practice lens—a focus on the everyday activity of organizing in both its routine and improvised forms. This approach is, to some extent, a reaction to an earlier emphasis in organizational theory that focused primarily on structural features while neglecting the agentic capacity of human action. Many scholars of contemporary organization theory recognize the importance of human agency in organizational life while making theoretical contributions to fields not necessarily associated with practice theory or practice philosophy. Dutton and Dukerich (1991), for example, develop and use identity theory in their study of the practices of employees of the New York Port Authority toward the homeless. Dougherty (2001, p. 615) proposes an emergent image of differentiation and integration in innovation by focusing on "the actual work of sustained

product innovation.” Weick and Roberts (1993) locate their study of distributed cognition within the practices of the crew of an aircraft carrier. These and many other studies emphasize the importance of human agency in producing organizational reality without explicitly drawing on practice theory or practice philosophy.

The second *theoretical* approach to practice explicitly takes on board the apparatus of practice theory. Although it includes a focus on everyday activity, it is critically concerned with a specific explanation for that activity. This approach answers the “how” of a practice lens—the articulation of particular theoretical relationships that explain the dynamics of everyday activity, how these are generated, and how they operate within different contexts and over time. Key theorists who have advanced specific practice-based theoretical relationships include Bourdieu (1977, 1990), Bourdieu and Wacquant (1992), de Certeau (1984), Giddens (1976, 1979, 1984), and Ortner (1984, 1989). Their work has been influenced by ideas from Heidegger (1962) and Wittgenstein (1967), as well as Schutz (1967, 1970) and Garfinkel (1967). More recent influences on contemporary practice theory include the works of Latour (1987, 1992, 2005), Lave (1988), Engeström (1999), and Schatzki (2001, 2002, 2005). As we discuss below, working with the specific theoretical ideas of practice theorists requires researchers to engage with the core logic of how practices are produced, reinforced, and changed, and with what intended and unintended consequences.

The third *philosophical* approach to practice entails the premise that social reality is fundamentally made up of practices; that is, rather than seeing the social world as external to human agents or as socially constructed by them, this approach sees the social world as brought into being through everyday activity. This approach answers the “why” of a practice lens—a focus on everyday activity is critical because practices are understood to be the primary building blocks of social reality. Such an ontology may be more or less explicit in researchers’ use of practice theory. For Schatzki (2001, p. 3), for example, practice theories represent a distinct social ontology: “The social is a field of embodied, materially interwoven practices centrally organized around shared practical understandings.” Some researchers use a practice ontology to question the status of the phenomenon they are studying (e.g., Gherardi 2006, Lave 1988). They do so by making the ontological primacy of practice—that is, that practices are fundamental to the production of social reality—a focal aspect of their research agenda (e.g., on learning and knowledge) and then use it to reconsider and respecify the phenomenon of interest (e.g., in terms of collective doing and cognition in practice). Other uses of practice theory may be simply consistent with a practice ontology without making the fundamental status of the phenomenon under investigation core to their research question.

These three approaches represent three different foci that researchers may emphasize in their use of a practice lens. In the rest of this paper, we focus primarily on the middle approach, practice theory. As a theoretical paradigm, practice theory is still a relatively unsettled intellectual landscape with multiple sources, influences, and instances. As such, there is no definitive canon of practice theory that is widely accepted by most scholars (Schatzki 2001, Gherardi 2006). What we hope to do here then is to outline some principles based on how practice theory is currently understood and applied within organizational research so as to provide a point of reference for scholars reading this research and those choosing to engage with it in their own research practice.

### Practice Theory Overview

Although practice theory is a broad intellectual landscape, there are a few recognizable features that have emerged and that are relatively common to the scholars working within the terrain. Here, we sketch the outlines of some core principles of a practice theory. We then offer a few brief illustrations of how scholars have applied these core ideas within organizational studies before turning to our own experiences.

### Some Principles of Practice Theory

Critical to practice theory is the relationship between specific instances of situated action and the social world in which the action takes place. Although various practice theorists emphasize different aspects of these relationships and elaborate distinct logics, all generally subscribe to a key set of theorizing moves: (1) that situated actions are consequential in the production of social life, (2) that dualisms are rejected as a way of theorizing, and (3) that relations are mutually constitutive. These principles cannot be taken singly, but implicate one another. In the following, we try to make these very abstract principles more concrete.

Practice theory argues that *everyday actions are consequential* in producing the structural contours of social life. Although this principle is worked out differently by different theorists, the general principle of consequentiality is found throughout practice theory. For Bourdieu (1990, p. 57), the habitus is a “generative principle of regulated improvisations . . . which reactivates the sense objectified in institutions.” For Giddens (1984), practices are those social actions that recursively produce and reproduce the structures that constrain and enable actions. For Schatzki (2002), the bundles of human activity that constitute practices enact social orders. MacIntyre (2007, p. 189–191) captures this consequential quality of practice when he describes the development of portrait painting as driven not primarily by the external demand for portraits but by the standards of excellence created by practitioners through the practice

of portrait painting. According to his view, what makes portrait painting or any other activity a practice is that the action of engaging in it is consequential for the development of the activity. What is produced and how varies across scholars: it may be social structures (Giddens 1984), field and habitus (Bourdieu 1991), bundled arrays of activity (Schatzki 2001), and so forth, but the productivity or consequentiality of everyday practices is a consistent theme.

That practice is consequential for social life is, for many practice theorists, associated with a strong humanist orientation and the foregrounding of human agency (Schatzki 2002). Recent work in a posthumanist vein, however, has been strongly influencing practice theory (Schatzki 2001). Such work—largely conducted by science and technology scholars such as Callon (1986), Latour (1987, 2005), Knorr Cetina (1997), Pickering (1995), Pinch (2008), and Suchman (2007)—has articulated the consequential role played by nonhumans, such as natural objects and technological artifacts in producing social life. Although these scholars differ as to how they theorize the status of nonhuman agency relative to human agency—for example, whether these agencies are posited to be symmetrical (Callon 1986, Latour 1987, Law 1987), intertwined (Pickering 1995), or entangled (Suchman 2007)—their work has been particularly influential in helping practice scholars acknowledge the importance of materiality in the production of social life.

A second principle of practice theory is the *rejection of dualisms* and recognition of the inherent relationship between elements that have often been treated dichotomously. These include such conceptual oppositions as mind and body, cognition and action, objective and subjective, structure and agency, individual and institutional, and free will and determinism (Reckwitz 2002). Bourdieu's theory of practice, for instance, takes as a central focus the deconstruction of the longstanding notion that the subjective and objective are independent and antithetical concepts. In addition, he singles out several other "antinomies—which the concept of the habitus aims to transcend—of determinism and freedom, conditioning and creativity, consciousness and the unconscious, or the individual and society" (Bourdieu 1990, p. 55). In Giddens's (1984) case, a primary purpose of his work on structuration theory is to transcend the dualism of agency and structure. As he writes, "The constitution of agents and structures are not two independently given sets of phenomena, a dualism, but represent a duality" (p. 25). Although analytical oppositions are sometimes useful, practice theory encourages skepticism toward these and the conceptual means to redefine and reintegrate concepts that have been partitioned and polarized in other theories. In particular, practice theory enables scholars to theorize the dynamic constitution of dualities and thus avoid the twin fallacies of "objectivist

reification" on the one hand and "subjectivist reduction" on the other (Taylor 1993).

A third principle of practice theory is the *relationality of mutual constitution*. Although sometimes the term relational is taken to mean interpersonal, the meaning intended here echoes that of Foucault (1978) and others in viewing relational as stipulating that no phenomenon can be taken to be independent of other phenomena (Bradbury and Lichtenstein 2000, Østerlund and Carlile 2005). Phenomena always exist in relation to each other, produced through a process of mutual constitution. The specific interactions of phenomena entailed by relationality vary among scholars. Giddens (1984) is well known for theorizing the recursive relationship between agency and structure. In this case, it is not just that recurrent actions constitute structures, but that the enacted structures also constitute the ongoing actions. Such practices are said to be recursive because they are "constantly recreated by the same means whereby they express themselves" (Gherardi 2006, p. 31). Though not using the language of recursion, Bourdieu also proposes a relationality in which practice, habitus, and field produce and reproduce one another (Gherardi 2006, Chia and Holt 2006). The notion of mutual constitution implies that social orders (structures, institutions, routines, etc.) cannot be conceived without understanding the role of agency in producing them, and similarly, agency cannot be understood "simply" as human action, but rather must be understood as always already configured by structural conditions. The ongoing nature of this constitutive relationship indicates that social regularities are always "in the making"; that is, they are ongoing accomplishments (re)produced and possibly transformed in every instance of action (Gherardi 2006, Reckwitz 2002).

Relations of mutual constitution are not to be confused with feedback relations, often referred to as feedback loops. Feedback involves the generation of information about system conditions that flow back to the system to control it. The notion of feedback recognizes the presence of distinct elements in a system that act on each other through information flows. Although such interactions can regulate or modify the ongoing operations of a system, they are not seen to generate the system themselves. Relations of mutual constitution produce the very system of which they are a part. Escher's 1948 lithograph "Drawing Hands"—where the left hand is depicted drawing the right hand, and vice versa (Orlikowski 2002)—provides a visual depiction of this relational constitution.

It is important to note that relations of mutual constitution do not imply equal relations. Rather, these are relations of power, laden with asymmetrical capacities for action, differential access to resources, and conflicting interests and norms. Practice theorists differ in how they theorize power. In Bourdieu's (1977, 1990)

work, for instance, power occurs through the objectification and institutionalization of subjective relations. For Giddens (1984, p. 283), power is identified with the agentic capacity to “make a difference” in the world and is defined as the “the means of getting things done.” In his formulation of the structuration process, power relations enact structures of domination over time. Power is thus understood to have both constraining and enabling implications for everyday action. The asymmetry of relations is fundamental to practice theorizing, and as such, “the notion of power can often serve as a helpful tool for identifying the relational force(s) at play in a particular practice theory” (Østerlund and Carlile 2005, p. 94).

### Some Applications of Practice Theory

Applications of practice theory have been gaining ground within organization studies, and we offer three examples here. In the first two examples—the fields of strategy and knowledge—scholars are drawing substantively on practice theory to investigate the phenomena of strategy making and knowing in practice. In the third example—that of neoinstitutionalism—scholars are drawing more lightly on practice theoretic ideas to inform their theorizing of institutional maintenance and change.

*Strategy.* A growing community of organizational scholars studying strategy has begun to use practice theory to understand the relational and enacted nature of strategizing (Whittington 1992, 2006; Johnson et al. 2003, 2007; Jarzabkowski 2005, 2008; Golsorkhi et al. 2010). Strategy as practice is oriented to what actors do as opposed to something that organizations have. This is an understanding of “strategy in the making” as a dynamic accomplishment rather than a static outcome. Building on Mintzberg’s (1978) important identification of emergent and deliberate strategy, the strategy as practice stream of scholarship focuses in particular on how strategy is constituted through the everyday actions of organizational participants. These scholars are also interested in understanding how the resulting strategies serve to constrain and enable the actions taken, and with what consequences. “Strategy as practice shifts the analytic focus to how strategy is constructed rather than how firms change, in order to understand the myriad of interactions through which strategy unfolds over time, each of which contains the scope and potential for either stability or change (Tsoukas and Chia 2002)” (Jarzabkowski 2005, p. 5). Mantere and Vaara (2008), for instance, examine the discursive practices that create more or less participatory strategizing processes, whereas Kaplan (2008) explores the framing practices that create and alter the meaning and legitimacy of strategic initiatives, highlighting the different consequences resulting from practices that reinforce existing collective frames and those that produce divergent frames.

*Knowledge.* A number of scholars within organization studies have turned to practice theory to help them reformulate notions of knowledge commonly used in the management literature. They have drawn particularly on Giddens’s (1984) and Bourdieu’s (1990) insights into human knowledgeableability, as well as work by anthropologists such as Lave (1988) and Hutchins (1991, 1995), who have argued for seeing knowledge as a consequential activity grounded in everyday situated practice. Giddens (1984, p. 4), for instance, defines knowledgeableability as “inherent within the ability to ‘go on’ within the routines of social life,” and Bourdieu (1990, p. 52) clearly identifies knowledge as constructed within practice rather than passively recorded. These insights have led to an understanding of knowing in practice as the knowledgeableability that is continually enacted through ongoing action. Such an understanding rejects the traditional dualism set up between knowledge that exists “out there” (encoded in external objects, routines, or systems) and knowledge that exists “in here” (embedded in human brains, bodies, or communities). Rather, “knowing is an ongoing social accomplishment, constituted and reconstituted in everyday practice” (Orlikowski 2002, p. 252). This enacted view of knowledge is strongly evident in research on knowledge production and sharing within organizations by such scholars as Bechky (2003a, b; 2006), Brown and Duguid (1991, 1998), Boland and Tenkasi (1995), Carlile (2002, 2004), Cook and Brown (1999), Gherardi (2006), Gherardi and Nicolini (2000), Nicolini et al. (2003), Tsoukas (2005, 2009), and Wenger (1998). Although the specific orientations of these scholars vary, their studies have in common the idea that knowledge is not a static entity or stable disposition, but rather an ongoing and dynamic production that is recurrently enacted as actors engage the world in practice.

*Institutionalism.* Institutional theory is a stream of research that has also drawn ideas from practice theorists, though it has not been the primary focus (Barley and Tolbert 1997, Whittington 1992). The focus of this stream is the creation of institutional fields and their effects on individual actions and cognitions (Powell and DiMaggio 1991; Scott 1995; Greenwood et al. 2002, 2008). This research views constraint as moving largely from organizational fields to institutions to individuals (Bechky 2011), and thus the mutually constitutive relationship between actions and institutions is not actively theorized. Human agency is portrayed as primarily shaped by macroinstitutional forces, and it is largely in the presence of some exogenous shock to the system that actors are seen to shift (usually suddenly) “from unreflective participation in institutional reproduction to imaginative critique of existing arrangements to practical action for change” (Seo and Creed 2002, p. 231). The role of everyday practices in both

the reproduction and transformation of institutions has thus been less central. Some recent institutional work has begun to shift this dominant view to take practices seriously as a constitutive component of institutions. This work focuses particularly on the microdynamics of institutional stability and change as performed by people's actions, interpretations, relations, and strategies (Zilber 2002, Munir and Phillips 2005, Lawrence 2004, Lounsbury and Crumley 2007, Kellogg 2009).

Having sketched out some key principles and organizational applications of practice theory, we turn now to our own experiences with practice theory to highlight how we have used its core ideas in practice and to draw attention to the value we have found in such use.

### Practice Theory in Practice: Our Stories

Our two stories of using practice ideas in organizational research discuss the empirical, theoretical, and philosophical terrain that we have each navigated with practice theory as well as the disciplinary orientations we bring to our use of practice theory. Differences in our intellectual backgrounds and the diversity of empirical phenomena we study give different flavors to our approaches to practice theory. At least as important as the differences between us are the differences across the projects each of us have conducted. Both of us actively study practices empirically—focusing on the everyday activity of organizing in both its routine and improvised forms. In some of our research, we draw heavily on the core elements of practice theory while backgrounding ontological issues. In other parts of our research, a practice philosophy becomes more central as when we problematize the ontological status of the phenomenon under investigation.

#### Martha's Story

I became interested in practice theory through my study of organizational routines. Routines were foundational to the research on decision making I had done for my dissertation. They were, as March and Simon (1958), Cyert and March (1963), and Nelson and Winter (1982) had noted, fundamental to the way work is accomplished in organizations. They were also predominantly seen as associated with stability and inertia. Although change took place, it was considered an aberration. Nelson and Winter (1982) used a genetic metaphor and referred to change as mutation. Following on my dissertation research that showed the continuity of report writing practices even in circumstances where the participants did not articulate the reasons for the continuity (Feldman 1989), I was intrigued by the mechanisms of this stability. Because I study phenomena ethnographically for the most part, I could contribute to our understanding of stability in organizational routines by exploring the microprocesses that produced this stability.

I chose a research site that the participants assured me had routines of mind-numbing stability that also provided me with as much access as I wanted to the day-to-day operations of the organization. I embarked on my ethnographic research and followed five routines of the organization for four years. The organization provided housing for undergraduates at a large state university. The routines were budgeting for the entire organization, hiring student staff, training student staff, opening the residence halls at the beginning of the year and after breaks, and closing the buildings at the end of the year. Although each of these routines has an annual cycle, they also take place through multiple actions throughout the year. During the course of the research I began to notice that I had a problem. The mechanisms of stability were not the only thing I would have to explain. Indeed, every one of the routines I was following was exhibiting some change and several of them exhibited considerable change over the period of observation.

Of course, others have noted that routines change and that routines are implicated in organizational change. One explanation for change in routines was the existence of "exogenous shocks." These are things like budget crises and new technologies that considerably alter the context that routines operate in. The context the organization operated in during this period, however, was very stable. Moreover, change had been theorized as the opposite of stability. For example, one common explanation of the process of routine change is provided by punctuated equilibrium theory (Tushman and Romanelli 1985, Gersick 1991). This theory suggests that routines enable people to ignore small changes in the context until they accumulate into really big problems, and the routines have to be abandoned or overhauled to reflect and respond to the new context. This punctuated change, however, did not describe what I was seeing.

I was not able to understand what I was seeing using the theories I had available to me at the time. Luckily, I had a sabbatical year and an opportunity to find new theoretical tools. Wanda Orlikowski suggested practice theory as an approach that might be useful. I spent a year reading (Giddens 1976, 1979, 1984; Bourdieu 1977, 1990; Bourdieu and Passeron 1990; Bourdieu and Wacquant 1992), thinking about my data, and writing memos. I found the framework of structuration theory most immediately applicable, and most related to a foundation I already understood based on Schutz's (1967, 1970) phenomenology and Garfinkel's (1967) ethnomethodology (Heritage 1984). Bourdieu's relational framework and the concept of habitus were also intriguing and important for thinking about the way people enact routines on a day-to-day basis. Later, I incorporated some of Latour's (1986, 2005) ideas (Sevón 1996), or my interpretation of these ideas. This stew of theories provided a foundation for a new way of conceptualizing routines and a way of understanding the

relationship between stability and change as a result of the internal (or endogenous) dynamics of the routine.

The result was a theory of routines as practices. The three principles we describe in the introduction can be used to explain what it means to theorize routines as practices. First, the consequentiality of action means not just that routines are created through action and do not exist without action, but also that *the development of the routine occurs through the enactment of it*. Second, there are two primary dualities engaged in theorizing routines as practices: action/structure and stability/change. Third, both of these dualities are relational and mutually constitutive in the context of theorizing routines as practices. Actions, often referred to as performances or performative aspects, and structures, often referred to as patterns or ostensive aspects, are not oppositional but mutually constitutive. Stability and change are different outcomes of the same dynamic rather than different dynamics. Change may be engaged in order to promote stability, and stability may be essential to bringing about change (Tsoukas and Chia 2002, Farjoun 2010).

My initial discussion of routines as a source of continuous change (Feldman 2000) argues that routines have an internal dynamic that cycles among the actions people take, the ideas or ideals they hold in relation to these actions, the plans people make to enact these ideas/ideals, and the outcomes they observe based on their actions. The cycle provides the possibility for both effortful and emergent accomplishments as people take different actions and create and recreate connections (Feldman and Rafaeli 2002) in the course of enacting multiple iterations of a routine. Pentland and Rueter (1994) articulate the notion of routines as effortful accomplishments and note the work that goes into reproducing a relatively stable routine. Conceptualizing routines as emergent as well as effortful involves noticing *how* the work of reproduction subtly or dramatically alters the routine (Feldman 2000, 2003; Jarzabkowski et al. 2011). People can *repair* the cycle so that it continues to produce outcomes that are similar to the ones that have been produced previously (effortful accomplishment). Alternatively, people can *strive* to enact new outcomes that more fully realize their ideas/ideals, or people can *expand* (or contract) their notions of what actions and outcomes are possible (emergent accomplishments).

The concepts of “ostensive” and “performative” were introduced in the Feldman (2000) article to capture the difference between the routine in principle and the routine in practice. These constructs are central to the work I coauthored with Brian Pentland (Feldman and Pentland 2003, 2005, 2008; Pentland and Feldman 2005, 2007, 2008) in which we conceptualize routines as generative systems created through the mutually constitutive and recursive interaction between the actions people take (performative aspect of routines) and the patterns these

actions create and recreate (ostensive aspects of routines). The ostensive aspects (routine in principle) are multiple rather than unitary because they depend on point of view and, therefore, are poorly represented by written rules or formal standard operating procedures. Performances of routines (specific actions taken by specific people in specific times and places) create, maintain, and modify the ostensive aspects of routines (the abstract patterns), and the ostensive aspects guide, refer to, and account for these performances. The interaction between these two aspects of routines produces a generative system that is more or less stable depending on the variation of the performances and the points of view from which people create patterns out of those performances.

This theory of routines provides a way of understanding the processes that produce *both* stability and change, which we refer to as routine dynamics. Routine dynamics conceptualizes routines as engaging agency and subjectivity on the one hand and structure and objectivity on the other hand. This relationship of mutual constitution between performative and ostensive aspects of routines raises questions about how power asymmetries play out in specific contexts. Do power asymmetries influence which innovative performances are selected and retained in the ostensive aspects of routines? How does retention affect power asymmetries? Who has the discretion to create new performances? What role does management play in the creation of new performances and the generation of new ostensive patterns?

Theorizing routines as practices emphasizes the consequentiality of the actions that people take while they are enacting routines and both the potential for change and the work that goes into stability. Moreover, distinguishing the ostensive from the formal rules has brought attention to the multiplicity and flexibility of the patterns we create as we enact organizational routines. In recent work, these concepts have been useful in bridging the gap between mindful and less mindful perspectives on organizational learning (Levinthal and Rerup 2006), in understanding the persistence of flexible organizational routines (Howard-Grenville 2005), and in exploring the difference between pricing theory and pricing practice (Zbaracki and Bergen 2010), the emergence of a new coordinating mechanism after a mandated reorganization (Jarzabkowski et al. 2011), and the development of an enacted organizational schema through trial and error learning (Rerup and Feldman 2011).

Conceptualizing routines as generative systems fits squarely in the category of practice theorizing. The practice ontology, the notion that social life comes into being through practices, is implicit in this theorizing, but it is not the main point. My research on resources (Feldman 2004) deals more directly with the ontological status of practice.

The question motivating that research was whether we can call something a resource before it has been used in some way. We have tended to identify resources as static, as things, as qualities, or as processes that are innately resources. Viewed through a practice lens, however, they are just potential resources until somebody uses them. Moreover, they are different kinds of resources depending on how they are used in a particular instance. These two observations suggest that practice is not just implicated in the use of resources but that practices are essential to the ontology of resources (Feldman and Worline 2011). The processes through which resources are enacted have been largely overlooked in the discussion of resources. The term *resourcing* has come to be used for that process (Feldman 2004, Feldman and Quick 2009, Goldsworthy 2010, Howard-Grenville 2007, Howard-Grenville et al. 2011, Jaquith 2009, Quinn and Worline 2008, Wang 2009). Resourcing puts the emphasis on the process rather than the entities. Indeed, from a resourcing orientation, things are only resources while they are being used. More important, however, it is the ways that things are used that makes them into particular resources. The term *resources in use* denotes that it is the combination of thing and use that makes a resource. This move is very similar to the move Orlikowski (2000) has made in theorizing technology in practice.

Theorizing resources as ontologically connected to the practices that create them through use opens new ways of understanding the processes that underlie organizational outcomes. Resourcing theory has been useful in explaining a variety of different situations. Quinn and Worline (2008), for instance, used it to explain how narrative practices generated collective courage in facing 9/11 hijackers on Flight 93, Feldman and Quick (2009) used it to explore how city managers can use participatory practices to build community, and Howard-Grenville et al. (2011) used it to show how unusual juxtapositions can resource liminality that promotes social change. In Feldman (2004), this theorizing provided an explanation for the emergence of resistance to a change in organizational practices that had been developed by the same employees that were resisting it. This situation mystified the managers but made sense when the resourcing analysis showed that the change in routines made it very difficult for the employees to enact the schema they thought appropriate to their work. The employees were professionals who worked in university residence halls. They thought of themselves as educators, but the new practices created resources in use that would be more appropriate if they were landlords. Their reaction was predictable from a resourcing orientation—they engaged in new practices, including practices of resistance, which created a different set of resources in use, resources they could use to support their sense of their proper role.

### Wanda's Story

I became intrigued by practice theory through my interest in understanding technology in the workplace. When I first began studying this phenomenon, some 25 years ago, I was surprised by the representations of information technology evident in the organizational literature. As someone who had designed and programmed computer systems for a number of years, many of the assumptions underlying the dominant theories of information technologies in organization studies (which strongly mirrored theories of technology more generally) seemed quite distant from my own understandings and experiences of such technologies in practice.

On the one hand, the logic of technological determinism—which posits technology as an external, largely independent, and irrevocable force for change—left little scope for human agency. Yet my colleagues and I had designed and coded software that had altered (sometimes substantially) the performance of particular machines and thus the outcomes produced. On the other hand, the logic of strategic design—which posits technology to be a malleable resource that can be put to a variety of uses (with a range of effects) depending on some preferred strategy or ideology—placed undue weight on the rationality of managers and designers and their abilities to optimize the machine. These theories assumed that the technology that was planned and designed would be built, that the technology that was built would be used in particular ways, and that the technology that was used would produce specific anticipated and intended outcomes. But as my colleagues and I discovered, not only could we not guarantee a perfect translation of requirements specifications to running code, we had no control over whether and how others would use the technology that we had built (both in the short term as well as over time), and we certainly had no way of knowing or anticipating the range of possible unintended consequences that might attend a technology's use in practice and over time.

Missing from these dominant models of technology was the recognition that technology is not valuable, meaningful, or consequential by itself; it only becomes so when people actually engage with it in practice. The scope for human agency—in particular, the potential for humans to adapt technology (whether as developers or users) in multiple and contingent ways—was thus significantly understated in many theories of technology, as was the notion of technological construction, that technologies are artifacts whose operation and outcomes are neither fixed nor given a priori, but always temporally emergent through interaction with humans in practice. The search for theories that had greater resonance with my lived experiences with technology began, and it led me on a journey through Berger and Luckmann (1966) and the social construction of reality, then the social construction of technology (Bijker et al. 1987, Bijker and



Law 1992, Woolgar 1991), and on to Giddens's (1976, 1979, 1984) structuration theory. Interestingly, structuration theory has very little to say about technology, but its articulation of consequential, recursive, and mutually constitutive relations between humans and structures was very compelling. As a metatheory of how the social world is performed in practice, it struck a deep chord.

Structuration theory helped me see how it is that through our actions we create the structures that shape us. And in understanding that we (re)produce our structures, there is an understanding of both how structures seem to get away from us (become reified) and how they can be changed (through collective action). Giddens's insights about the duality of structure seemed to explain my experiences with technology, and that led to my proposing a reconceptualization of the nature of technology in organization research (Orlikowski 1992). Framed as "the duality of technology," I advocated a structural view of technology in practice as, on the one hand, created and changed in ongoing human action, and, on the other hand, as objectified and institutionalized by recurrent action.

Further fieldwork that focused on the structured and situated practices through which people engage with particular technologies (Orlikowski 1996), as well as the constructive critiques of many colleagues, led me subsequently to modify my structural view of technology. In this later version, the notion of practices (which had been conceptually backgrounded in the earlier work) came to the foreground, and I sought to actively theorize the relationship between everyday practices and technologies in use (Orlikowski 2000). This revised view of technology in organizations suggests that through their regularized engagement with a particular technology (and some of its inscribed features) in their ongoing practices, users recurrently enact technology structures—what I term *technologies in practice*—that are (re)constituted in people's ongoing interactions with the technologies at hand. It is thus not technologies per se, nor how they may be used in general that matter, but the specific technologies in practice (enacted technology structures) that are recurrently produced in everyday action that are consequential for the shaping of organizational outcomes.

Recursivity is central to this notion of technology in practice. As humans interact with technological artifacts, they constitute a technology in practice through their recurrent use of the technologies. However, their actions are at the same time shaped by the technologies in practice they have enacted in the past. Thus, in their ongoing and situated action, actors draw on structures that have been enacted previously (both technologies in practice and other structures) and in such action reconstitute those structures. By drawing more explicitly on a practice lens, I was able to identify various conditions (institutional, interpretive, and technological) that shape the

recursive enactment of different technologies in practice and to articulate how those different enactments reinforce or modify (both incrementally and substantially) the institutional, interpretive, and technological conditions in turn.

The distinction between technological artifacts and technologies in practice offers some practical insights to how technology may be introduced and managed. In organizations, people often focus on the technological artifacts with their tangibility, relative stability, and apparent predictability of performance, and they downplay the technologies in practice that produce outcomes that are situated, dynamic, and emergent. For example, I studied a multinational consulting firm that had adopted a groupware technology to facilitate knowledge sharing among its global consultants. Focusing on the artifact, the managers concentrated their energies and resources on installing the technology within the firm's infrastructure and on every consultant's desktop. They viewed this deployment as very successful, as indicated by the measures they used (number of user accounts established, number of servers installed, and number of databases created). Focusing their efforts and their metrics on the technological artifacts, these managers did not attend to or assess the technologies in practice—to what consultants were actually doing with the groupware technology in their everyday consulting practice. Such attention would have revealed that consultants were not using the technology much at all. In the context of this consulting firm, with its competitive "up or out" career path and individualistic work norms, to share knowledge was countercultural. Not surprisingly, there was only nominal adoption and use of the groupware technology in practice. As a technological artifact, the groupware technology could be seen to have the potential to facilitate knowledge sharing across the firm. However, what is consequential for organizational outcomes is not the artifact itself, but how it is used to get work done in specific contexts. And the consultants' use of the technology in practice was simply not achieving knowledge sharing across the firm. By managing the technological artifact rather than its use in practice, this firm (like many others) failed to achieve the benefits of the technology they had deployed. The insights afforded by a practice lens on technology adoption and use have been further elaborated and extended by examinations of other technologies in practice, including enterprise resource planning systems (Boudreau and Robey 2005), intranets (Vaast and Walsham 2005), Web-based self-service applications (Schultze and Orlikowski 2004), nomadic computing (Cousins and Robey 2005), and mobile e-mail devices (Mazmanian et al. 2006).

My understanding of the relationship between practices and technology was deepened and elaborated in my collaborative work with JoAnne Yates. We were

both interested in exploring the implications of electronic media for communication practices, and so we conducted a series of empirical studies into the uses of various electronic media, including electronic mail (Orlikowski and Yates 1994), online discussion boards (Yates et al. 1999), groupware (Yates and Orlikowski 2002), and PowerPoint (Yates and Orlikowski 2007). Along the way, we blended my structuralist interests with JoAnne's literary and historical interests to rethink conventional understandings and treatments of the notion of genre (Yates and Orlikowski 1992).

In particular, we proposed the idea of *genres of organizational communication* that we argued are “socially recognized types of communicative actions—such as memos, meetings, expense forms, training seminars—that are habitually enacted by members of a community to realize particular social purposes” (Orlikowski and Yates 1994, p. 542). This enacted understanding of genre draws attention to the dynamic yet recurrent and habitual nature of communicative practices, and it provides a practice-based lens for studying the production, reproduction, and change of organizational communication. For example, in studying the electronic discourse of a group of computer scientists, we identified the repertoire of genres enacted by the participants over time and showed how their daily communicative actions reflected their collective purposes, the media at hand, as well as the shared norms and relations of their occupational community (Orlikowski and Yates 1994). My more recent work in this area with Natalia Levina has addressed the question of power dynamics within and across organizations. Using critical genre analysis, we examined how conditions of novelty and ambiguity on consulting engagements produce discursive tensions that create liminal opportunities for marginalized agents to act. In particular, we found that such actors often choose to make discursive moves that deviate from established genre norms and communicative expectations in use within their organizations (Levina and Orlikowski 2009). When such discursive moves succeed and are accepted by other actors, they may reconfigure established power dynamics and transform power relations within and across organizations.

Where my earlier work (Orlikowski 1992, 1996) used practice theory to inform my understanding of phenomena (highlighting the recursive duality of technology in use), my later work (Orlikowski 2000, 2002; Schultze and Orlikowski 2004) used practice theory more explicitly to reconceptualize the nature of the phenomenon (articulating how technologies in practice are constituted in recurrent practices, proposing an enacted view of knowing in practice, and articulating a practice perspective on network relations). In my most recent work (Orlikowski 2007, Orlikowski and Scott 2008, Scott and Orlikowski 2009), I have been particularly influenced by Latour (1992, 2005), Schatzki (2002, 2005), and

Suchman (2007) to use practice theory to revisit and reconfigure the ontological status of the phenomenon in question—in this case, technology at work (Orlikowski 2007). This conceptual turn shifts away from studying the design and/or use of technology in the workplace (a framing that still posits a separate artifact situated in some social context, thus inscribing an ontological distinction between the social and the technical) toward studying sociomaterial practices that perform social and material relations together.

Such a reconfiguration entails, as Suchman (2007, p. 257) notes, a move beyond “an ontology of separate things that need to be joined together” and toward a starting place that “comprises configurations of always already interrelated, reiterated sociomaterial practices.” How to do this is quite challenging empirically, as my coauthor, Susan Scott, and I have come to appreciate in our recent research project on social media (Scott and Orlikowski 2009). We have begun by examining the sociomaterial conditions of user-generated content in various travel reviewing websites and how this dynamic materiality configures and reconfigures the practices and possibilities of different modes of engagement by multiple users. Emerging from our analysis are some insights into how social media are far from being neutral channels or passive mediators of user content, and how the distributed and collective sociomaterial practices that constitute them are integrally and actively part of the knowledge produced, the relations enacted, and the accountabilities that are rendered consequential.

### The Challenge and Value of Practice Theory

A number of challenges accompany the use of practice theory to conceptualize organizational phenomena. These have to do with the move intrinsic to practice theory of focusing attention on the consequentiality of everyday action and the relationality of phenomena. One such challenge is to problematize and then theorize the constitutive processes of enactment, rather than take for granted the existence of discrete entities. Another is to find language and logic that adequately express the recurrent and relational nature of everyday practices.

Although organization scholars have been increasingly examining action and process—ever since Weick (1969) urged us to attend to *organizing* rather than *organization*—much of organization theory remains largely focused on entities (Chia and Holt 2006, Østerlund and Carlile 2005, Tsoukas and Chia 2002). In the box-and-arrow figures so prevalent in organization theory, the boxes are always labeled, whereas the arrows are often unadorned by any text, as if they speak for themselves. Moreover, entities are often reified, considered sufficiently meaningful independent of their use or

performance. In practice theory, by contrast, the emphasis is on the arrows, on the relationships and performances that produce outcomes in the world. To put it another way, practice theory theorizes the arrows to understand how actions produce outcomes. Thus, when viewing routines or technology use through a practice lens, the specific outcomes of stability or change are seen as consequential only in the context of the dynamic relations and performances through which such (provisional) stability and change are achieved in particular instances of practice.

Readers and reviewers at times find this focus confusing. They want to know what knowledge has been acquired or what resources are being used rather than how knowing is achieved or action is resourced. Many expectations rest on the understanding that, for instance, a resource is a thing or quality that either is, by nature, a resource or has become a resource. Given such expectations, it is unsettling to take on the notion that a resource is defined not by what it *is*, but by the practices through which it is enacted as a resource, and that such enactment as a resource is an ongoing and thus necessarily temporary accomplishment (Feldman 2004, Feldman and Worline 2011). Similarly, for many, technologies are objects in the world with definite and independent material features and functions. The premise that characteristics and capabilities of technologies are relational and enacted in practice is a challenging one to absorb when confronted with the manifest physicality of assembly lines, CT scanners, and computers. Consequently, the idea of sociomateriality, which signals that technologies do not stand alone with certain inherent properties, but that their material characteristics and capabilities are relevant only in relation to specific situated practices, can be hard to grasp (Scott and Orlikowski 2009).

Practice theorists often use entities analytically (e.g., performative and ostensive aspects of routines, or technological artifacts and genres of communication) and thus contribute to the confusion. Practice scholars can feel caught between a rock and a hard place. The bracketing of entities is typically done for analytical convenience, but the move may be misunderstood by scholars not working in a practice tradition. As a result, attention can become riveted on the entities at the expense of attending to and understanding the dynamic and relational practices that constitute such entities.

We note that practice theorists have tended to deal with these challenges in multiple ways. One strategy is to create new words: “habitus” and “structuration” come immediately to mind. The other is to write sentences that seem to go in circles: “structured structures predisposed to function as structuring structures” (Bourdieu 1990, p. 53), or “structure as the medium and outcome of the conduct it recursively organizes” (Giddens 1984, p. 374). Although neologisms and recursive logic may

be challenging to parse, they serve the purpose of allowing the explicit theorizing of consequential, nondualistic, and mutually constitutive relations that enact the world through everyday practice. These strategies thus afford access to the analytic power and distinctive value of practice theory.

Taking practice seriously in organizational research also requires a tolerance for complexity and ambiguity because it requires engaging with the everyday realities of organizational life that are rich with contingency, multiplicity, and emergence. A commitment to a practice lens requires deep engagement in the field, observing or working with practitioners as they go about their work. Collecting and analyzing such data is time consuming and intellectually challenging, whereas the writing and publishing of practice theoretic accounts is complicated because practice accounts do not always conform to some readers’ and reviewers’ expectations of conventional management science.

Given these challenges, it is reasonable to ask, why bother? What is the payoff for all of this effort and difficulty? Our experience with practice theory suggests at least two reasons why it is worth the trouble. First, practice theory provides the basis for powerful theoretical generalizations, and second, practice theory has the capacity to offer important practical implications for practitioners.

The theoretical generalizations produced through the use of practice theory are not predictions in the conventional sense but may be better understood as principles that can explain and guide action. They articulate particular relationships or enactments (e.g., technologies in practice, resources in use) that offer insights for understanding other situations while being historically and contextually grounded. Theoretical generalizations are different from statistical generalizations in that they explain situated dynamics, not universal variation. Although each context of study is different, the dynamics and relations that have been identified and theorized can be useful in understanding other contexts. In this way, theoretical generalizations are powerful because they travel.

Lave’s (1988) development of “cognition in practice” is a good example of how a theoretical generalization based on practice theory can travel. She found that people who score poorly on standardized math tests may still display considerable mathematical skill in their daily situated practices. Her scholarship, thus, has allowed us to see the mutually constitutive nature of cognition and action in practice. This deep theoretical insight has traveled considerably, promoting new insights into communities of practice (Orr 1996, Brown and Duguid 1998, Østerlund and Carlile 2005), boundary objects (Bechky 2003a, b; Carlile 2002, 2004), and knowing in practice (Orlikowski 2002, Nicolini 2011, Nicolini et al. 2003, Gherardi 2006), while also providing scholars with ways of helping organizations

address problems associated with knowledge production and sharing.

Related, in part, to this theoretical generalizability, practice theory is also practical. The findings and insights of practice scholarship can identify organizational levers for enabling change in practices while supporting and reinforcing those practices that are working. These levers identified by practice theory are neither exogenous to nor independent of the organization, but are grounded in the microdynamics of everyday interactions and highlight the importance of all participants' actions in producing organizational outcomes. Organizational interventions that are informed by such grounded microdynamics can be more directly relevant to the particular sites and particular practitioners involved.

## Conclusion

The interest in a practice lens within organization studies is an important development in the range of ideas and approaches that scholars use to study organizational phenomena. In focusing on the empirics of practice, we understand organizational phenomena as dynamic and accomplished in ongoing, everyday actions. In focusing on practice theory, we understand the mutually constitutive ways in which agency is shaped by but also produces, reinforces, and changes its structural conditions. In focusing on practice ontology, we understand that it is practices that produce organizational reality, or to paraphrase James (1956, p. 104), it is practices all the way down.

The entailments of taking on a practice lens within organization studies allow us to see that theorizing practice is itself a practice, one that produces particular kinds of consequences in the world, for which we as theoretical producers are responsible. Academia plays an important role in training scholars and practitioners to see and value the complexity and dynamics of the sociomaterial world. Theories that rely on linearity and independence of discrete entities are ill equipped to deal with such contemporary realities as multiplicity, transience, and dispersion (Law and Urry 2004). Practice theory, with its emphasis on explaining the emergent constitution of the sociomaterial world through the microdynamics of everyday life in organizations, is an approach that can allow us to make this contribution.

## Acknowledgments

The coauthors are equal collaborators in writing this article. They are grateful to Linda Argote, Beth Bechky, Rich Burton, Deborah Dougherty, Danielle Dunn, Samer Faraj, Sarah Kaplan, Ann Majchrzak, Willie Ocasio, Haridimos Tsoukas, and two reviewers for helpful comments.

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