Navigating the clock and the corridor: how time and space influence unplanned conversations

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Abstract

Purpose – Despite their centrality to organizing – acknowledged by several theorists – unplanned conversations are often marginalized in organizational theory. To remedy this oversight, we recenter attention on this understudied aspect of organizing. We draw on the affordances perspective to elaborate on the spatial and temporal factors influencing unplanned conversations.

Design/methodology/approach – This conceptual paper integrates multidisciplinary literature on unplanned conversations to identify a range of spatiotemporal factors influencing unplanned conversations. Our approach emphasizes how various situational factors afford or hinder opportunities for unplanned conversations among organizational members.

Findings – Unplanned conversations were precisely defined as opportunistic or spontaneous conversations, characterized by the absence of pre-planning, that can be work or non-work-related. Then, the characteristics of unplanned conversations (emergent, episodic and brief, interrelated, convenient, and improvisational) were outlined, indicating their distinct organizing and structuring capabilities. The spatial (i.e. spatial proximity, visibility, legitimacy, and psychological safety) and temporal (i.e. work time pressure, work history, work expertise, and work routineness) factors identified in the study both afford and constrain individuals' unplanned conversations. The empirically testable propositions offered in the study have significant theoretical and practical implications.

Originality/value – This study enriches our understanding of unplanned conversations by offering a precise conceptual definition, outlining their essential characteristics, and underscoring their theoretical and practical significance in organizing. The study highlights the need for organizations to consider the spatiotemporal factors that influence unplanned conversations.

Keywords Unplanned conversations, Temporality, Spatiality, Informal communication Paper type Conceptual paper

Introduction

Among the multiple changes that COVID-19 brought to workspaces around the globe, the question of how to recover the missing interaction that remote work and social distancing removed from our day-to-day routines still remains. It is a puzzling dilemma because, in many ways, interaction continued unabated and even flourished. Organizations continued to meet. In fact, they met even more given the many affordances of videoconferencing platforms like Zoom (Moss, 2022). Teams continued to share information. The use of media platforms like Slack soared in the past several years (Moss, 2022). Members continued to email. Overload remains a costly challenge for individuals and organizations alike (Mark, 2023).

So we did not have less communication during the pandemic; we had more. What is more, all of these mediated forms of communication were efficient and inexpensive compared to owning or leasing office space. Yet, despite the financial incentives to continue with remote work, the once-empty office buildings are now slowly filling back up. While it is a contentious return to the office, it is happening (Gartner, 2020). This is because leaders ultimately found



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Received 19 June 2023 Revised 30 November 2023 3 May 2024 Accepted 7 May 2024 that all of the Zoom calls, Slack channels, and email cannot recreate the communication dynamics of a co-located workspace. Organizational members across industries are struggling to recover one crucial aspect of communication: the unplanned conversation.

Unplanned conversations often occur when individuals happen to see each other in colocated workspaces (Kraut *et al.*, 1990). These conversations occur near watercoolers, photocopiers, or restrooms, in elevators, or at the beginnings and endings of meetings. Through unplanned conversations, individuals develop relationships, form collectives, and turn solitary actions into collaborative efforts (Sobering, 2019). These conversations are critical for sharing information, monitoring projects, and providing real-time feedback (Pentland, 2012). Moreover, unplanned conversations influence employee well-being and organizational outcomes such as job satisfaction, engagement, collaboration, and productivity (Blanchard, 2021; Mandhana, 2023). Conversely, a lack of engagement in unplanned conversations can lead to heightened levels of burnout, exhaustion, and isolation (Blanchard, 2021; Hall, 2021).

Nonetheless, despite their vital role in organizing and influence on key organizational outcomes, unplanned conversations are often overlooked in organizational theory (Kraut *et al.*, 1990). Several studies focus only on conversations during formal work-related activities (Oittinen, 2018). Teamwork models privilege formal, planned interactions among members to improve collaboration (Ellingson, 2003). This predominant focus in the management and communication literature on highly visible, planned conversations has led to a substantial lack of theorizing on unplanned conversations and their antecedents.

Notably, much of the prior work focuses on manipulating workplace layouts to foster unplanned conversations (Allen, 2007; Waber *et al.*, 2014). However, the effects of workplace designs on unplanned conversations remain inconclusive, with studies yielding both positive (Hua *et al.*, 2010) and negative effects (Bernstein and Waber, 2019). These mixed results suggest that the influence of workspaces on unplanned conversations may be affected by other temporal factors – as space and time are inherently interconnected (Ballard *et al.*, 2017). Additionally, organizational communication, whether planned or unplanned, occurs within fundamental and perceptible temporal constraints (Ballard, 2002). Thus, it is essential that theorizing on unplanned conversations extends beyond mere workplace designs and incorporates temporal factors that can facilitate unplanned conversations.

As a first step in this direction, we trace the multidisciplinary literature on unplanned conversations and elaborate on the influences of spatial factors (i.e. proximity, visibility, legitimacy, and psychological safety) and temporal factors (i.e. work time pressure, work history, work expertise, and work routineness) on the frequency of unplanned conversations. To provide a foundation for future research on unplanned conversations, we begin below by clearly defining them and elaborating on their key characteristics. Then, we review research approaches to measuring unplanned conversations' frequency, duration, and perceived value. Next, drawing on the affordances perspective, we synthesize existing research to identify the spatial and temporal factors that influence unplanned conversations. Throughout, the discussion is supplemented with testable propositions to guide future research on unplanned conversations. The paper concludes with a discussion of the key theoretical and practical implications.

Defining unplanned conversations and tracing their multidisciplinary lineage

Based on the degree of spontaneity and pre-planning, Kraut *et al.* (1990) categorized workplace interactions into four types, including conversations that were (1) previously scheduled or arranged (scheduled); (2) sought explicitly by one participant (intended); (3) anticipated by one person but occurred only by chance (opportunistic); and (4) unanticipated by either participant (spontaneous). Owing to the lack of pre-planning, the last two types of

conversations (i.e. opportunistic and spontaneous) collectively represent *unplanned conversations* among organizational members.

Crucially, intended conversations explicitly sought by one participant are not considered unplanned because they require a degree of pre-planning on the seeker's part. In contrast, opportunistic and spontaneous conversations are essentially unplanned. Opportunistic conversations, though anticipated by one participant, lack pre-planning and only occur due to chance encounters between participants (Kraut *et al.*, 1990). These conversations would not have occurred had the participants not encountered each other serendipitously. Spontaneous conversations unfold without pre-planning and anticipation, arising solely due to the copresence of participants. Therefore, opportunistic and spontaneous conversations, characterized by the absence of pre-planning, collectively represent unplanned conversations.

While Kraut *et al.* (1990) label opportunistic and spontaneous conversations as informal communication, the discrepant definitions and interpretations of the formal/informal dichotomy render this term imprecise when referring to unplanned conversations. Broadly defined, formal communication is pre-specified, unidirectional, and relatively impoverished, whereas informal communication is spontaneous, interactive, and rich (Carr and Zube, 2015). Despite these broad distinctions, scholars in communication, management, and organization theory have interpreted the terms "formal" and "informal" in different ways (see Stohl and Redding, 1987).

For example, in communication, Johnson *et al.* (1994) define formal interactions based on the relationships represented in the organizational hierarchy, specialized tasks and roles, and formal coordination mechanisms. In contrast, informal interactions are categorized based on the communication relationships arising from various human factors beyond individuals' job positions or roles (Schein, 1965). In management research, Kraut *et al.* (1990) differentiate between formal and informal interactions based on the "degree of pre-specification, conventionality, and rule-boundedness" (p. 4). Finally, Hage *et al.* (1971) describe scheduled (routinized, planned communications) and unscheduled (informal, impromptu conferences) meetings, albeit limiting the definition to task-based communication.

While unplanned conversations fit many of the characteristics of informal communication because they include both work-related and non-work-related communication, they do not fall neatly into either the formal or informal category. So, to circumvent restrictive labels and accurately reflect prior research, the study uses the term *unplanned conversations* to define the chance encounters – characterized by a lack of pre-planning – that occur among employees amidst everyday work. Specifically, the unplanned conversations that are the focus of this study include opportunistic or spontaneous conversations and can be work-related or non-work-related. Key characteristics of unplanned conversations – that they are *emergent, episodic and brief, interrelated, convenient*, and *improvisational* – are elaborated below.

Characteristics of unplanned conversations

Due to the absence of pre-planning and pre-specified agenda, unplanned conversations are inherently *emergent* and situated in the current context (Kraut *et al.*, 1990). Information is exchanged interactively, and courses of action are modified in the moment based on the context (Fish *et al.*, 1992). Moreover, unplanned conversations modify and are modified by the ongoing interests and understandings of the participants. They provide real-time feedback contingent upon the changing dynamics of the situation and help clarify ambiguities to enhance understanding promptly (Kraut *et al.*, 1990; Waring and Bishop, 2010).

Notably, unplanned conversations are *episodic and brief*, often lacking formal openings and closings (Whittaker *et al.*, 1994). They consist of one long intermittent conversation made up of multiple unplanned fragments that are mostly continuations of prior conversations (Kraut *et al.*, 1990). These intermittent conversations are short and brief (Gutwin *et al.*, 2007) and usually last for seconds rather than minutes or hours (Whittaker *et al.*, 1994).

Unplanned conversations are *interrelated*, and their value in organizing work and tasks becomes apparent only when considered collectively. Each unplanned conversation, when viewed in isolation, is expendable (Fish *et al.*, 1992). Furthermore, any single unplanned conversation is largely inconsequential, with no discernible impact on organizational structuring. However, when these conversations accumulate over time, they constitute organizations, building on one interaction to another (Boden, 1994).

Convenience is a key characteristic of unplanned conversations. Given that any single unplanned conversation is expendable, individuals typically do not seek such conversations or willingly incur high costs to engage in these conversations (Allen, 1977; Fayard and Weeks, 2007; Fish *et al.*, 1992; Kraut *et al.*, 1990). Instead, individuals tend to engage in these conversations when an opportunity presents itself, such as when they run into suitable partners and have clear channels to initiate conversations.

Finally, unplanned conversations are *improvisational*. Although unplanned conversations are commonplace and deeply intertwined with individuals' day-to-day work, categorizing any specific unplanned conversation as "routinized" is challenging. Pentland and Feldman (2005) note that routine practices occur against the backdrop of organizational structures, but individual performances within these practices are always novel. Likewise, in each unplanned interaction, individuals must remain attentive and continuously adapt their responses based on the emergent context and the nature of the conversation.

Approaches to measuring unplanned conversations

Unplanned conversations have been a topic of research for scholars from a variety of fields, including management, human-computer interaction, health, architecture, engineering, construction, and design (e.g. Allen, 2007; Brown *et al.*, 2014; Coradi *et al.*, 2015; Fayard and Weeks, 2007; Mashhadi *et al.*, 2016; Pentland, 2012; Sailer *et al.*, 2016). Given the guiding conceptual and theoretical work that focuses on the emergent, episodic and brief, interrelated, convenient, and improvisational properties of unplanned conversations, most researchers have focused on measuring their frequency, with some also assessing the length and perceived value of these conversations (e.g. Arora *et al.*, 2011; Koch and Denner, 2022; Kraut *et al.*, 1990; Whittaker *et al.*, 1994). The following paragraphs document how prior studies have measured unplanned conversations in terms of their frequency, length, and perceived value.

Frequency of unplanned conversations

The episodic, brief, and interrelated qualities of unplanned conversations point to the need to study their frequency over time as a key measure of impact. Accordingly, studies on unplanned conversations conducted before 2010 utilized direct observations, spot sampling, retrospective surveys, or audio and video recordings to measure the frequency of unplanned conversations. For instance, in studies conducted in the 1990s (e.g. O'Conaill and Frohlich, 1995; Whittaker *et al.*, 1994), audio and video recordings were used to track and measure the frequency of unplanned conversations. Kraut *et al.* (1990) employed a spot-sampling method in which researchers identified unplanned conversations among participants. These participants were then asked to complete a brief questionnaire on the spot. Fayard and Weeks (2007) used a triangulated data collection method to record the frequency of unplanned conversations that included video recordings, observations, and interviews. In each of these studies, the frequency of unplanned conversations was measured by coding for spontaneous, unscheduled, and synchronously occurring interactions.

More recently, automated sensing systems have been deployed to record the frequency of unplanned conversations. These systems utilize proximity as a proxy for unplanned, face-to-face interactions. Predominantly, Radio-frequency Identification (RFID) badges (e.g. Brown *et al.*, 2014; Pentland, 2012) and Bluetooth Low-energy (BLE) devices (e.g. Mandhana, 2023; Mashhadi *et al.*, 2016) have been used to track co-location between individuals, and by proxy, measure the frequency of unplanned conversations. Both RFID tags and BLE devices check for the received signal strength indicator (RSSI) threshold values to identify co-location. Once other users' RFID tag or beacon (BLE device) is in the threshold range (usually set to 2–3 meters) of a user's badge or beacon for some time (e.g. 30 s to 5 min), the corresponding mobile application or cloud computing system stores the timestamped contacts of pairs of people (Brown *et al.*, 2014; Mandhana, 2023).

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Length of unplanned conversations

The length of unplanned conversations has been measured using video recordings to identify the initiation and closing times of unplanned conversations (Whittaker *et al.*, 1994), survey data to get estimates of the duration of unplanned conversations among individuals (Kraut *et al.*, 1990), and semi-structured interviews and observational data to record the number of words per conversational turn in unplanned conversations (El-Tayeh and Gill, 2007).

Researchers have also used RFID tags or BLE devices to measure the duration of unplanned conversations. These devices record the timestamps of entering and exiting the range of users' badges or beacons. The difference between the exit and enter timestamps provides an estimate of the length of unplanned conversations (Brown *et al.*, 2014; Mashhadi *et al.*, 2016).

Perceived value of unplanned conversations

The perceived value of unplanned conversations has also been assessed by examining the specific functions they accomplish. For instance, Kraut *et al.* (1990) adapted McGrath's (1989) group functions model and evaluated the perceived value of unplanned conversations in terms of their group work's production and social functions. These production and social functions were measured using 5-point Likert-type scales. Sample items on the production and social functions included "How useful was this conversation in getting your work done?" and "How enjoyable was this conversation?" respectively.

Similarly, Koch and Denner (2022) identified five functions associated with informal conversations – information, organization, integration, entertainment, and venting. Participants then rated the effectiveness of these conversations in fulfilling these functions using a five-point Likert scale. Other researchers, such as Johnson *et al.* (1994), have evaluated the utility of spontaneous, unplanned conversations. However, unlike Kraut *et al.* (1990), these studies exclusively focused on the value of non-work-related unplanned conversations, excluding work-related unplanned conversations from the analysis.

Having described the characteristics of unplanned conversations and surveyed existing research approaches for measuring unplanned conversations, we now turn our attention to underscoring the crucial role played by spatiotemporal organizational contexts in shaping these conversations. Much of the prior research has focused on organizational spaces as the primary factor influencing unplanned conversations, overlooking the effects of organizational temporal contexts. However, organizational communication, whether planned or unplanned, occurs within fundamental and perceptible temporal constraints (Ballard, 2002). Below, we discuss the ways in which space and time may facilitate or constrain the emergence of unplanned conversations.

Spatiotemporal influences on unplanned conversations

Due to the absence of a pre-specified agenda, unplanned conversations are embedded in the current context (Kraut *et al.*, 1990). These spatiotemporally situated contexts play a pivotal

role in facilitating or constraining individuals' unplanned conversations. For instance, in certain scenarios, organizational spatiotemporal contexts (e.g. visibility, slack times) may afford opportunities for unplanned conversations. Conversely, in other cases, these contexts (e.g. closed doors, time pressure) may hinder unplanned conversations. Therefore, the occurrence of unplanned conversations among individuals is shaped by organizational spaces and times.

Before discussing the spatiotemporal determinants of unplanned conversations, it is imperative to define the scope of the current research and literature. First, our theoretical arguments are anchored in the affordances perspective (Gibson, 1986), emphasizing the potential for individuals' actions within specific spatiotemporal contexts. However, it also acknowledges that these possibilities are not solely determined by the material or social aspects of the situated contexts (Fayard and Weeks, 2007). Consequently, the propositions formulated here offer a useful heuristic framework that focuses on the dynamic interplay between individuals' unplanned conversations and the spatiotemporal organizational contexts.

Second, the testable propositions developed here focus on the association between the spatiotemporal organizational contexts and the *frequency* of unplanned conversations. While examining the length and quality of unplanned conversations holds value, our primary focus on frequency is grounded in the strong association between the frequency of unplanned conversations – regardless of their length and quality – and performance (e.g. Kraut *et al.*, 1990; Pentland, 2012; Waber *et al.*, 2014). Moreover, given the interrelated nature of unplanned conversations, individuals' frequencies of these conversations both shape and are shaped by the nature of future unplanned conversations.

Last, the propositions offered here are limited to face-to-face unplanned conversations, characterized by the absence of pre-planning and occurring due to the co-presence of employees (Fayard and Weeks, 2007). By this definition, most technology-mediated communication (e.g. videoconferencing tools and organizational social media platforms), which requires some degree of planning and intentionality – especially on the seeker's part (Mandhana, 2023) – is considered planned rather than unplanned communication and therefore not included in this research [1].

Organizational spaces and unplanned conversations

Organizational literature is replete with studies of organizational spaces, examining their objective and subjective features (e.g. Hua *et al.*, 2010; Ropo and Hoykinpuro, 2017; Zerella *et al.*, 2017). In the context of unplanned conversations, these studies have mainly focused on objective dimensions of workplace designs as the primary determinant of such interactions (Allen, 2007; Stryker and Santoro, 2012; Waber *et al.*, 2014). These studies center around manipulating the physical layout of workspaces, such as open-plan and closed-plan layouts, and evaluating their impact on unplanned conversations (Hua *et al.*, 2010). However, the impact of physical workplace designs on unplanned conversations must be considered in conjunction with subjective assessments of those spaces (Zalesny and Farace, 1987; Zerella *et al.*, 2017). Indeed, organizational spaces are perceived in the context of social and cultural norms, influencing individuals' behaviors within these spaces (Hillier, 1996). As Fayard and Weeks (2007) note, spaces like "watercoolers" and "photo-copy" rooms may serve as hubs for unplanned conversational culture and norms.

Yet, neither physical nor subjective dimensions of spaces determine individuals' unplanned conversations, as individuals possess the capacity to either eschew or engage in interactions, even when physical or social norms suggest otherwise (Bernstein and Waber, 2019; Fayard and Weeks, 2007). Therefore, our focus is on the perceived affordances – physical and social – of organizational spaces that shape the possibilities for unplanned conversations. Subscribing to the affordances perspective, we also acknowledge that these conversations may result from participants' agentic actions (Gibson, 1986). Regarding physical dimensions, we consider the proximity and visibility afforded by workspaces. The social dimensions are explored in relation to the legitimacy and psychological safety afforded by organizational spaces.

Physical affordances of organizational spaces. Spatial proximity. Spatial proximity, referring to the physical distance between individuals and commonly measured in units such as meters (Zerella *et al.*, 2017), has been a subject of study since the pioneering work of Allen (1977). Subsequent research (e.g. Fayard and Weeks, 2007; Kraut *et al.*, 1990) has consistently demonstrated a positive correlation between the frequency of communication and the physical proximity between individuals. Physical proximity affords individuals convenience – which is the primary determinant of engagement in unplanned interactions. Given the expendable nature of unplanned conversations, individuals do not intuitively seek such conversations but engage in them opportunistically. The physical proximity of individuals facilitates unplanned conversations, making it more convenient for individuals to engage with each other. This is reflected in our first proposition.

P1. The frequency of unplanned conversations will be positively associated with the spatial proximity of organizational spaces.

Spatial visibility. Organizational spaces that afford visibility effortlessly connect individuals across different areas without requiring much movement, such as leaving their workstations or standing up (Coradi *et al.*, 2015; Zerella *et al.*, 2017). These prominently visible spaces often leverage themselves as hubs for unplanned conversations (Fayard and Weeks, 2007; Stryker and Santoro, 2012). Occupants of these highly visible spaces are more likely to be seen by their peers, which can serve as visual cues that trigger work- or non-work-related ideas or questions (Fayard and Weeks, 2007). So, the visibility of workspaces may afford more opportunities for spontaneous, unplanned conversations among organizational members.

P2. The frequency of unplanned conversations will be positively associated with the spatial visibility of organizational spaces.

Social affordances of organizational spaces. Spatial legitimacy. The spatial legitimacy of a given space encompasses the social norms dictating acceptable, permissible, or required behaviors within that space (Fayard and Weeks, 2007). This legitimacy varies, shaping perceptions of appropriate social behaviors. Certain spaces, like the photocopy or watercooler room, afford legitimacy for informal, spontaneous encounters, whereas areas near workstations or hallways in open-plan offices may discourage non-work-related discussions (Rashid *et al.*, 2009). Additionally, the legitimacy of an organizational space extends through its material objects. Consider the office kitchen, for example, where individuals using the microwave engage in an activity that justifiably requires waiting and demands minimal mental effort. Those present or passing by the kitchen may recruit these individuals for interactions, recognizing their apparent availability. This discussion implies that spatial legitimacy can influence the occurrence of unplanned conversations in a given space.

P3. The frequency of unplanned conversations will be associated with the spatial legitimacy of organizational spaces.

Psychological safety. The actions of individuals within organizational spaces are influenced by the ambiance and emotional climate of these spaces (Martin, 2002). This emotional climate encapsulates the social relations, norms, and unspoken understanding among individuals occupying these spaces. It is this emotional climate that crucially shapes the collective behaviors of individuals within those spaces (Martin, 2002).

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A relevant and measurable construct reflecting the emotional climate of organizational spaces is *psychological safety*. Psychological safety is the shared belief among members that behaviors like risk-taking, expressing ideas or concerns, asking questions, or admitting mistakes are appropriate and carry no negative consequences (Edmondson, 1999). Individuals in psychologically safe spaces experience an environment marked by high interpersonal trust and respect, fostering learning and opportunities for interpersonal risk-taking (Lee *et al.*, 2011). Those perceiving their workspaces as psychologically safe feel at ease providing suggestions, sharing concerns, or posing questions. In essence, psychologically safe spaces afford individuals more opportunities to communicate with each other.

In psychologically unsafe spaces that lack interpersonal trust and mutual respect, individuals may hesitate to share ideas, raise concerns, find errors, or give suggestions (Choo *et al.*, 2007; Edmondson, 1999). For example, individuals working under an authoritative supervisor may experience the workspace as less safe. This absence of psychological safety in workspaces can prompt individuals to refrain from admitting mistakes or sharing incomplete information, subsequently reducing information and knowledge sharing (Choo *et al.*, 2007).

P4. The frequency of unplanned conversations will be positively associated with the psychological safety of organizational spaces.

Temporal influences on unplanned conversations

Time and temporality also act as affordances for unplanned conversations. For example, in their study of chronemic urgency, Kalman *et al.* (2021) explore the temporal affordances of message impermanence and asynchronicity, as well as mobility, in shaping message response times. In their conceptualization of affordances, Treem and Leonardi's (2013) identification of persistence points to a contrasting temporal feature – i.e. permanence – that serves as an affordance. Notably, they discuss how the ability to sustain knowledge over time, create robust forms of communication, and grow content all bolster persistence. Related to these perspectives, we highlight a range of temporal influences on unplanned conversations.

Work time pressure. Due to rapidly changing technologies, client needs, and competition, individuals face several temporal challenges in the form of tight deadlines, coordination of tasks across disciplines, and shifting task goals (Mohammed and Nadkarni, 2011). Members working on time-sensitive tasks are required to carefully manage their temporal resources and consider their impact on other team members (Ballard and McVey, 2014). The frequency of unplanned conversations is one aspect of group functioning affected by time pressure.

In particular, time pressure affords limited opportunities for unplanned conversations. When individuals sense time constraints, they tend to prioritize efficiency – often manifested in working within enclosed office spaces or abstaining from online social media activities (Bailey and Konstan, 2006; O'Conaill and Frohlich, 1995). Elevated time pressure prompts individuals to focus on performance, reducing exploratory behaviors such as discussing alternatives to a proposed solution or novel procedures (Knight, 2015).

Conversely, when individuals are not pressed for time, they can engage in exploratory behaviors characterized by experimentation, innovation, and risk-taking (Parmigiani and Rivera-Santos, 2011). These exploratory behaviors often entail developing creative solutions and spending more time interacting and sharing ideas and solutions with other members (Foss *et al.*, 2016). Additionally, without the pressure of impending deadlines, individuals may work with open doors, not rush through hallways, and be more available for unplanned conversations.

P5. The frequency of unplanned conversations will be negatively associated with organizational members' work time pressure.

Work history. Another temporal factor that shapes the affordances for unplanned conversations is work history. Members with lengthier work histories with each other have more opportunities for interaction, resulting in a heightened awareness of each other's expertise (Ren and Argote, 2011). Drawing on their work histories, these members share more common ground, efficiently collaborate in problem-solving activities, and establish effective information-sharing protocols (Sutton and Hargadon, 1996; Walker and Stohl, 2012). Accordingly, individuals working together over time tend to cultivate a shared understanding, providing a broader array of conversational topics that may lead to more unplanned conversations.

In contrast, those with limited work histories face challenges in sharing information and participating in problem-solving discussions, which stem from a lack of opportunities to familiarize members with each other's task expertise (Sutton and Hargadon, 1996). As organizational members spend more time working together, they develop a collective rhythm, engage in substantive debates, exchange information, and learn to synthesize solutions (Mandhana, 2022). Recognizing the affordances leveraged by team history for the development of a shared understanding, awareness of members' skills and expertise, and the acquisition of collaborative problem-solving skills, we propose:

P6. The frequency of unplanned conversations will be positively influenced by organizational members' work history.

Work expertise. While work history affords efficient communication among members, work expertise is a form of task history and, as such, affords efficiency in operations. Individuals with extensive task histories develop a nuanced understanding of organizational products and processes, making them adept at task completion and information dissemination (Lee *et al.*, 2011; Seibold *et al.*, 2014). Given their technical expertise, these individuals become go-to sources for clarifications, decisions, and solutions (Waring and Bishop, 2010). Additionally, team members obtain domain-specific information from those with task histories and expertise to enhance task execution (Wegner, 1987). Recognized domain experts are often approached by multiple members who initiate discussions or pose questions (Palazzolo, 2005). Essentially, members regularly turn to individuals perceived as experts to obtain work-related information.

Skilled workers with diverse experiences and knowledge often work on tasks requiring high levels of interdependency due to the changing work processes or conditions (Van de Ven *et al.*, 1976). To navigate these dynamic tasks, expert team members coordinate with various stakeholders, engage in critical discussions with teammates, and collectively make informed decisions (Lee *et al.*, 2011; Waring and Bishop, 2010). Thus, as members with higher work expertise are regularly sought for information, advice, or opinions and are frequently involved in highly interdependent tasks demanding extensive coordination and discussions, we propose:

P7. The frequency of unplanned conversations will be positively influenced by organizational members' work expertise.

Work routineness. In her typology of activity cycles, Ballard (2009) emphasizes the influence of work routineness on the temporal dynamics of everyday organizational communication. For instance, several routine organizational tasks exhibit low variability and uncertainty, allowing members to independently execute them with minimal collaboration (Daft and Lengel, 1986). During these tasks, organizational members rely on shared interpretive schemas, possess a clear understanding of requirements, and anticipate the responses of other members. Given this clarity in roles and actions, individuals aren't compelled to engage in richer, face-to-face conversations to perform routine work (Foss *et al.*, 2016). Thus, routine work may not stimulate frequent unplanned conversations among individuals.

Conversely, every so often, the work undertaken by organizational members is nonroutine and marked by high levels of uncertainty (Van de Ven *et al.*, 1976). Members performing non-routine tasks often experience uncertainties related to aspects such as understanding the tasks, identifying essential resources, and predicting and interpreting the actions of their peers (Tang *et al.*, 2015). In such situations, mere information transmission is insufficient and requires additional face-to-face discussions (Foss *et al.*, 2016). Therefore, to successfully complete non-routine work, individuals may be required to engage in more unplanned conversations.

P8. The frequency of unplanned conversations will be positively influenced by organizational members' work routineness.

Discussion

Despite their organizing capabilities, unplanned conversations are often marginalized in organizational theory (Kraut *et al.*, 1990). Several studies focus only on conversations during formal work-related activities, presuming that most organizing occurs through planned interactions (Oshima and Asmu β , 2018). Consequently, there has been a notable absence of theorizing on unplanned conversations, with researchers mainly focusing on workspaces as their primary determinant while neglecting the impact of organizational temporal contexts. Accordingly, the main objective of this paper was to develop a more thorough framework that includes both spatial and temporal factors influencing unplanned conversations.

Drawing on the affordances perspective, the study proposed a comprehensive spatiotemporal approach that integrates the effects of both physical (i.e. spatial proximity and visibility) and social (i.e. spatial legitimacy and psychological safety) affordances of organizational spaces on unplanned conversations. Additionally, it considers the influence of temporal affordances (i.e. work time pressure, work history, work expertise, and work routineness) on the frequency of unplanned conversations. Throughout, we offer empirically testable propositions that have significant theoretical and practical implications.

Theoretical implications

The theoretical implications of this study are threefold. First, the proposed spatiotemporal antecedents of unplanned conversations advance current theorizing on the factors shaping such conversations. While previous research has mainly focused on workplace designs and layouts as antecedents (e.g. Allen, 2007; Waber *et al.*, 2014), our study emphasizes the importance of both physical and social dimensions of workspaces in influencing unplanned conversations. Furthermore, it identifies various temporal factors as contributors to the frequency of unplanned conversations. This theoretical expansion gains particular significance in the context of complex, post-pandemic work structures, where facilitating unplanned conversations may necessitate a more nuanced approach than merely modifying physical workspaces.

By grounding our theoretical propositions in the affordances perspective, we illuminate the possibilities and potential behaviors afforded by individuals' spatiotemporal contexts. Yet, we also acknowledge that these possibilities and behaviors are not fully determined by these contexts (Treem and Leonardi, 2013). The propositions offered here provide a useful heuristic framework for understanding the spatiotemporal influences on unplanned conversations while recognizing that engagement in these conversations may vary based on the agency of actors. Therefore, this framework provides a foundation for future research, offering the potential to not only explore how spatiotemporal contexts influence unplanned conversations but also identify other factors that may shape individuals' actions within these contexts. Second, the study clearly defines and describes the characteristics of unplanned conversations, tracing their multidisciplinary roots to establish clarity and consistency in the terminology used. We move beyond the restrictive formal/informal dichotomy and define unplanned conversations as opportunistic or spontaneous interactions, characterized by the absence of pre-planning, that can be work-related or non-work-related. Moreover, by outlining the characteristics of unplanned conversations – *emergent, episodic and brief, interrelated, convenient,* and *improvisational* – we provide the theoretical foundation required to advance research on unplanned conversations. Specifically, we illustrate the organizing capabilities of unplanned conversations through their emergent, episodic, and interrelated characteristics. We also describe their improvisational nature that zooms in on individuals' situated actions, emphasizing the interplay between unplanned conversations and spatiotemporal contexts.

Finally, this study challenges the prevailing assumption that most organizing occurs during planned interactions. By highlighting the role of unplanned conversations in relationship formation, knowledge sharing, and collaboration, the study provides a counterargument against the marginalization of unplanned conversations within organizational theory. This shift urges researchers to consider the multifaceted nature of organizing, wherein both planned and unplanned conversations contribute to the overall functioning and structuring of organizations. Recognizing the organizing potential inherent in unplanned conversations broadens our understanding of how organizations operate, opening new avenues for organizational inquiry.

Practical implications

This study offers practical insights for organizations by emphasizing the spatial factors influencing unplanned conversations. By considering the social and physical affordances of workspaces, organizations can strategically implement targeted interventions that promote unplanned conversations among key team members. For example, managers may identify individuals involved in interdependent tasks and proactively create interaction opportunities by adjusting spatial proximity. These physical modifications, however, may produce desired effects on unplanned conversations when supplemented with corresponding social changes, such as establishing social norms that promote psychological safety and communication norms that legitimize work areas for informal conversations. Subsequently, these efforts may lead to improved information and knowledge sharing among organizational members.

Organizations may also support unplanned conversations by considering the temporal factors influencing such conversations. For instance, team leaders may strategically decrease work time pressure by optimizing reporting procedures, allowing members to spend more time on tasks and collaboration. Simultaneously, disseminating information about members' work expertise may allow individuals to identify domain experts. This, in turn, may result in increased communication with domain experts, particularly when individuals are engaged in non-routine tasks that require consultations and discussions. Managers may also support newer members by creating planned interaction opportunities like team lunches to help them develop relationships and shared rhythms with their team members. This shared understanding may afford more opportunities for unplanned conversations among newer and older team members.

Opportunities for future research and theorizing on unplanned conversations

While empirically testing the propositions offered in the study presents promising avenues for future research, a crucial direction for further theorizing involves developing an understanding of the interaction effects of spatial and temporal factors on unplanned conversations. In the spirit of parsimonious theorizing, we attended to the effects of space and time on unplanned conversations separately in this study. However, space and time are

experienced simultaneously and can have an interactional effect on unplanned conversations. For instance, even in highly visible and proximate workspaces, employees experiencing time pressure may engage in fewer unplanned conversations. Conversely, during slack periods, individuals may engage in more unplanned conversations in spaces with limited visibility and proximity. Therefore, analyzing the interactional effects of space and time may offer valuable insights.

The study's propositions focus on the frequency of unplanned conversations. However, future research may consider the effects of spatiotemporal factors on the type (e.g. work-vs non-work-related), length, and perceived value of unplanned conversations. While spatial proximity and visibility may increase frequency, they may afford less privacy, potentially resulting in shorter, work-related unplanned conversations. In contrast, workspaces that afford privacy and limited visibility may hinder frequency but facilitate longer, satisfying unplanned conversations. Thus, studying the effects of spatiotemporal factors on the type, length, and perceived value of unplanned conversations could also be a fruitful future research endeavor.

Conclusion

This study enriches our understanding of unplanned conversations by offering a precise conceptual definition and outlining their essential characteristics. The study emphasizes that facilitating unplanned conversations among employees requires more than merely altering workplace layouts. Drawing on the affordances perspective and synthesizing existing research, the study identifies spatial and temporal factors influencing unplanned conversations in organizing processes and highlight the need for organizations to recognize and leverage their potential. By considering the spatiotemporal factors outlined in the study, organizations can actively facilitate unplanned conversations, promoting relationship-building, information sharing, and collaboration among employees.

Note

1. The mixed reality architecture (MRA) system, supporting constant audio-visual connections between office occupants in different locations, supports unplanned conversations among remote and co-located employees. Nevertheless, these systems do not support unplanned conversations among individuals who haven't been formally introduced (Sailer *et al.*, 2016).

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