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Interaction Genres and Multiminding in Network-Based Work

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A few decades into the twentieth century, famed American historian and sociologist Lewis Mumford (1934) declared in *Technics and Civilization* that: "The clock, not the steam engine, is the key-machine of the modern industrial age. For every phase of its development the clock is both the outstanding fact and the typical symbol of the machine: even today no other machine is so ubiquitous" (p. 14). This declaration came on the heels of Charlie Chaplin's *Modern Times*, which depicted the centrality of clock-based timekeeping in fueling modern industrialization. More than a decade into the twenty-first century, communication, connection, and connectivity have joined time clocks and conveyor belts as the *zeitgebers*, or "time givers," that fuel global commerce. Today, in postindustrial work, the communication network has joined the clock for a large segment of the global workforce, as new forms of time and space have emerged (Castells, 2000). Consequently, the nature of work is being redefined.

While industrial work centers largely on sequential *individual* contributions, network-based (or postindustrial) work centers on concurrent *collective* contributions. As a result, both those who manage and those who perform network-based work are struggling to shift from a focus on *the time needed to complete a well-defined task* in industrial work to a focus on the *organizational and individual capabilities required to reliably achieve the more complex, interlocking outcomes*

characteristic of postindustrial work. According to a recent report by the McKinsey Global Institute, the fastest-growing segment of the workforce in advanced economies is the interaction worker (McKinsey, 2012). This suggests that scholars must consider the utility and relevance of extant theory and models to account for the experience of this new front line of the network-based economy. Indeed, because interaction work relies upon complex communication and coordination with others yet requires independent judgment, the study of communication is critical to consider the implications of this shift for organizations and their members.

All of the above shifts—in the key-machine that drives work, in the practices needed to accomplish it, and in the relationships among the people who perform it—translate to equally profound shifts in how organizational members come to apprehend time and space, or spatiotemporality. Particularly, Castells and colleagues (2000; Castells, Fernandez-Ardevol, Qui, & Sey, 2007) theorize about how societal shifts associated with new communication technologies find us collectively experiencing "space" that is not defined by place but by a given network of relationships, and "time" that is not defined by a clock but through constant interaction that saturates all moments with activity. Indeed, Castells and colleagues argue that these new communication processes associated with space and time are key to the emergence of the network society, owed to the fact that: "Time and space are the fundamental, material dimensions of human existence. Thus, they are the most direct expression of social structure and structural change." (Castells et al., 2007, p. 171).

Therefore, the growth of interaction work means that these organizational members have experienced profound spatiotemporal change in a remarkably short period of time. Not surprisingly, this has led to intense work pressures as organizations and their members seek to develop effective organizational communication practices to manage this shift. Therefore, our focus in this paper is to explore the various spatiotemporal interaction genres—*coworking, commuting, choosing, contemplating*—and the broader repertoire—*multiminding*—that emerges from an oscillation within and among the various genres.

We begin our discussion by exploring the temporal dimension, *separation*, described by Ballard and Seibold (2003) in their meso-level model of organizational temporality. It is conceived as a measure of (spatiotemporal) connection or availability among organizational members; therefore, it is an excellent starting point to consider contemporary enactments of spatiotemporality (Ballard & Seibold, 2003). We then explore Orlikowski and Yates' (1994) concept of an *interaction*, or *communicative genre*, and describe four genres—*contemplating, choosing, coworking, commuting*—used to manage spatiotemporal connection in various ways (Ballard & Seibold, 2003; Ballard, 2007; Ballard & Gossett, 2007). Finally, we define a larger genre repertoire, *multiminding*, that includes each of these genres yet extends our understanding of contemporary enactments of time and space at work.

Separating and Connecting in Time

Chronemics at Work

Based on any number of mainstream business outlets, the sense that time matters to work is abundantly clear (Bluedorn, 2002). However, the "time" referenced in these popular contexts is typically drawn with a broad stroke: People are worried about "wasting time," reminded that "time is money," driven by "deadlines," concerned about reaching "daily quotas," finishing "quarterly reports," receiving "annual evaluations," and lobbying for more "vacation time," "time off," or family "leave." Yet, with all of this emphasis on time in organizational life, time is still considered—by organizational members, practitioners, and scholars—merely the backdrop against which substantive issues unfold. This incomplete understanding of time in work is embodied in many popular approaches, including Taylorism, Fordism, and Six Sigma to name a few. Time is considered a simple, linear fact of nature, an objective and independent factor in work life. It is a commodity subject to ownership, usage, and the like.

Our interest here, however, is on the study of time as it is bound to human communication, or *chronemics*. Bourdieu (1977) argued that the human experience of time only comes into being through our interaction with others. For example, prior to clocks and formal timekeeping devices, persons were able to notice particular temporal, or time-based, patterns—e.g., the frequency, pace, duration, and regularity—based solely on their occurrence vis-à-vis communication episodes. Imagining our early forebears, this seems quite rudimentary and, perhaps, irrelevant for comparisons to contemporary life. Yet this same quality of time abounds in our current daily lives. For example, in skilled nursing facilities around the world, persons without access (visually, cognitively, or logistically) to mechanized timepieces experience time through group activities and one-on-one interaction (including long visits and regular phone calls from loved ones). As well, in organizations everywhere, the pace, regularity, duration, and frequency of communication—from meetings to email—signals clearly when a deadline is approaching, the fiscal year is ending, or the day is almost over (Flaherty & Seipp-Williams, 2005). Likewise, these same meetings and email requests are noticed or overlooked, celebrated or dreaded, and prioritized or avoided based upon their relationship to the fiscal year, the time of day, or their relationship to a deadline. Thus, our communication patterns and practices are vitally important in signaling time, and our temporal experience is also important in shaping the communication patterns and practices of a given group (Ballard & Seibold, 2003).

The importance of this chronemic, or interaction-based, focus on human temporality—over a solely task-based focus—is that it allows organizational members, practitioners, and scholars to understand (and to, potentially, shape) the bigger relational picture within which our temporal experience unfolds (Ballard & McVey, 2014). Under ordinary conditions, the socially constructed nature of time

is obscured. Instead, temporal behavior becomes guided by a set of rules that are "known to all, obeyed by all, but seldom if ever stated … implicit, taken for granted, almost impossible for the average person to state as a system, and generally out of awareness" (Hall, 1983, p. 211). Thus, implicit norms necessarily preclude strategic, proactive change. Nonetheless, critical aspects of our organizational and individual performance are shaped by our temporal behaviors and construals, described next.

Interpreting and Performing Time: Dimensions of Organizational Temporality

In their research on time and work, or *organizational temporality*, Ballard and colleagues (Ballard & Seibold, 2006; Ballard & Gomez, 2006) report that organizational members experience time across at least twelve distinct dimensions: *flexibility, linearity, pace, punctuality, delay, scheduling, separating*,[1] *scarcity, urgency*, and *present, past*, and *future time foci*. These twelve dimensions, divided into temporal construals and temporal enactments, highlight the numerous and dynamic ways in which organizational temporality shapes and is shaped by organizational members' quality of life and work.

First, temporal *construals* represent the way organizational members "interpret" or "orient" to time. This includes construals of: *scarcity*, a focus on time as a limited and exhaustible resource (Karau & Kelly, 1992); *urgency*, a preoccupation with deadlines and task completion (Waller, Conte, Gibson, & Carpenter, 2001); and *present, past*, and *future time foci*, characterized by intentions oriented toward immediate action or long-term planning, respectively (Bluedorn, 2002; Jones, 1988). To construe something means "to interpret, give a meaning to, put a construction on (actions, things, or persons)" (Simpson et al., 2005). While perceptions are typically associated with personal, even neurological, processes, the notion of *construals* emphasizes the social process of deriving meaning and opens up the possibility of shared interpretations as well.

Next, temporal *enactments* refer to the way work group members "perform" time. Enactment encompasses more than behavior. Enactments are both the medium and the outcome of human interaction with the environment. As such, they highlight the ways in which temporality is communicatively constituted. As Weick (1979) describes, "the external environment literally bends around the enactments of people" (p. 130). Enactments impact and are impacted by the interaction of organizational members with a variety of environmental factors, including colleagues, clients, family members as well as task timelines, project deadlines, and the like. They include *pace*, tempo or rate of activity (Levine, 1988); *flexibility*, the degree of rigidity in time structuring and task completion plans (Starkey, 1989); *linearity*, the degree to which tasks are completed one at a time (Graham, 1981); *punctuality*, the exacting nature of timing and deadlines (Schriber & Gutek, 1987); *delay*, working behind schedule—orthogonal with

punctuality; *scheduling*, the extent to which the sequencing and duration of plans, activities, and events are formalized (Zerubavel, 1981); and *separation*, the degree to which a given use of time and/or space signals an intent to include or exclude interaction with others in the process of accomplishing work[2] (Perlow, 1997). The role of separation behaviors in managing interaction work is the focus of this paper, and is developed and described in detail below.

Separation and Spatiotemporality

The spatiotemporal experience of *separation* is evidenced in the extent to which individuals are available for interaction in time and space. If activities without apparent connection to the focal activity are seen as unwelcome "interruptions,"[3] a high level of separating is being enacted. Screening behaviors, including closing the door or not answering the phone, are common in these contexts. In contrast, low levels of separation—i.e., high connection—are evident in practices like the open door, discursively or literally used to communicate less restricted spatiotemporal norms.

Separation is signaled in spatial and temporal barriers to interaction, whereas connection has been signaled in the removal of these same barriers in order to facilitate interaction. For example, leave-taking behaviors like standing up, gathering one's belongings, physically orienting one's body away from another, and/or checking one's watch are all ways that individuals signal the intent to separate from the stream of communication. Similarly, sitting down, taking off one's coat, and moving closer to another are ways that—for many generations—individuals have expressed that they have time for face-to-face interaction (Hall, 1983). However, the emergent forms of spatiotemporality afforded by new mobile communication technologies such as laptops, smartphones, netbooks, and tablets shed new light on ways in which separation may be enacted. As such, literature on mobile communication (elaborated below) offers a rich exemplar base to consider how separation has varied across time and across cultural groups based upon the unique interaction goals that persons seek to accomplish.

As Castells and colleagues (2007) assert, technology adoption is shaped by the value that users perceive it offers. While certain features and usage patterns are now shared universally, differences across group values still account for major differences in use (Yu & Tng, 2003). While the cultural comparisons across national boundaries (with regard to mobile communication technologies) are growing slowly, one cultural group understandably absent from the technological adoption literature is the Amish. While this absence is logical—given their reputation for rejecting even the most basic of technologies (including the convenience of outside pockets on their clothes)—examining Amish discourse and practices concerning communication technology, in general, and mobile communication technology, in particular, highlights the centrality of spatiotemporal values in separation norms and practices (Kraybill, 2001; Kraybill & Hurd, 2006).

Kraybill (2001) describes the communicative, especially the relational, aspects of separation and spatiotemporality:

> The telephone line was the first visible link to the larger industrial world—a real and symbolic tie that mocked Amish belief in separation from the world. Phones literally tied a house to the outside world and permitted strangers to enter the house at the sound of a ring.
>
> (p. 192)

Concern with interruptions during business hours and disruptions in the natural flow of family rhythms was among the reasons given for the initial ban on landline phones in Amish communities. Nonetheless, a compromise was eventually made due to church members' concerns about issues of safety (e.g., the ability to call a doctor or fire department). Thus, after 1940, telephone shanties (resembling an outhouse) began to appear in order to house a "community phone." While separation from the outside world is a classic value of their culture, separation within families and communities is the antithesis of Amish tradition, thus the community phone, located outside of the home, was palatable. Kraybill (2001) observes, "The Amish believe that a home phone separates but that a community phone integrates" (p. 196). Not surprisingly, then, in many Amish communities, mobile telephones are strictly forbidden due to their ability to invade home space. At their fall 2003 conference, mobile phones were expressly forbidden from invading the communal space because, as one member notes, "When it's connected to a line it controls mobility" (Kraybill & Hurd, 2006, p. 217).

The references to connection and separation throughout the studies of mobile communication highlight the importance of time and space in groups' communication technology use patterns and the underlying interaction genres they seek to accomplish. Below, we explicate a typology of spatiotemporal enactments through offering examples from a variety of technologies-in-use relevant to managing interaction work.

The Spatiotemporality of Interaction Work: Contemplating, Choosing, Commuting, Coworking, and Multiminding

There are a variety of communication, or interaction, genres (Orlikowski & Yates, 1994) signaled in members' spatiotemporal enactments associated with work. Interaction genres 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. A genre established within a particular community serves as an institutionalized template for social action—an organizing structure—that shapes the ongoing communicative actions of community members through their use of it" (Orlikowski &

Yates, 1994, p. 542). They go on: "Members of a community rarely depend on a single genre for their communication. Rather, they tend to use multiple, different, and interacting genres over time. Thus to understand a community's communicative practices, we must examine the set of genres that are routinely enacted by members of the community. We designate such a set of genres a community's 'genre repertoire'" (p. 542). We are interested in four different spatiotemporal communication genres—contemplating, choosing, commuting, and coworking—that characterize how organizational members appropriate communication technologies-in-use as well as a broader genre repertoire—multiminding—that reflects a higher order strategy wherein members move across these interrelated genres to sustain multiple ongoing flows of interaction work.

We develop a spatiotemporal typology that utilizes the two elements of separation—both temporal and spatial qualities of communication—to arrive at various communication genres. Temporality and spatiality are described along a conventional dichotomy of states—*synchronous* versus *asynchronous* interaction across time, and *face-to-face* versus *remote* interaction across space—each of which is being complicated and reshaped by the rise of interaction work. Due to the affordances of networked technologies, these dichotomies (while familiar) are no longer sufficient on their own: They are being reshaped, punctuated by new intermediate spatiotemporal states that are rapidly becoming predominant: *continuous* (temporality) and *together* (spatiality). Together, the grounded ends of the continuum along with these fluid intermediate states reflect the protean shapeshifting that Shockley-Zalabak (2002) describes in her explication of the Protean Places which characterize contemporary work environments.

In terms of chronemics, whereas asynchronous communication is drawn on to signal interaction on "my time," or a "different time" than another, and synchronous communication signals interaction on "our time," or the "same time" as another, there is also a type of *continuous* communication—neither synchronous nor asynchronous, but a constant movement between both. Instead, continuous communication signals the value of interaction "over time" in interaction work—transcending industrial conceptions that time is a commodity to be owned by one or more interactants. Continuous communication operates on Castells's notion of timeless time in network-based society.

Similarly, in terms of proxemics, whereas face-to-face communication signals that one is "here" and remote communication signals that one is "there," communication can also have the quality of occurring *together* with another—which operates differently than either face-to-face or remote. Spatially, together is reflected in Castells's notion of the space of flows, defined by interaction within one's network of relationships. So, rather than communicating from here or there, communicating together occurs "shoulder-to-shoulder" in either virtual or real space. The spatial metaphor of shoulder-to-shoulder conveys an image of working together in a collaborative space—with only a few inches, or a desk, or mere cyberspace separating and connecting another. For example, a "shared folder" on

Dropbox is the network-based equivalent of a shared, locked, filing cabinet that a group of office mates share where anyone who needs access has the key. The space of flows literally enables us to work shoulder-to-shoulder, or together.

The *contemplating, choosing, coworking*, and *commuting* genres anchor the ends of the continuum. At the center, driven by a shapeshifting intersection of the other qualities of communication, the intermediate states give rise to the broader genre repertoire of *multiminding*—a higher order strategy—that undergirds sustainable, networked work, workers, and workplaces. Thus, throughout we note where the neatly defined boundaries—*asynchronous versus synchronous* and *face-to-face versus remote*—routinely fall apart and then come together as *continuous* and *together*.

Note that this is not a typology of technologies, but of types of interaction accomplished using a range of communication technologies in multiple ways. Indeed, in the course of becoming mainstream, it is almost required that a given practice be appropriated in more than one way to signal various genres. Below, we describe each genre in turn and offer examples of typical spatiotemporal enactments for each. We then end this section with a discussion of multiminding.

The Contemplating Interaction Genre

The *contemplating* interaction genre is drawn upon in settings where individuals are spatially co-located in a face-to-face setting with others but interacting with them in an asynchronous fashion as a means of momentarily offering more focused attention to other people and activities.

The classic contemplative strategy is simply closing one's door at the office (Ballard & Seibold, 2000; Hall, 1983). The history of this practice reflects the power relations associated with organizational spatiotemporality, since higher-ranking organizational members are often the only persons with an office door to close. More typically, the majority of organizational members work in cubicles that prohibit this privileged door closing practice. In contemporary settings, the strategy is often appropriated by persons who may be expected to interact continuously with others (either by role or by group norm) by simply wearing ear buds or headphones that signal their attention is devoted to another task or interaction. Enacting this genre requires an interlocutor to "ask" for another's attention, rather than to assume ownership of it.

Recently, some organizations have instituted "No Email Fridays" as a way to decrease the flow of messages and resultant problem of communication overload. This policy exists for co-located and teleworking colleagues the same. As well, smartphone makers recently have built-in systems to allow users to enact the contemplating genre. Apple calls this function on the iPhone "Do Not Disturb." "Do Not Disturb" is exemplary of the discursive construction of contemplating long used by bank tellers, cashiers, etc., to convey the need to concentrate their attention on one activity before moving back into interaction with others. Notably, in the absence of formal mechanisms to enact contemplating, many

organizational members simply appropriate calendaring systems (such as Outlook or Doodle) in such a way as to decline availability.

The practice of contemplating is appropriated to manage the timing of interaction and offer focused attention on a given set of activities. Notably, this genre is often met with impatience due to the perceived inconvenience to others, reflective of cultural attitudes against contemplation in a network-based economy. As well, the time scale over which contemplating occurs may extend from seconds to hours (Ballard & McVey, 2014).

In interaction work there is frequent movement back and forth between *asynchronous* and *synchronous* communication, resulting in a kind of *continuous* interaction when one zooms out to see a larger time scale (such as across the day). Consider the office administrator described earlier who is continually engaged by others. Between interactions, she resumes her work wearing headphones in order to discourage unnecessary interruptions and regain attention for the report she is preparing (due the following day). From moment to moment, we might see either asynchronous communication or synchronous communication, but—due to the constant movement across the two over the longer day—her interaction with others has a decidedly continuous character. Thus, like the other genres, they are analytically distinct but deeply interwoven in the course of interaction work.

The Choosing Interaction Genre

The potential for more accessibility (compared to the contemplating genre) is reflected in the *choosing* genre wherein individuals located remotely from their colleagues use communication technologies in an asynchronous fashion as a way to offer availability to some activities but not other activities in a given unit of time.

Castells and colleagues (2007) describe how pagers and Caller ID were some of the earliest communication technologies explicitly designed to offer remote users the choice to engage in immediate interaction or to decline availability until a later time of their own choosing. Both were used to selectively choose with whom one wants to interact, deciding in the moment whether or not to be available. In the last century, answering machines were used in the same way. Digital voicemail and "recent call" lists on cellphones now stand in as ways that individuals screen phone calls, choosing interaction on their "own time": Persons can ostensibly capture the intended message or simply the caller's name and return the call at a time of temporal convenience (if at all).

While organizational members frequently appropriate email as an almost synchronous communication media, it was designed as (and can still be used as) an asynchronous media that permits individuals to choose when they are available. Nonetheless, as is the case for each of the contemporary enactments of the choosing genre, the presumption of speed in response means that persons may attempt to keep up in real time (Barley, Meyerson, & Grodal, 2011; Kalman & Rafaeli, 2011). Thus, the line between asynchronous and synchronous

communication is again blurred, resulting in interaction patterns that are best characterized as continuous (Fallows, 2013), moving regularly between synchronous and asynchronous interaction. As an example, when required to indicate whether email is a synchronous or asynchronous communication technology (even when the definition of synchronous and asynchronous were provided), respondents indicated that email was synchronous despite the fact that email is described as asynchronous in the literature (Jourdan, 2006).

Additionally, organizational members often face a professional–personal tension that requires a choice between attending to their personal wellness and relationships by regularly taking "time off" and being away from work versus being ever available to coworkers (Perlow, 2012). Perlow developed an arrangement called Predictable Time Off (PTO) where members of the Boston Consulting Group were afforded one night a week where they would leave the office and not be available to coworkers or clients, with the exception of emergencies. This may not seem related to workplace interaction, but it was centered precisely on creating a shift in the temporal expectations of work. Ultimately, it transformed the work environment itself: employee satisfaction rose, recruitment and retention improved, and client satisfaction increased as well. Thus, the choosing genre covers a range of approaches to attention management at various time scales. From in-the-moment decisions about responding to a given caller or messenger (SMS or IM), to waiting to answer email until later, to actually having regular time off each week, to leaving town for several months. At various time scales, organizational members often benefit from being allowed to choose the time and place of interaction, rather than offering continuous availability to all others' work-related requests.

To summarize, the choosing genre is appropriated to help manage the ebb and flow of communication in time and space. Spatiotemporal enactments associated with the commuting interaction genre are described next.

The Commuting Interaction Genre

The *commuting* interaction genre allows individuals to use remote communication practices in a synchronous fashion (or a close approximation of it) in order to signal their temporal availability to others. Often physical absence is desired, as in the case of an arranged teleworking agreement, but this genre applies in a variety of other contemporary settings (Ballard & Gossett, 2007). The term *commuting* does not apply only to those in formal telecommuting situations, but that which is commonly enacted by members throughout the organization (Ramgolam, 2007): This includes working from home at the end of the day (after leaving the office), being on-call over the weekend, and being generally available after hours (despite the day or time). Independent contractors and freelancers often find themselves in this situation as well.

Commuting enactments include phoning into the office from home (and receiving phone calls at home) in order to facilitate availability from a fixed

location, as well as utilizing a mobile phone to facilitate availability from any location (including while traveling on business or on a family outing). Video conferencing is a common means to connect virtual teams from around the globe. With the advent of Skype, this technology is widely available to organizations and individuals. The instant messaging features of Skype and its competitors are often used to maintain mutual awareness and intermittent conversation between pairs of people and small groups. Twitter-like workplace microblogging systems like Yammer, along with Skype, add another form of continuous connectivity to the mix. Organizational members also regularly use SMS (short message service) to facilitate availability from any location, and instant messaging has been commonplace among work colleagues for some time (Mamberto, 2007). Finally, in some corporate cultures, email "fire drills" are commonplace as a means of decision-making (Ballard, 2007). A fire drill is used to hold meetings in lieu of face-to-face communication and is characterized by rapid-fire back-and-forth among a group. Being unavailable during such a drill often leads to negative perceptions by others.

Within a commuting genre, organizational members are extended across space but have the goal of connecting with others in real time. Thus, the synchronous nature of communication can be associated with a quality of togetherness as organizational members work "shoulder-to-shoulder" via video conferencing software as well as in using Google Drive, Evernote, or Dropbox. This distinction occurs in interaction work owed to its reliance upon complex communication and coordination.

The Coworking Interaction Genre

The greatest level of spatiotemporal availability is reflected in the *coworking* interaction genre, wherein individuals are co-located with colleagues and interacting synchronously with multiple others. In his original treatment of monochronic and polychronic time, Hall (1983) wrote about office configuration as one of the most visible signs of culture. In polychronic cultures where relationships are afforded priority over task completion, office spaces are huge open rooms where all are welcome to congregate and interact at once. Short of this polychronic ideal, the open door has long been another cultural symbol of availability in many Western organizations. However, in an environment characterized by virtual teams, virtual organizations, independent contractors, and telework, the open door of yore has been replaced by its technological equivalent.

As an example, mobile phoning to micro-coordinate (Ling, 2004) en route to a meeting while on the same corporate campus or in the same vicinity is a familiar occurrence (Geser, 2006). Texting is also being used as a tool to strategize, and subversively change coalition strategies, during face-to-face meetings with co-located colleagues (Stephens & Davis, 2009). Colleagues with adjoining cubicles are instant messaging each other as a means of collaborating among co-located colleagues at work (Schmitz Weiss, 2008). As well, during a SXSW (South by Southwest)

Interactive Festival panel held to discuss the latest innovations in Web 2.0, several co-located members of the audience began Tweeting on their smartphones about how the panel was boring and ineffective (Wallace, 2008). In real time, a moderator informed the panelists of the feedback and the direction of the panel was changed immediately.

The level of openness and connectivity achieved through the use of new communication technologies exceeds that of the open door (unless we plan to stay at the office twenty-four hours a day, seven days a week). The smartphone affords exceptional access to the coworking genre—from phoning, to texting, to emailing, to following received links, to sharing information through social networking sites. It offers an always-on, always-there capability not available in the past (Fortunati, 2002; Katz & Aakhus, 2002; Lee & Whitley, 2002) that extends from our professional into our personal lives (Ballard, 2007). As such, it symbolizes the new open door characterized by a space of flows and timeless time. Castells and colleagues note, "it is this time-based (rather than space-based) organization of activities that defines 'accessibility,' leading to a redefinition of 'public time' and 'private time' into 'on time' and 'off time'" (2007, p. 176). Not the shift from a space-based to a time-based metaphor. As Green (2002) describes, it enables a "boundary rearrangement" (p. 288).

From Coworking to Minding

Scholars have variously described the spatiotemporal enactments associated with the coworking genre as reflecting and enabling *perpetual contact* (Katz & Aakhus, 2002), *presence absence* (Fortunati, 2002) as well as *network time* (Hassan, 2007). Additionally, a prominent practitioner and researcher described the phenomenon of *continuous partial attention* (Stone, 2008) to describe our ability to be always on, but only half present, despite our physical location. These characterizations all point to various spatiotemporal aspects of interaction work. Fortunati (2002) sums them up well, where he describes both their communicative purpose and common form:

> The mobile, much more than the fixed phone, makes it possible to speak and do various actions at the same time as it being used: walking, driving, and so on. Doing more than one thing at a time allows you to live a double or triple life, even if this obviously raises your level of stress. The mind gets used to spreading attention in various directions. Certainly it is less brilliant attention, more opaque, but it enables people to cope with multiple actions.
> *(p. 517)*

This characterization of more opaque attention in the coworking genre reflects the research on the cognitive limitations associated with multitasking in contemporary media environments (Ophir, Nass, & Wagner, 2009). However,

Fortunati's (2002) description ignores literature on polychronic cultures whose members have always done more than one thing at a time—in both their professional and personal lives (Hall, 1983). So the spatiotemporal enactments are not new, but the psychological stress associated with multiple task accomplishment is a result of the speed that also characterizes it (Bluedorn, 2002).

Bluedorn (2002), König and Waller (2010), as well as Stephens, Cho, and Ballard (2012), have all tried to clarify that there are important distinctions between multiple task accomplishment in traditionally monochronic cultures (such as the U.S. and much of the Western world)—where time is seen as a scarce commodity to be hoarded and space is seen as private—compared to traditionally polychronic cultures—where time and space are used in more fluid, intangible ways. Hall (1983) explained these differences:

> *Monochronic* cultures are those in which the time base is an outgrowth of the industrial revolution. Monochronic cultures stress a high degree of scheduling, concentration on one thing at a time (hence the name), and an elaborate code of behavior built around promptness in meeting obligations and appointments. *Polychronic* cultures are just the opposite: human relationships and interactions are valued over arbitrary schedules and appointments. Many things may occur at once (since people are involved in everything), and interruptions are frequent.
>
> *(p. 184)*

Multiminding involves qualities of both the monochronic valuation of time in the form of punctuality and appointments but also of a polychronic approach toward relationships and interactions.

Thompson's (1967) classic description of preindustrial cultures also reflects a core aspect of multiminding: minimal "demarcation between 'work' and 'life'" (1967, p. 60) compared to the time (clock) orientation observed in industrial cultures. In the twenty-first century we again find that interaction work is less reliant upon the clock time that dominated the twentieth century. Below, we explore this genre repertoire in more detail—including on the issues of *attention* and leading *multiple lives* that Fortunati (2002) references. Rather than a simple return to preindustrial or an obliteration of the industrial, multiminding emerges in the course of postindustrial shapeshifting between synchronous versus asynchronous (in *continuous* time) and remote versus face-to-face contexts (in space *together*).

The Multiminding Genre Repertoire

Multiminding reflects a genre repertoire typical of the interaction worker engaged in protean shapeshifting within and among the various genres described previously. As Solomon Gray (2014) describes, it is a naturally occurring attention management strategy characterized by five key components: a) maintaining a

channel of attention on the activities and well-being of key dependents and interdependents; b) pursuing an outcome or state of being that is more expansive—including in terms of both shared histories and futures—than a discrete task; c) allocating individual and collective effort over time as needed; d) performing an agreed upon role in a dynamic narrative; and e) operating with a sense of sustained responsibility and intentionality. At its root, it is a relationship-based, multithreaded way of attending to personal and professional objectives, in time and over time.

Notably, it centers on a shift from tasking (focused on managing one's time) to minding (focused on managing one's attention). Recall two of our earlier observations about interaction work (McKinsey, 2012): 1) While industrial work centers on sequential individual contributions, interaction work centers on concurrent collective contributions. 2) Interaction work requires a shift from focusing on the time needed to complete a well-defined task to the collective and individual capabilities required to reliably achieve complex, interlocking outcomes. Thus, while industrial constructions of time and space remain, interaction work also occurs in the timeless time and space of flows that Castells (2000) describes as characteristic of network society. Solomon Gray (2014) points out that tasking is the predominant way to manage work in industrial time–space, while minding is a naturally acquired skill we practice from birth but is also now an emergent way of managing work in postindustrial time–space.

The term *multiminding* was originally flung into marketing discourse by the business unit of a leading PR firm (Skoloda, 2009) to dramatize why women (responsible for more than 80 percent of consumer spending across all categories) now needed to be advertised and marketed to differently. They boldly asserted that women aged twenty-five to fifty-four had moved beyond (or above) multi-tasking to "a new level" of busyness and time compression. However, what the founder and early funders of Mmindd Labs discovered at StudioLab in 2007, just as the iPhone was being introduced, was that these women were not simply exhibiting *time and task* management "on steroids" as it were. They were pursuing a different *attention* management strategy—one based on meeting multiple goals at the same time so as to care for and orchestrate not only their own lives, but the lives of those to whom they were most closely connected. This was a stark contrast to the short-term, goal-centered, conical single-point-of-focus attention mode conventionally attributed to the ancient "hunter" and still embodied in most time management tools and methods.

This genre repertoire employed by interaction workers relies upon the *commuting* genre to manage global commerce with virtual teams around the world, the *coworking* genre to appropriate speed and social presence, the *choosing* genre to achieve personal renewal away from work, and the *contemplating* genre to handle distractions while working. Each of these genres is necessary to create a sustainable working environment. Because of the constant attention management required in interaction work, minding occurs in *continuous* time and *together* in space (either

virtual or real). Thus it also reflects the Protean Places that Shockley–Zalabak (2002) describe as "simultaneously maintaining core values while supporting continually changing practices" (p. 238).

Conclusion

Our objective in this paper was to consider the importance of spatiotemporality with regard to communication processes, in general, and organizational communication processes, in particular. While the study of time and space are seen as vital to communication scholarship, we have often held limited conceptions of the ways that time and space function in organizational communication processes. As part of extending traditional notions of chronemics and proxemics scholarship, we elaborated Ballard and Seibold's (2003) construct of *separation* through a typology of communicative genres—coworking, commuting, contemplating, and choosing—and a broader genre repertoire—multiminding—employed by interaction workers. Ultimately, we hope to stimulate theorizing and research on the role of time and space in the twenty-first century, challenging accepted notions of spatiotemporality and communication in work.

Notes

1   In previous publications, this dimension was referred to as separation (as opposed to separating). This dimension was renamed, if slightly, to emphasize its processual nature.
2   The original definition of this dimension was "the degree to which extraneous factors are eliminated or engaged in the completion of a work task." This definition has been modified to reflect the fact that work increasingly is not defined by tasks and that "extraneous factors" are also becoming difficult, or impossible, to identify. Our intent is to modify the definition so that it offers a timeless representation of both enduring and contemporary chronemic patterns.
3   The very concept of interruption or distraction is culturally defined and has very different meanings in clock-based versus event-based cultures (Hall, 1983).

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