Organization Science

Vol. 26, No. 6, November–December 2015, pp. 1574–1592 ISSN 1047-7039 (print) | ISSN 1526-5455 (online)



Newsmaking and Sensemaking: Navigating Temporal Transitions Between Planned and Unexpected Events

Gerardo Patriotta

Nottingham University Business School, Jubilee Campus, Nottingham NG8 1BB, United Kingdom, gerardo.patriotta@nottingham.ac.uk

Daniel A. Gruber

Medill School of Journalism, Media, Integrated Marketing Communications, Northwestern University, Evanston, Illinois 60208, d-gruber@northwestern.edu

Navigating transitions between planned and unexpected events is a familiar challenge for organizations, and yet little is known about the sensemaking processes by which organizational members coordinate action to fit unexpected events within temporally defined plans and schedules. Drawing on an ethnographic study conducted at a local U.S. television station (codenamed "Local TV"), we elaborate on how workers in the news department plan their stories on a daily basis and adjust their plans when new stories break. We find that newsmaking is shaped by expectancy frameworks, which define the baseline of what is expected to occur during the news day, and typifications, which allow newsworkers to categorize incoming events based on relevance and update expectancy frameworks accordingly. Taken together, these provide newsworkers with sensemaking resources for responding regularly to unexpected events. Our study contributes to the understanding of sensemaking processes in three main areas: the effect of time-based dynamics on the control and coordination of work, the interaction of routine and mindful processes in response to unexpected events, and the structural influences of expectations and typifications on sensemaking.

Keywords: sensemaking; news; time; unexpected; expectations; typifications

History: Published online in Articles in Advance October 6, 2015.

At 9 a.m., producers and reporters sit down in the news conference room at Local TV for a routine morning meeting to select and prioritize the stories that will be covered during the day. Several news meetings take place at Local TV [a local U.S. television station] throughout the day, but the morning meeting is the most important, as it establishes the plan for the news day, including the order of the stories to be used across the scheduled newscasts. When the stories have been decided on, the meeting concludes, and everybody knows his or her working plan for the day. The likelihood, however, is that the plan will change numerous times; in fact, the producers and editors at Local TV agree that approximately 10% of these plans will materialize as predicted in the morning meeting. The implication is that while newsrooms have scheduled programs to be aired, news workers deal largely with unexpected events or events that require existing plans to be modified. One producer explained what happens when she walks out of the morning news planning meeting and moves to her desk with a list of stories that will be aired on her show: "It is our plan of action, but it will look totally different by the time it airs. You need to be able to adapt both to the timing of the stories and to the breaking elements [breaking news]. We lay things out and then fill them in during the day.'

This vignette, which we have extracted from our fieldwork at a news organization, illustrates how news workers make sense of transitions between planned and unexpected events by situating those transitions within a temporal framework. There are two critical elements in the temporal organization of the newsroom. The first is the fixed timing of events imposed by the broadcast schedules: regardless of anything else that is happening, the newsroom is organized to produce and broadcast a predictable flow of news on deadline (Lowrey 2008). The second element is related to the likely emergence of breaking news stories and the dynamics of fitting those stories into news programs at the scheduled times. By arranging planned news stories temporally, the news workers at Local TV are putting in place an underlying structure (they are "laying things out") that will eventually help them update their plans to accommodate breaking news (they will "fill them in"). In this way, the predictable flow of events defined by the morning planning meeting is used as a point of reference for understanding, anticipating, and attempting to control other sets of unexpected events (Clark 1985).

The emergence of breaking news and its integration into broadcasts draws attention to an important question in organizational research: how do organizations make sense of and navigate temporal transitions between planned and unexpected events? The dynamics observed at Local TV suggest that sensemaking in the newsroom is guided by a set of expectations that are temporally embedded and provide a reference structure for



responding to novel situations. The two temporal elements detected in the newsroom have been characterized in the organizational literature as clock time—time as objectified and commoditized in schedules, deadlines, plans, and routines—and event time, which is time as experienced in event-based or cyclical work processes (e.g., Ancona et al. 2001, Bluedorn and Denhardt 1988, Butler 1995). Surprisingly, sensemaking research has somewhat neglected the importance of temporal structuring in processes of attribution of meaning (see Maitlis and Christianson 2014, Kaplan and Orlikowski 2013, Wiebe 2010). For example, studies of crisis sensemaking and high reliability organizations broadly emphasize urgency and the challenges of achieving coordination under time pressure (e.g., Madsen et al. 2006, Roberts 1990, Weick 1993, Weick et al. 1999). However, given the extreme nature of the events being considered, the natural emphasis of these studies has been on the nonroutine occurrences, mindful processes, and improvisational practices associated with event time rather than on the routines, plans, and structures associated with clock

The consequences of this neglect are particularly significant in relation to our understanding of how routine and mindful processes are mutually constituted (Levinthal and Rerup 2006, Feldman and Pentland 2003). For example, in fast-response settings such as hospital emergency units, police stations, and fire departments, shifts between planned and unexpected events occur swiftly and continuously (Argote 1982, Faraj and Xiao 2006, Klein et al. 2006). In these settings, the temporal progression of work is subjected to frequent interruptions, the boundary between routine and nonroutine work is increasingly blurred, and participants "expect the unexpected" (Bechky and Okhuysen 2011, Jett and George 2003, Patriotta 2003b). Studies in these settings are important because they identify sensemaking processes in response to swift changes, but they do not explicitly capture the temporal transitions through which sensemaking is accomplished. The purpose of this paper is, therefore, to examine the influence of time on sensemaking during transitions between planned and unexpected events.

We examine these dynamics in the context of a research study conducted at a local U.S. television newsroom. A newsroom is a fertile ground for studying sensemaking processes because it is a fast-response setting where highly trained professionals continuously apply their expertise to manage a changing set of information inputs. In the newsroom, new stories are constantly breaking, the pace of work is driven by rapidly approaching deadlines, and news workers have to quickly make sense of transitions between planned and unexpected stories. Furthermore, the prominence of time factors in news organizations has led communication

scholars to describe news workers as having a "chronomentality" (Schudson 1986) and as members of a "stopwatch culture" (Schlesinger 1977). We find that news workers navigate transitions between planned and unexpected events through expectancy frameworks, defined as the shared baseline expectations about the temporal progression of the news day. Expectancy frameworks allow news workers to make sense of emerging stories against prescheduled ones. This is accomplished through typifications, defined as the ordering of incoming events according to preset categories (Schütz 1967, Tuchman 1973). Typifications may lead to the updating of expectancy frameworks based on the relevance of emerging stories. We propose that expectancy frameworks and typifications are important sensemaking resources whose interaction informs the construction of everyday reality in organizational settings characterized by the persistent and irreducible presence of the unexpected. More specifically, our study contributes to the understanding of sensemaking in three main areas: the effect of time-based dynamics on the control and coordination of work, the interaction of routine and mindful processes in response to unexpected events, and the structural influences of expectations and typifications on sensemaking.

Sensemaking and Temporal Organizing

Organizing relies on highly structured temporal orders through which activities are allocated, scheduled, and synchronized (Zerubavel 1979, Hassard 1991). The temporal organization of work presupposes the ordering of activities according to time-based structures such as plans, routines, schedules, and deadlines. These structures define temporal boundaries, thereby punctuating the unfolding of action in organizations (Orlikowski and Yates 2002, Roth 1963, Yakura 2002). The temporal organization of a workplace serves as an interpretive framework for rendering action in the setting meaningful (Barley 1988). In this respect, time is an essential sensemaking resource, as it creates the orderliness and baseline expectations for organizing (Weick and Sutcliffe 2007). It is against this background of orderliness (i.e., the expected) that relevant organizational actors revise plans, adjust resources, and update interpretations in cope with unexpected events.

One central challenge for organizations is the coordination of concurrent flows of events that unfold according to variable temporal patterns. Management scholars have drawn attention to a number of temporal dualities within organizations (e.g., Adam 1995, Ancona et al. 2001, Bluedorn and Denhardt 1988, Butler 1995, Clark 1985, Fried and Slowik 2004, Jacques 1982, Lee and Liebenau 1999). There is a recurring distinction between time as a linear and measurable unit (clock



time) and time as a set of discontinuous events that follow no predictable order (event time). This and similar distinctions implicitly characterize the organization– environment relationship as a system of two interacting, but temporally disconnected, cycles (Gersick 1994).¹ Coping with environmental stimuli involves synchronizing the pace of work with changes in temporal conditions and external cycles (Ancona and Chong 1996, 1999; McGrath and Rotchford 1983). This presupposes a sensemaking activity: as novel events disturb the clock time of preset deadlines and schedules, individuals and groups have to collectively update their understandings of current situations to "fit work into time" (Gersick 1989, p. 274).

The implication here is that the temporal order of work is associated with a parallel cognitive order to which the meaning of routine situations is anchored (Zerubavel 1979). Unexpected events interrupt the regular progression of work, which instigates a "cognitive switch" from routine to mindful processing (Louis and Sutton 1991, Patriotta 2003b). Scholars interested in processes of sensemaking have proposed that organizations respond to unexpected events though improvisational action and bricolage (Bechky and Okhuysen 2011; Milliken 1987; Sandelands and Stablein 1987; Vogus and Welbourne 2003; Weick 1993, 1998; Weick et al. 1999; Weick and Sutcliffe 2007). These responses rely on "sociocognitive resources" such as protocols, shared role systems, and emergency codes that convey collective knowledge of the task and work flow expectations (Bechky and Okhuysen 2011). Sociocognitive resources provide an infrastructure for mindful behavior (Levinthal and Rerup 2006), help organizations structure responses to emergent demands (Bigley and Roberts 2001, Faraj and Xiao 2006), and contribute to processes of "routinization of the unexpected" (Tuchman 1973). The combined use of improvisational practices and formal coordination mechanisms allows individuals to develop situated responses to unexpected events while managing calendar deadlines (Crossan et al. 2005).

Taken together, prior studies suggest that organizational action unfolds through concurrent flows of planned and unexpected events, which follow distinct temporal patterns; however, research is less informative about how shifts between planned and unexpected events are interpreted and assimilated within the temporal organization of the workplace. Addressing this issue requires an understanding of (1) how organizations make sense of planned and unexpected events and (2) how organizations synchronize between clock and event times. Although there is literature addressing each of those two points separately, insufficient attention has been paid to the integrative question of how organizations make sense of and navigate temporal transitions between planned and unexpected events. In this study, by considering how news workers respond to breaking news in the context of fixed program schedules, we pinpoint the critical sensemaking processes that connect the unfolding of events to forms of temporality.

In the remainder of this article, we present the empirical setting we have chosen for this study—a local TV newsroom—and discuss other work that has demonstrated its theoretical significance. Next, we present the data from our fieldwork at Local TV: we systematically examine the temporal order of the newsroom, the planning of the news day, and the dynamics that emerge when plans are disrupted. Finally, we discuss the study findings and identify contributions to theory.

Methods

Research Context and Data Collection

We investigated our research question in the context of a local television news organization in the United States, where there are television stations in more than 200 cities spread across the country. Many cities have local affiliate stations of the major broadcast networks NBC, CBS, and ABC. These stations play an important role in their local markets, as they provide viewers with news and information that is especially relevant to them. Our focus was on newsmaking, the process of turning everyday occurrences into news events (Tuchman 1973, 1978). In particular, we examined the ways in which news workers handle breaking news, which is the most significant example of the unexpected in a newsroom. Local TV is a network affiliate station in a major U.S. city with approximately 60 full-time staff. At the time of the study, the network had 10 newscasts each weekday (at 5 A.M., 5:30 A.M., 6 A.M., 7 A.M., 9 A.M., 12 P.M., 5 P.M., 6 P.M., 9 P.M., and 10 P.M.) and 4 on Saturdays and Sundays (at 7 A.M., 8 A.M., 6 P.M., and 10 P.M.). Additionally, Local TV provides news updates during different times of the day to share important information with its viewers while other programs are airing. These updates are sometimes previews of stories that will later air on the news shows if they are still considered important at that time. Local TV also runs stand-alone news briefs in between shows providing a basic rundown of the main stories of the day.

The data collection process was modeled on qualitative research from recent ethnographic studies of news organizations in sociology (Klinenberg 2005) and communication studies (Boczkowski 2004). These studies have sparked a resurgence in the investigation of the inner workings of newsrooms, a practice that had been largely dormant since many of the foundational studies of the 1970s (e.g., Epstein 1973, Gans 1979, Schlesinger 1978, Schudson 1978, Tuchman 1973). The decision to use ethnographic methods was based on a desire to offer a rich description of both the context and the process being investigated. An ethnographically oriented study



permits a theoretically informed observation of the organizational practices that lie behind the making of news, and in particular of how discontinuities in an ongoing flow of action such as breaking news are dealt with. In the context of this study, as news workers strive to "routinize the unexpected" (Tuchman 1973), the production of news is continually subjected to changes in external circumstances that may challenge existing plans, shift current allocations of resources, and call for decisions to be made on the fly. An ethnographic study can therefore uncover the tensions between the planned and the unexpected in a particular work setting, as well as the robustness of the work organization (Schlesinger 1978).

Our fieldwork combined observation with semistructured interviews. One of the authors was able to obtain access to Local TV through a social contact who works there as a reporter. He spent over 100 hours at Local TV observing interactions in the newsroom and conducting interviews with employees. Direct observation involved shadowing news workers and asking questions about specific stories. Once he had realized that this was the location in the newsroom through which the vast majority of new information flowed, the author in the field spent much of his time in the assignment desk area (see Figure 1 for a visual depiction of the newsroom). He was also welcomed to daily morning news planning meetings, the control room during live newscasts, and various other locations throughout the newsroom at Local TV to talk with newsroom employees and watch them in action. Because he had a background in news, the author in the field built a good rapport with the assignment desk workers, and they allowed him to spend time with them and sit in with them. This enabled him to act as a participant observer and engage with the news workers on topics relevant to their work. Ethnographic work also included an analysis of the artifacts gathered on site (meeting agendas, plans for breaking news coverage, and scripts from the news programs).

Figure 1 Newsroom Layout at Local TV

Newsroom live shot	Anchors' cubicles			Editing suites
Assistant news director	Reporters Writers Producer	Producers/Directors Reporters/Writers	Reporters Writers Producer	
News director]	Senior producers		
News conference room				
News plannii	ng	Assignment desk (elevated)	Spo	tside: orts/Weather estigative orting

Additionally, semistructured interviews were conducted with 25 newsroom employees at every level of the hierarchy. These comprised producers, managers, writers, reporters, anchors, assignment desk editors, and technical support staff. The interviews were based on a protocol focused on planning for, and responding to, breaking news stories (see Figure 2). As many of the employees were working on stories throughout the day, and were thus rather busy, most interviews included only a few questions from the protocol before the newsroom employees had to stop. When the interview could be resumed, the informant would clarify the questions and provide additional context.

The frequent interruptions during interviewing reflected the frantic pace of work in the newsroom and provided opportunities for gathering observational data on the context in which the interviews were carried out. In other words, these discontinuities in the interviewing process constituted breaking events in their own right, which prompted the informant to attend to an emerging issue and thereby shed further light on the organizational practices under observation. In addition to the formal interviews, he was able to speak informally with newsroom employees as they went about their work. Daily field notes were written during fieldwork at Local TV and were reviewed at the end of each day to make sense of what was being seen and to create a plan for the next day's research. These notes included excerpts from conversations and the interviews conducted at Local TV, as well as observations in the newsroom.

Analytic Approach

The analytic approach combined ethnographic work with grounded theory strategies (Glaser and Strauss 1967). We followed a constructivist variant of the grounded theory approach, which meant using the principles and practices suggested by grounded theory while acknowledging that the way we used these principles and practices was informed by a set of theoretical assumptions constituting a model of reality (Charmaz 2006). The implicit model guiding our fieldwork assumed that organizational activity unfolds in the form of routinized action that is occasionally interrupted by unexpected events. Furthermore, we built on the insight that transitions between routine and unexpected events trigger sensemaking processes (Weick 1995). We advanced interpretive analyses that acknowledged these constructions, traveling back and forth between the data and the literature and developing an interpretive account of Local TV's newsmaking routines.

We began our analysis by reviewing field notes, interview transcripts, and documents gathered at Local TV to cull data for the organizational routines associated with daily news production. We first analyzed organizational routines for news planning and looked at how these routines were triggered or disturbed when news broke. We



Figure 2 Interview Protocol

Routines

- Please describe a typical workday for you here.
- · When do you work?
- · Is it a fixed schedule?
- · How do you spend your time?
- · Where do you spend most of your time?

Pacing

- · How many stories do you cover on a daily basis?
- How much time do you have for putting together your stories?
- · How often does your deadline for a story shift?
- What is your response when the deadline shifts?

Breaking news

- · How do you define breaking news?
- · What is your process for dealing with breaking news stories?
- · How would you rate your newsroom's response to covering major breaking news?
- · How would you rate your newsroom's preparedness to cover major breaking news?

Switching between stories

- Tell me how you shift from one story to the next?
- Who decides when you should shift from one story to another?
- How often are you in the middle of working on a story when another breaking story forces you to divert your attention elsewhere?
- · How do you go about transitioning a story to another reporter/producer in your news organization?

Dealing with new types of stories

- How many times per week do you cover a story unlike any other you have encountered?
- What is your first response when you hear about the story?
- Can you give me an example of a recent story that fit this description and how you proceeded to report the story?
- How capable is your organization of covering this type of story?

Additional questions for news managers

- How often do you get involved in covering breaking news stories?
- How do you staff the newsroom to be prepared for breaking news?
- How often do the managers meet to assess the newsroom's process for covering a big breaking news story? What does the content of that meeting include?
- Does your newsroom have a specific contingency plan in place for covering breaking news stories?

Closing questions:

- Is there anything you think we should have talked about but didn't?
- Do you have any questions for me?

considered breaking news stories where the author in the field had the opportunity to observe events unfolding firsthand and interview the reporters and/or producers who were part of the coverage. The focus was on stories that were determined to be significant enough to be lead stories on the news programs because they involved multiple news workers and had significant resources allocated to them.

As we progressed from descriptive to increasingly analytical readings of our empirical material, we developed theoretical categories to answer fundamental questions about the phenomena observed and to understand what was happening. We initially used broad codes to demarcate planned from unexpected occurrences in the newsroom's daily activities. We were able to distinguish between anticipated stories, which were prescheduled

and planned, and breaking news stories, which were unanticipated and addressed in real time. We then looked at the temporal underpinnings of anticipated stories and breaking news stories, which led us to associate planned events with clock time and unexpected events with event time. In a subsequent stage, we considered how planned/unexpected events and clock/event times were implicated in processes of sensemaking during the news day. This led us to detect two core mechanisms that Local TV had in place to plan the news day and subsequently adjust the plan in response to the emergence of breaking news stories. We labeled these mechanisms "expectancy frameworks" and "typifications" to capture the distinctive rationales of control and contingency conveyed by their use. Using the constant comparative method (Strauss and Corbin 1990),



we looked for commonalities and differences in behaviors and actions across selected breaking news stories. This allowed us to explain how news workers drew on expectancy frameworks to "typify" breaking news and routinize deviations from expectations. Specifically, we found that expectancy frameworks relied on plans, routines, and schedules to lay out a reference structure for accommodating breaking news. Conversely, typifications used expectancy frameworks as a background for categorizing incoming events on the basis of lists and rules of thumb. Finally, we extracted theoretical implications from the findings, traveling back and forth between our data, emerging insights, and existing theory (Eisenhardt 1989). This led us to conceptualize expectancy frameworks and typification mechanisms as sensemaking resources contributing to processes of social construction of reality in organizational settings. In the following sections, we first describe the work setting and the news planning process at Local TV. We then discuss three breaking news stories to illustrate the interaction of temporal structures and sensemaking in response to unexpected events. The purpose of this presentation of the empirical evidence is to detail the planned and unexpected at Local TV and to illustrate what newsmaking and sensemaking processes look like in action.

Findings

Entering the Newsroom

Newsmaking is the transformation of incoming information into meaningful stories. One reporter at Local TV used an analogy to convey the idea of newsmaking as a transformation process: "Making the news is like making sausage. It is a process that has many things going into it and it is not glamorous, but the end product tastes good." The newsroom is set up to notice and respond swiftly to incoming information. The layout is designed to allow easy flows of information right across it. The assignment desk is the hub of these information flows and has scanners tuned to the various police, fire, and emergency channels. The scanners are constantly buzzing with information about accidents, fires, and other emergencies that might be worth covering by Local TV. There are three scanners going at any one time, but the assignment desk editors, some of whom have been working at the desk for a long time and can "follow the scanner speak," are still able to decipher the various responses. The assignment desk is the only area of the newsroom that is physically elevated (by approximately two feet), so that those who are staffing it can see everything that is happening around them. It is located next to the producers' desks. One of the producers explained how the newsroom's layout allowed news workers to listen for deviations and make sense of transitions between planned and unexpected events: "While

I am copy editing the noon news show, I am listening to the chatter on the [assignment] desk. I am listening to hear if there is something I need to know about. It is the reason we sit the way we do in the newsroom. If I was even two desks over I would not hear what is happening.... I am trying to work in conjunction with the desk so that we all know what is going on and that we are getting the right stuff." When the chatter on one of the scanners indicates a major emergency response, whoever is closest to the scanner on the assignment desk will turn up the volume and listen intently. When breaking news arrives through the newsroom scanners, it interferes with existing plans and provides an occasion for sensemaking (Weick 1995). Although information arrives in the newsroom in bits and pieces, it is broadcast to viewers as a cohesive presentation.

"Laying Things Out": The Creation of an Expectancy Framework

The remark in the opening vignette that only 10% of the plans laid out in the morning meeting will materialize as expected may sound surprising. In fact, classic ethnographies of journalism have demonstrated that news work is highly routinized (Tuchman 1973, Schlesinger 1978); nonetheless, this claim conveys how news workers make sense of their work and construct news accordingly. One of the assignment desk editors summed up the core feature of newsmaking when he said, "You can't schedule breaking news." To cope with this kind of volatility, news workers develop what we have labeled an "expectancy framework," an underlying structure that outlines what is expected to occur in the course of the news day. This structure is largely time based. The production of broadcast news takes place in the context of a daily time cycle; each news day is divided into a number of transmission times for which news programs have to be prepared. This means that work organization is centered on a series of deadlines corresponding to the daily news program schedule. These deadlines provide a temporal work structure that is mostly filled with preplanned coverage but is flexible enough to allow for updates and breaking news. Deadlines dictate the pace of news production by imposing agendas and shaping the patterns of deployment of reporting resources. At Local TV, 5 P.M. represents a particularly significant milestone, because it separates the morning broadcasts from the prime-time programs and is preceded by a significant temporal gap of four and a half hours.

Several meetings take place at Local TV throughout the day to plan news coverage and the content of newscasts. The largest of these is the morning meeting, which takes place in the news conference room at 9 A.M. The purpose of the meeting is to select the stories that will be covered during the news day and organize them according to a running order that will appeal to the viewing audience. On average, 15 employees who work



on the news teams for the afternoon and evening newscasts attend the morning meeting; these include writers, producers, reporters, assignment desk editors, and news managers. The writers create the scripts for the programs, the producers put together the entire show, the reporters craft the news stories with camera operators accompanying them, the assignment desk editors give a rundown of the various events that are taking place that day and summarize the stories Local TV is pursuing from the early morning newscast, and the news managers handle staffing and resource allocation for the news organization.

The assignment desk is responsible for preparing the agenda for the meeting, which is the product of several hours of scanning newswires and news websites, calling dozens of sources, and taking stock of the stories that have been gathered at Local TV in the late evening and early morning hours. The result of this news-gathering process is a two-page document that is handed to each of the participants in the meeting. The document typically includes a list of approximately 15 stories. These have been referred to in the communications literature as "anticipated stories" (Gans 1979), and they relate to predictable future events that have been prescheduled by sources, such as press conferences, speeches, court hearings, state occasions and visits, elections, and budgets. They also include news stories that have been produced the day before or stories from affiliate stations.

The morning meeting's discussion establishes which stories will be covered and in what order they will appear in the newscast, based on considerations regarding the potential significance of the stories to the audience. The producers formulate a plan to distribute the stories across the news day, ensuring that each newscast will have enough content. The plan also details how the stories will be presented in the newscasts, e.g., with a live shot from the scene, a packaged story, or footage from another source that has already created the story. Whether the stories listed on the document will be on the newscasts depends on a number of factors, including the occurrence of breaking news. However, anticipated stories form the baseline for what is expected during the news day. The selected stories are assigned to reporters and resources are allocated to each of them (camera operators, writers, editors, etc.), with the expectation that they will be slotted into specific newscasts on Local TV over the course of the day.

The expectancy framework set up through the morning meeting is embedded and reproduced in organizational mechanisms such as planning, scheduling, and routines. These provide news workers with a shared repertoire of what is likely to make news. For example, plans convey expectations about what is likely to occur over a given time horizon. Schedules and deadlines are based on the expectation that events and activities can be

ordered sequentially according to standard times. Routines are designed on the expectation that action will repeat itself, albeit with variations that nonetheless follow predictable patterns (Feldman 2000, Feldman and Pentland 2003, Pentland and Rueter 1994). Sense is made by assessing new cues against this shared background of expectations. In this way, expectancy frameworks allow news workers to detect deviations from a predicted state and to elaborate responses to environmental stimuli based on their conformity with or discrepancy from expectations (Weick and Roberts 1993). News workers expect that plans will be revised several times during the day because of the emergence of breaking news. In other words, there is a built-in expectation of change in the expectancy framework that news workers lay out at the morning meeting. In the next section we document how news workers update current understandings of planned action when new stories "break."

"Filling Things In": Sorting Breaking News Through Typifications

The morning meeting is a critical mechanism for controlling news production by defining a baseline set of expectations. It provides a forum for the exercise of editorial control before the decision-making locus shifts to the "shop floor" level of newsroom practice (Schlesinger 1978). However, the nature of news presupposes a notion of change. Therefore "updating" is integral to the entire production process. This involves accommodating "new facts" in a predefined sequence of anticipated stories and replacing entire stories with "new" ones (Schlesinger 1978). The continuous updating of the expectancy framework is a major instance of news workers switching between planned and unexpected events. As one reporter at Local TV pointed out, "The ability to constantly switch what you are doing is a strand of DNA that you find in reporters.... We are always switching racetracks." Modifications in the contents and running order of anticipated stories can occur for a variety of reasons. Sometimes, if a prescheduled story is not finished before the scheduled newscast, it will be moved down the running order. This might depend on technical problems or journalistic issues that contribute to a particular piece being late: for example, a critical interview is delayed, footage is of poor quality, reporters want to redo part of the script because they have more relevant or updated information, or a relatively minor event develops into a story that merits more attention and causes the piece to become a longer item. Most of the time, however, plans laid out during the morning meeting are expected to change to accommodate breaking news. Breaking news could be a dramatic story such as a major fire or a plane crash, or it could be a less tragic story such as a police chase.

Although breaking news may be a powerful illustration of deviation from the planned running order, it is



a very familiar occurrence in news organizations. Thus, covering breaking news does not mean shifting to a nonroutine mode of action. Sociologists of news have shown that news workers deal with unplanned stories through typifications, which allow them to delimit the scope of new situations and thereby develop predictable work actions (Berkowitz 1992, Tuchman 1973). According to Tuchman (1978, p. 58), "Newsworkers use typifications to transform the idiosyncratic occurrences of the everyday world into raw materials that can be subjected to routine processing and dissemination." More specifically, typifications are created along dimensions that reflect the practical tasks associated with news work (meeting deadlines, fitting existing schedules, matching available technology and resources, etc.). In this paper, we define typification, in phenomenological terms, as the process of ordering unique happenings under familiar categories by means of synthetic recognition (Schütz 1967). This is accomplished by singling out specific attributes of unfolding events as "typical" of something, based on a set of conventional beliefs and presuppositions (Berger and Luckmann 1967). From this perspective, typification provides a reconnaissance structure for making sense of action in progress.²

Typification was a pervasive pattern within the newsmaking activities observed at Local TV. For example, in addition to making calls on stories that Local TV was working on at any given time, the assignment desk workers were also answering incoming calls, monitoring the fax machine that sits behind them, checking the station's email inbox, listening to the scanners, and watching the televisions located above their heads that were tuned to the two local news competitors at all times. As new stories broke, news workers had to interpret them quickly and assimilate them within the existing expectancy framework. The senior producer articulated some of the questions that are asked when a new story arrives on the assignment desk: "How many people is it affecting? How long is it [going to be] a problem? Does it affect our viewers? What do I need to dedicate? Is it just a report? Do we need a reporter? Do we need more than one reporter? How many news trucks do we need? How quickly can I get there?" These questions provided news workers with established rules of thumb that allowed them to typify events as news and to predict the resources required to report specific news items. As stories were translated into a plan of action, the major concern would be to figure out the best way to cover the story by moving reporters, camera crews, and other resources

The empirical evidence presented above begins to address the question of how news workers navigate transitions between planned and unexpected events within predefined schedules. News planning is based on an expectancy framework that provides the backbone for each day's production requirements and is used to guide

the deployment of available resources. The morning meeting sets expectations about newsworthy stories that are subsequently embodied in various planning documents. These include a routine agenda, a broad list of anticipated stories with a "lead," and a subset of selected stories to be slotted into the daily news programs. Most news is constructed within a framework of firm expectations, but these expectations will be disrupted if new stories "break in." The coverage of breaking news stories is based on a typification mechanism, which allows news workers to quickly process incoming information and align schedules with unplanned events.

Coverage of Breaking News

News stories broke every day at Local TV during the period of observation. Some were small stories that were simply read on air during a newscast by the anchors, whereas others resulted in a reporter and a camera operator being sent to cover them. In this section, we provide details of three breaking news stories that occurred during data collection at Local TV. The three stories share attributes of typicality while offering variation in terms of the temporal dynamics involved. First, they are representative of breaking news stories broadcast at Local TV during the typical news day; in particular, they have a strong local focus and are relevant to the local audience. Second, they follow different temporal dynamics and therefore provide rich insights into how the news workers at Local TV enact expectancy frameworks and typifications in the face of unexpected occurrences.

The Barricaded Gunman: A Breaking News Story That Faded Out in a Timely Manner. On one of the first days of observation, a call came into the newsroom to inform the assignment desk that a man with a gun had barricaded himself inside a house and taken a hostage. A photographer and live truck (a truck that can establish a satellite link to allow a reporter to report live) were immediately dispatched from Local TV's offices after the assignment desk editor had heard the information and had been told that Channels 4 and 7 (Local TV's main competitors) were already on the scene. A reporter was sent with his camera operator to "front the story." The assignment desk briefed the reporter by telephone while he was on his way to the location. He reached the scene approximately 10 minutes before the noon newscast and spoke with the police and other witnesses to discover the latest information. As the reporter was preparing to speak live on the air for the noon newscast, the gunman was taken into custody.

The other two noon newscasts were leading with the same story. It is safe to assume that none of the three had included the story as part of the news planning coming out of their respective morning meetings, as there had been no knowledge of the event at that time. However, each of the three stations, including Local TV, was on



the scene with reporters to cover the story at noon. This meant that they either needed to dispatch a reporter from the newsroom (as Local TV did) or reassign one of their reporters in the field from their initial assignment for the day to the barricaded gunman story.

After the show, one of the news managers said of the response,

Our first goal was location. Number of people affected. What time is it? How much time do we have? How quickly can we get there? When Roving Reporter [pseudonym] arrived on the scene, he is running through in his brain: 'What do I need to know?' And he is trying to get it into an organized fashion so he can deliver it. Back here we are trying to say, "How big is this? How quickly can we do this? What can we do?" It is a series of questions and I think you develop your own list through different experiences.... I had no problem with Roving Reporter saying that this story is over, because that is what is happening right now. It was seconds ago. The police are still there. The news was good and then it was over. There is no reason to do it at five. Nobody cares any more at five. Sometimes it just happens like that. It is nice when breaking news starts and finishes in time to get to your next story.

Because the event had reached its end point, Local TV did not keep the reporter on the scene and shifted its attention to other developing stories. The executive producer said that depending on the news later in the day, the story of the barricaded gunman would likely not end up on the afternoon newscasts.

This story took an unexpected turn but could still be fitted into Local TV's daily news schedule in a straightforward manner. As soon as the reporter arrived at the location, the barricaded gunman was taken into custody. The story thus lost its continuing importance because the newsworthy event was over. The story illustrates how events are constructed as news: a story is newsworthy as long as it remains open—as soon as it is closed, it ceases to be of interest. The retrospective account by the producer conveys the kind of stimulation a "breaker" generates among news workers and the mix of routine and mindful acts through which they respond to a breaking story: time, available resources, the potential impact on viewers, and the actions of the competitors become matters of concern, and they shape news workers' sensemaking. The event is typified through a list of routine questions that provide the basis for constructing a breaking news story. The typifying questions evoke the expectancy framework through references to time, timing, duration, and schedule. The 5 P.M. time slot provides a key temporal reference point, as it separates the noon newscast from the early evening shows and therefore represents the largest temporal gap in Local TV's news schedule. The newscast involves interaction between the reporter and his crew at the scene preparing to speak live and "front the story" and the staff working at the assignment desk in the newsroom and providing briefs by telephone. The news reporter is "running [the issue] through in his brain" while trying to get it into an organized fashion' in order to deliver the news. Behind the scenes, news workers are attempting to translate the story into a plan of action and work out how best to cover the story with the available resources. Breaking news starts and finishes within a convenient time frame that allows the news managers, in this instance, to make a smooth transition from one story to the next. Order is restored as the breaking news event is fitted within the existing schedule. As the news loses its immediacy, Local TV is able to return to its regular schedule of anticipated stories until the next disruptive event occurs.

A Car Crash on an Interstate Highway: A Breaking News Story That Was Difficult to Typify. The assignment desk at Local TV picked up a car crash on an interstate highway from the scanners in the early afternoon while no newscast was being aired. Within minutes, the Local TV helicopter had been sent to the scene to shoot footage. In the meantime, one of the other stations broke into its normal programming to show the scene of the accident, and the producers at Local TV saw this report. Subsequently, the story was reported during the midafternoon updates that Local TV broadcasts when other programming is on the air, but it was not given any further coverage in the evening newscast.

When discussing the station's reaction to the information from the scanner the next day, the executive producer described how typifications allowed news workers to make sense of action in progress by bracketing cues from the context:

We knew there was an accident. Our immediate response was to send somebody so we could get a visual and to call somebody so we could find out what they were telling us. [The assignment desk] made the calls. There wasn't anybody to answer the questions. So then your second chance was to see it. As soon as we saw it we said, "Look, this is a serious accident. This is affecting a tremendous amount of people. Look at the traffic that is backed up." We knew we needed to get that into a midday update...and then we had to determine how long it was going to be a problem. It is 1:30 now, they are saying 2-4 hours—is it clear by 5? Does it [the accident] affect our viewers at 5? Because my viewer does not care if it does not affect them [sic] any more.... That's how I go about evaluating breaking news. Who is it affecting? How big is it?

Local TV had the story covered for its afternoon news briefs, but the story had fizzled out by the late afternoon, as they had monitored the traffic and details, and it was not reported in the evening newscasts. The story of the crash further illustrates how news workers respond to shifts between planned and unexpected



events by leveraging expectancy frameworks and typifications. The expectancy framework stipulates that news workers have a specific set of working plans for each newscast, and they expect to change what they are doing to fit things into it. So Local TV needed to typify the highway blockage by estimating its duration and importance to audience and decide whether to include the story in the next broadcast. The list of questions evokes the expectancy framework through temporal references. As with the previous story, the 5 P.M. time slot is a key temporal reference point. The evening news shows have been in preparation throughout the day, so if a news event that was relevant earlier in the afternoon is not important by 5 P.M., then Local TV will proceed with the stories it has been working on during the day. Concerns regarding the competitors' moves, viewer expectations, and the impact on the existing schedule affect how news workers typify the event as news and construct a news story: a breaking news story is picked up through the scanners on the assignment desk, its importance is confirmed as news workers see their competitors' coverage on Local TV's monitors, its impact on viewers seems obvious, and resources are mobilized accordingly.

Red Cross Blood Shortage: A Misjudgment That Was Addressed Through Improvisational Practices. One Tuesday, the Red Cross issued a press release that was received by fax and email to declare a "state of blood emergency." Local TV's health reporter deemed the story to be important, interviewed Red Cross officials, and reported the information to viewers throughout the day's newscasts. On the Thursday, two days after the initial story, while the Local TV health reporter remained unaware of the increasing severity of the situation, the two other local stations in Local TV's market were leading their 5 P.M. newscasts with a "breaking news" story about the blood shortage. The executive producer for the afternoon newscasts and the health reporter scrambled to track down information, confirmed the information that had appeared on their competitors' stations, and reported the story to their viewers.

Local TV's health reporter had thought the story would fizzle out after the Tuesday reports of the news and that it would not require any further attention. As Local TV employees attempted to work out why they had not received the proper information, they found a telefax on the telefax machine behind the assignment desk, buried among dozens of other sheets of paper. The same information was found in the health reporter's email inbox. A press release dated July 7 had stated that "the blood shortage poses a serious threat to public health and disaster preparedness," and this was the lead into the story on the competition's broadcasts.

In a conversation the next day, the executive producer remarked.

Is it a story we should have had? Yes. Does it affect a lot people? Yes. Did we do our job? No, we didn't. We didn't

do what we needed to do with that story. The way we reacted after we saw the other stations was that we quickly confirmed the same information and we got our health reporter to get involved. And she was on the air with it within ten minutes. Our viewers probably didn't know the difference, but back here we knew the difference. Part of my job is finding the health reporter, telling somebody to call, to find out. What can we see? I tell the producers this story is coming in and you need to add this in and I am just giving the directive and they carry it out.

The executive producer's account reiterates the role of expectancy frameworks and typifications in the processing of breaking news. The expectancy framework surfaced in her reference to the existing schedule ("I tell the producers this story is coming in and you need to add this in"). Typification conveyed concerns about viewers ("Does it affect a lot of people?," "Our viewers"), competitors ("we saw the other stations"), and internal resources ("part of my job is finding a health reporter"). The story sheds further light on the connection between expectancy frameworks and typifications. An error in the gathering of information and checking of sources had led the news workers to underestimate an important story in the expectancy framework that was in place for Thursday's news planning. The overlooked information prompted the health reporter to think the event was not affecting people after Tuesday. But because competition forms part of the typification process at Local TV, the news workers were able to update their expectancy framework and get on the air with the story after they saw what the competitors were doing. This transformed a potential failure in news gathering into a less critical near miss. The implication of this story is that competitors significantly affect the construction of events as news: news workers typify the opening/closure of a news story, its duration, on the basis of what the competitors are doing.

This misjudgment in understanding and covering the story provided an opportunity for reflection on how news workers address organizational errors. The executive producer of the morning program compared breaking news to a "fire." She discussed the kind of stimulation that these fires generate and the kind of firefighting actions that breakers require: "There are sure to be other fires. Everybody is running on overdrive. There are a lot of 'type A' personalities and you need to make decisions on the fly. You put one fire out and then move on to the next." One of the senior producers underlined the time-based competitive dynamics in local television news and elaborated on how these dynamics affect the balance between the speed and accuracy of news coverage: "In order to win breaking news, you need to have it on the air and have it right. It is better to wait a couple of minutes than to make a rash decision. It is a delicate balance. There is no exact science but you do get a sense in your gut." An assignment desk editor contrasted



news workers' reliance on gut feelings and mindful processing with an emphasis on routinized responses based on typification. He explained, "The response to stories becomes a routine that you learn on the job. You know what you need and how to respond. Who is impacted? Who responded (fire, police, emergency medical services)? Even though some events are unexpected, there are expected ways to deal with them."

The retrospective account by the executive producer revealed that the blood shortage had initially been underestimated, which placed Local TV in a weak position vis-à-vis its competitors. The problem was then addressed backstage (finding reporters and other resources, and adding the news in) without the viewers realizing it. As with the first story, the language used by the executive producer highlights the mindful and less mindful processes underlying news workers' responses to unexpected events. Breaking generates a sort of collective stimulation ("everybody is running on overdrive") similar to that brought on by being in the middle of a fire. Fires need to be "put out" so that the newsroom can move on to what comes next. The effective handling of breaking stories requires "making decisions on the fly," and it relies on gut feelings. On the other hand, the response to breaking news follows a set script (typification) that has been learned on the job and allows news workers to routinize idiosyncratic occurrences on an ongoing basis. In this regard, typifications provide expected ways to deal with unexpected events. In this case, however, typification may possibly have been a cause of the misjudgment: the story resembled a 10 o'clock fire (Weick 1993) that news workers thought would be out by the end of the news day or the next morning but which kept going and needed to be put out quickly when it flared up again two days later. The implication is that typifications also need updating to address variations in the type of events that organizations confront. If responses to unexpected events keep failing, organizations might even necessitate developing a richer repertoire of typifications. More generally, the story points to issues of competition in the local news sector and illuminates the critical link between sensemaking and organizational performance. Competitors to Local TV have similar schedules and compete for the same time slots. This generates imitation in news coverage. Under these circumstances, performance depends on the quality of typifications and the ability to improvise when typifications fail. The same story may be underestimated or overestimated, which will affect how the story is categorized as news, positioned within the day's running order, and covered in the newscast.

The Interaction of Expectancy Frameworks and Typifications During Breaking News

The three breaking news stories we have described above present certain commonalities that pinpoint the routinized character of newsmaking. First of all, the three stories draw attention to the temporal aspect of newsmaking: that is, how breaking news impinges on the plans and schedules encoded in the expectancy framework. The timing of news stories in relation to Local TV's newscasts affects what news workers do to report a story and how they deploy available resources. There is also a consideration of the impact of the event later in the day and whether it will be relevant to viewers hours later. Second, news workers typify events as news based on standard considerations regarding resources, audiences, and competitors. Internally, newsmaking is constrained by the logistical demands imposed by breaking news and the deployment of scarce resources to arrange coverage: What is the story? Does it fit the plans? Now what? Do I have a reporter and appropriate resources to cover it? Externally, newsmaking is socially shaped: it is the result of the interaction of news organizations with their audience and competitors. Audiences, far from being passive recipients, influence the construction of events as news. Competitors stimulate news organizations to constantly assess the importance of their lead stories and to fill potential gaps in news coverage. The implied rule of thumb from this evidence is that "it is better to keep track of the competitors' video truck than of your own." The typification criteria identified at Local TV highlight one important difference with Tuchman's work. Tuchman (1973) conceptualized typifications as the fitting of events in the practical context of work, based on considerations about availability of internal resources. Our study recognizes the role of audiences and competitors as external sources of typification. From this perspective, typifications are organizationally as well as socially constructed.

Although the coverage of the three breaking news stories follows the same typification pattern, each of the stories unfolds in a different manner, which affects the way in which coverage is undertaken. First, the three stories differ in terms of their timing and position of the story in relation to transmission times: breaking news events interrupt a predefined sequence of anticipated stories. The earlier they break before a scheduled newscast, the greater the opportunity for the editors to arrange coverage. Second, the three stories are characterized by their variable duration—the time span within which news goes from being "hot" (metaphorically suggesting the need for immediate news coverage) to "cold" (no longer worthy of news coverage) (Schlesinger 1978).

The story of the barricaded gunman starts and ends before the newscast goes on air. A reporter is sent to the scene but cannot cover the news beyond the next broadcast because the story ends just before on-air time. Because of its timing and duration, the news is covered with relatively little adjustment: the story unfolds within a convenient time frame, as it fits the existing programming schedule, but resources are sent to the scene anyway and not utilized. The car crash happens during



the long temporal gap between the morning and afternoon newscasts. The main decision for the news workers relates to the estimated duration of the crisis, to whether the story would make it to the afternoon newscast at five. A helicopter is sent to the scene for a visual because it is not possible to obtain information from sources over the telephone. Coverage is subsequently provided during the mid-afternoon updates between other television shows. The deployment of resources for coverage is greater than it had been for the previous story, but there is no need to cover the news live during the primetime newscasts. The blood shortage story, on the other hand, spans two days and is to some degree a story of organizational error stemming from ineffective news planning. It was on the list of anticipated stories agreed upon at the morning meeting but was not prioritized because, based on available information, the news editors and producers thought that story would fade relatively quickly. Instead, relevant information (the buried fax) had been overlooked, which led to a misjudgment of the importance of the crisis. The impact of this error was exacerbated by the duration of the blood shortage. Competitors' coverage led to attention being returned to the blood shortage story. The initial misjudgment was then addressed by means of backstage repair.

Our analysis therefore highlights two important sources of uncertainty in relation to the occurrence of unexpected events. One is related to the timing of events: that is, when the event breaks in relation to existing schedules and expectations. This form of uncertainty is manifested in the tension between clock and event time, and it is addressed through the combined use of expectancy frameworks and typifications. The second source of uncertainty stems from a discrepancy within event time. This has to do with the duration of an event—in the case of newsrooms, the lapse of time whereby news stories go from hot to cold. The

unpredictable unfolding of live events requires ongoing adaptation to address discrepancies with the schematic form of coverage prescribed by typifications: the planned running order is quickly adjusted, the reporters "switch racetracks," and repairs of errors and misjudgments are worked out behind the scenes to ensure consistency in the news coverage. This ongoing adaptation often occurs through improvisational action and bricolage. Paradoxically, uncertainty is vital for newsrooms because it generates value for the audience. Although news workers set up expectancy frameworks to plan and control, news is valuable to the extent that it interferes with expectations. That is, uncertainty is positively related to the value of newsworthiness: the "hotter" the news and the longer its duration, the more it will be of interest to the audience.

Summary of Findings

The study's findings bring us back to the two types of temporality identified in the opening vignette. News work is temporally structured in terms of a news day cycle, which is in turn divided according to a series of news shows to be broadcast at specific times of the day. Each show reports on a number of news stories arranged in hierarchical order of salience. News day cycles and newscast schedules introduce regularity and repetition in the organization of news work; they routinely fix events at prearranged points in time and therefore define expectations about the unfolding of action in the newsroom. These expectations are encoded in expectancy frameworks and reproduced in routine meetings, schedules, agendas, anticipated stories, running orders, deadlines, layouts, and monitoring technologies. At the same time, news work is punctuated by irregular flows of incoming events, which interfere with the sequential order of the planned organization and call for adaptation. Figure 3 provides a visual representation of the two temporal patterns characterizing the newsroom setting.

Figure 3 Expectancy Framework at Local TV

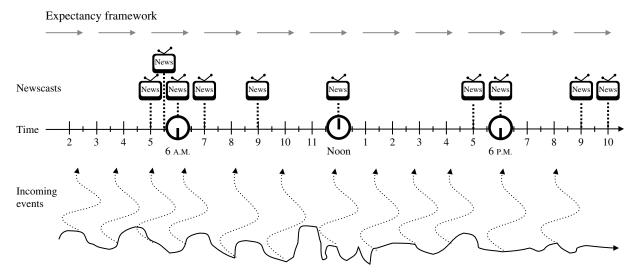
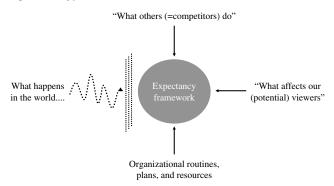




Figure 4 Typification at Local TV



The expectancy framework set up during the morning meeting defines a baseline set of expectations that allows news workers to insert incoming flows of events within an ordered sequence of anticipated stories. If there were no anticipated stories organized in a running order, the news workers would perceive undifferentiated events flowing in a continuum. News workers address deviations from expectations by means of typifications that streamline the variability of incoming events according to a list of standard questions. Regardless of the scope and the timing of incoming events, breaking news stories are typified so that they can fit expectancy frameworks. Expectancy frameworks and typifications are at the nexus of a distinctive "ecology" of action and structure characterized by exogenous timing of events, fixed timing of broadcasts, competing stories, audience expectations, and actions of competitors. These different elements influence the manner in which news workers make sense of incoming information and construct news stories. Figure 4 illustrates the typification dynamics observed at Local TV. Through expectancy frameworks and typifications, newsrooms gain control over variable flows of events and achieve greater predictability of production.

Theoretical Contributions

Our findings extend current understandings of how organizations make sense of, and navigate transitions between, planned and unexpected events. Specifically, they provide insights into (1) the effect of time-based dynamics on the control and coordination of work, (2) the interaction between routine and mindful processes underlying responses to unexpected events, and (3) the structural influences of expectations and typifications on sensemaking processes. Below, we articulate these contributions in greater detail.

Time-Based Dynamics and the Coordination of Work

Time represents a critical aspect of organizing in the face of uncertainty. Organizations devise temporal orders to control the flow of work (Perrow 1967, March and

Simon 1958, Thompson 1967), but they regularly face unexpected events and need to handle a variety of emergencies. This poses practical problems for coordination, as it requires fitting unexpected occurrences within predefined plans and schedules (Okhuysen and Bechky 2009). Previous studies have emphasized issues of coordination arising from conflicting temporal demands, such as the duality of clock and event times. These studies have demonstrated that temporal coordination can be achieved through entrainment processes (Ancona and Chong 1996, 1999), improvisational action (Crossan et al. 2005, Bechky and Okhuysen 2011), and dialogic practices (Faraj and Xiao 2006), among others. We extend previous research by showing the structural underpinnings of temporal transitions. Specifically, we show that transitions between clock and event times provide occasions for sensemaking, which is accomplished through the combined use of expectancy frameworks and typifications.

The news production dynamics observed at Local TV provide a powerful example of temporal discrepancy and its consequences for sensemaking. Consider how different temporal patterns, as manifested in the interplay between anticipated stories and breaking news, affect sensemaking processes. Anticipated stories might be known about months in advance. This foreknowledge allows news workers to produce "set pieces," where the timing of decision making is relatively comfortable, and logistical arrangement can be made beforehand. Breaking news stories, on the other hand, are characterized by the value of immediacy and therefore require instant editorial decisions (Schlesinger 1977). They generate disruption in the newsroom, as news workers have to assess and report stories amidst time pressures, fragmented information, and uncertainty regarding available resources and logistical arrangements. The actual unfolding of news stories complicates this picture even further. Events happen and are detected soon after. If the event is relevant as determined by the assignment desk, it is typified as news and coverage is arranged. However, while coverage is being arranged and implemented, the news continues to unfold. In other words, there is a significant temporal gap between the occurrence of an event identified from a scanner, its assessment by news workers, and news coverage.

Expectancy frameworks and typifications are important sensemaking resources allowing organizations to navigate transitions between planned and unexpected events. Expectancy frameworks define the baseline work expectations in a given setting. In so doing, they set boundaries around the diverse signals coming from the external environment and thereby "give" sense to incoming flows of action. Without these boundaries, organizations would perceive undifferentiated flows. From this perspective, expectancy frameworks "prevent simultaneously occurring events from running into one another"



(Levine 1997, p. 95) and thereby fulfill a need to control and manage work. On the other hand, organizations cannot fully anticipate all of the events that may occur over a given time horizon, and so it is only natural that changes should emerge. Typifications connect novel occurrences with a predefined template, which functions as a reconnaissance structure. Through typification, organizations streamline incoming information according to standard criteria such that unique happenings are subsumed under predefined categories and treated as equivalent. In the process, the variety of individual occurrences is necessarily stripped away. The assigning of unfamiliar happenings to familiar categories is crucial in processes of sensemaking in the face of the unexpected.

Expectancy frameworks and typification, therefore, provide contexts of meaning within which ongoing action finds its significance (Schütz 1967). These contexts of meaning are available to organizations in the form of "what is expected" (expectancy framework) or "what is familiar" (typification). What distinguishes the two mechanisms is their temporal orientation: expectancy frameworks are forward looking and designed to lay out intended action, whereas typifications are oriented toward the recognition and processing of action in progress. At the same time, the two mechanisms are mutually constituted: expectancy frameworks constrain and orient the typification processes by which individuals and groups fit work into time. Typifications allow participants to update a preplanned course of action whenever there are deviations from expectations.

The dynamics of timing and duration observed at Local TV demonstrate the influence of temporal structuring on organizational action (Barley 1988, Orlikowski and Yates 2002) and its implications for sensemaking. According to Weick (1995), action exists in two temporally defined forms: as pure duration and as discrete segments. Pure duration is a continuous and equivocal stream that that has no contours, no boundaries, and no differentiation (Schütz 1967). It never starts and never stops. To make sense of pure duration, people create breaks in the stream, thus bracketing discrete segments of time with clear start and end points. Our study suggests that action flows across temporal boundaries (e.g., time slots and schedules), which turn equivocal streams into circumscribed and meaningful events. Unexpected events produce breaks in the temporal order of the work setting and require actions aimed at reconciling clock with event time, so that work is fitted into time (Gersick 1989).

In organizational settings such as newsrooms, the distinction between pure duration and discrete segments is often blurred. For example, as depicted in Figure 3, unexpected events can be visualized as irregular flows

with an initial point—representing timing and interfering with the expectancy framework and an open endrepresenting duration and spanning an unspecified number of discrete time slots. News workers make sense of timing by referring to the baseline expectations incorporated in the expectancy framework. They make sense of duration by typifying breaking news stories according to standard criteria of newsworthiness that prompt the allocation of resources for news coverage. Typifications, however, carry an element of guessing, which can lead to close calls, near misses, biases, misjudgments, or other kinds of errors (Patriotta 2003a). This possibly explains why organizations might need repertoires of typifications. It also explains why organizational actors need to integrate typifications with acts of improvisation and bricolage when events drift or take on unexpected consequences.

Routine and Mindful Processes

A consideration of expectancy frameworks and typification as sensemaking resources enhances current understandings of routine and mindful processes in organizational settings (Levinthal and Rerup 2006, Louis and Sutton 1991, Weick et al. 1999). According to Levinthal and Rerup (2006), individuals operate under the influence of ambiguous stimuli that require interpretation on an ongoing basis. To make sense of incoming stimuli, actors need to consider the type of request being made and the kind of problem being faced. This sorting out process converts experience into familiar reconfigurations of assumptions, frameworks, and action. We extend this body of work by detailing the structural and temporal mechanisms by which routine and mindful processes are mutually constituted. In particular, we show how typifying mechanisms allow individuals and groups in organizations to interrogate ambiguous stimuli, convert them into familiar categories, and encode them into shared repertoires of expectations. Furthermore, the dynamics of routinizing the unexpected in the context of news work resonate with recent approaches to organizational routines, particularly with reference to the distinction between ostensive and performative elements of routines (Feldman 2000, Feldman and Pentland 2003, Turner and Rindova 2012). Our study suggests that ostensive routines can be understood as a context for meaning associated with clock time and against which participants carry out their performances. From this standpoint, the ostensive element of routines becomes a sensemaking resource, setting up expectations about the likely unfolding of action. The performative element, on the other hand, ensures consistency in performance by synchronizing action in progress with the baseline expectations encoded in the ostensive routine.

Our findings also suggest that improvisational practices involve strong structural influences that are often temporally embedded (Ancona and Chong 1996, 1999).



Previous studies have only partially addressed the critical link between structure, time, and improvisation. For example, Crossan et al. (2005) conceived of improvisational action as a way to bridge discrepancies between clock and event times but neglected the structural context within which improvisational action is undertaken. Other research has recognized that improvisation relies on sociocognitive resources—stored knowledge, memory, skills, workflow expectations, and learned routines which provide the material infrastructure for responding to unexpected events (Baker and Nelson 2005, Bechky and Okhuysen 2011, Brown and Eisenhardt 1995, Hatch 1998, Miner et al. 2001, Weick 1993). This research, however, has downplayed the temporal underpinnings of improvisational action. Our study demonstrates that improvisational action is embedded in the temporal organization of work, which provides a reference structure for making sense of transitions between planned and unexpected events.

Sensemaking in the newsroom portrays significant parallels with the dynamics observed in police SWAT teams and film production crews (Bechky and Okhuysen 2011). Like SWAT officers and film crews, news workers "expect the unexpected." This heuristic principle is embedded in expectancy frameworks and typifications, which constitute the sociocognitive resources that newsw orkers draw upon to address unexpected events in an organized fashion. Furthermore, the handling of breaking news shows similarities to responding to surprises as it requires improvisation and mindful acts of bricolage. Our chosen setting presents significant contextual variations, however. For example, Bechky and Okhuysen (2011) focus on situations where people must continue with their work after encountering a surprise. In our case, the work that must be done has clear and publicly relevant milestones in the form of the newscasts. In other words, newsrooms operate according to a strict temporal work organization in which clock time is highly relevant. It is perhaps for this reason that we see a different form of reaction to surprise, one that complements the kind of sensemaking observed in film crews and SWAT teams, because the temporal dynamics are different across the situations.

In addition, in the newsroom the pace of work is partially shaped by audience expectations and the actions of competitors. Under these circumstances, sensemaking in the newsroom involves synchronizing plans, routines, and schedules with stories competing for scarce resources, audience expectations, and competitors' moves. This is achieved via three temporally defined mechanisms—expectancy frameworks, typification, *and* improvisation—by which news workers address unexpected events while maintaining continuity and stability in their work. Expectancy frameworks provide a blueprint for the news day. At any moment news workers can compare the blueprint to what is actually

going on. Typification constitutes an intermediate form of agency between planning and improvisation, which is triggered by news stories that do not fit into the preset schedule of anticipated stories. Improvisation emerges in response to errors and misjudgments and is aimed at repairing or correcting unfolding action trajectories. The three mechanisms outlined above represent ways of making sense of the present from different time perspectives. This finding suggests that the meaning of an action differs depending on the point in time at which it is observed (Schütz 1967).

The Structural Influences of Expectations and Typifications on Sensemaking Processes

Expectancy frameworks and typifications constitute sensemaking resources because through them organizations construct and apprehend their environments. It has been suggested that expectations are a mixed blessing: they provide a significant infrastructure for everyday life, but they create blind spots for sensemaking (Weick and Sutcliffe 2007). The latter may take the form of belated recognition of unexpected events, conceal small errors that can grow larger, or lead to self-fulfilling prophecies (Catino and Patriotta 2013, Clarke 1993, Merton 1948, Olson et al. 1996). From this perspective, organizations develop expectations that become largely taken for granted over time and therefore impair the mindful processing of incoming stimuli (Weick et al. 1999). Our findings challenge the idea of expectation bias and suggest, instead, that expectations are often formulated explicitly to define a temporal order that can be used as a reference point to address change and respond to the variability of events. Because newsrooms cannot control the stream of real-world events, they stipulate expectations regarding the unfolding of the news day and fill in schedules with anticipated stories and ready-made coverage. These expectations provide a background structure that defines a day's news cycle and allows news workers to compare incoming information with an established plan of action. These findings suggest a distinction between implicit and explicit expectations. In the former case, expectations work as assumptions that are taken for granted. Organizational members seek confirmation of their expectations, normalize deviations, and maintain the status quo. In the latter case, organizational members are particularly mindful of information that does not fit expectations. They establish expectations as reference points, notice deviations from expectations, and take corrective action. We propose that expectations, when formulated explicitly, can be a source of mindfulness and a driver for change. They enhance the attentional capacity of organizations so that specific cues can be noticed and typified (Rerup 2009).

In a similar vein, typifications provide shared interpretive schemes that individuals and groups within organizations recursively enact in response to irregularities, discontinuities, and, more generally, events that



challenge existing expectations (Emirbayer and Mische 1998). Whenever deviations from the expected occur, generating discrepancies between clock time and event time, sense is made by referring the unexpected event to familiar response patterns (schemes, lists, templates, labels, etc.). Ethnomethodologists have studied the use of typification as a tool for understanding how people such as doctors, prosecutors, and police officers achieve a sense of predictability in their work (Garfinkel 1967). In these professions, individuals operate with a sense of a "typical" situation, which allows them to bracket the unique features of emergent issues and recognize their recurrent elements. Our study suggests that typifications work in tandem with expectancy frameworks, from which they acquire sense and from which they contribute to modifying through continuous updating. In the context of newsmaking, typifications allow news workers to insert breaking news stories within the temporal structure predefined by the expectancy framework and to update existing plans based on the salience of incoming stories. However, typifications are in turn subjected to bias and can lead to misjudgments of events that do not fit the type. For example, the Red Cross story exemplifies how an error in fact-checking underlying the creation of the expectancy framework led news workers to underestimate the impact on the audience in their typification of the story. This was eventually addressed by incorporating the actions of the competitors in the typification process. Depending on the scope of typifications, news stories may get either under- or overcovered. When this occurs, typifications need to be reviewed or changed.

Navigating transitions between planned and unexpected events requires that both expectations and typifications are held to lightly and treated as features that are subject to regular revision. From this perspective, organizations need to plan so that they have something they can modify. The recipe seems to be that "it is much easier to modify what you already have got (expectancy framework) than to create a structure in the light of changing events." Through expectancy frameworks and typifications, organizations set up revisable structures that define what is known in order to make sense of what is unknown.

Limitations and Directions for Future Research

This study has limitations that must be acknowledged. We have chosen to examine processes of temporal organizing and sensemaking in one news organization. Additionally, the observations are focused on the dynamics unfolding in the newsroom where decisions are being made, and we have not collected detailed empirical evidence from the perspective of the other stakeholders (e.g., competitors, viewers). It is important to note that the portrayal of news work in social science research has

been consistent for decades. In particular, classic ethnographies of newsrooms have long shown that temporality has a profound impact on processes of routinization of the unexpected, which in turn affect how the news is produced (Epstein 1973; Gans 1979; Molotch and Lester 1974; Schlesinger 1978; Tuchman 1973, 1978). However, technology in the news business is constantly evolving, and some of the tools used by the reporters at Local TV at the time of data collection are likely to be replaced by novel ways of gathering news. Thus, the ideas put forward in this article are likely to have a lasting impact, but the manner in which they manifest themselves will continue to evolve.

Although the findings are based on a case study conducted in one particular news organization, the issues under investigation and the dynamics portrayed are familiar to other settings, particularly fast-response and high-reliability organizations (e.g., Bigley and Roberts 2001, Faraj and Xiao 2006, Vogus and Welbourne 2003, Weick and Roberts 1993, Weick et al. 1999). These organizations face unexpected events on a regular basis and have to achieve coordination and decision making under time pressure. Because newsrooms are characterized by a distinctive ecology of action and structure, further research should be carried out in other fast-response settings to validate and extend our findings. For example, hospital emergency departments and trauma centers rely on routines, protocol, and admission codes that set workflow expectations and provide an underlying structure for addressing input uncertainty (Argote 1982). Triage mechanisms are in place to categorize patients and determine the priority of patients' treatments based on the severity of their condition. Similar to the typification of breaking news stories, triage allows for the efficient allocation of scarce resources in response to the progress of emergencies. Responses to emergency combine strict protocols and admission codes with improvisational action, dynamics delegation, and dialogic practices (Faraj and Xiao 2006, Klein et al. 2006). Future studies could explore what expectancy frameworks and typifications look like in these settings and how they affect sensemaking during transitions between planned and unexpected events.

Conclusion

A focus on the interaction between expectancy frameworks and typifications helps scholars understand how temporal organizing affects sensemaking processes at work. The sensemaking sequence seems to be as follows: organizations build an expectancy framework and disseminate it through plans, routines, and schedules; events occur that interrupt it; and interruptions are made meaningful through typifications, which update the original expectancy framework. The sensemaking



achieved through expectancy frameworks and typifications might give organizations an edge over competitors, match competitors' meanings, or—in the case of errors and misjudgments—create situations of disadvantage. All of this happens within time boundaries. This seems to be a microcosm of organizing in general: to weaken expectancy frameworks and typifications is to disorganize.

Acknowledgments

The authors thank editor Dan Levinthal and two anonymous reviewers for their helpful suggestions and constructive guidance throughout the review process. The authors are deeply grateful to Beth Bechky, Pablo Boczkowski, Laurie Cohen, Joep Cornelissen, Jochen Koch, Davide Ravasi, Ryan Smerek, Simona Spedale, Kathie Sutcliffe, Tim Vogus, Tony Watson, Klaus Weber, and Karl Weick for their insightful comments on earlier drafts of the manuscript. Previous versions of the manuscript were presented at the Academy of Management and European Group for Organizational Studies conferences. The authors also received valuable feedback from the seminar audiences at Cranfield Business School, Lancaster School of Management, Northwestern University's Medill School, and the University of Michigan's Ross School of Business.

Endnotes

¹Other distinctions include contrasting linear time with cyclical time, objective with subjective, homogeneous with heterogeneous, regular with irregular, precise with imprecise, reversible with irreversible, and so on (see Ancona et al. 2001 for a full review of concepts of time).

²It is important to note that whereas phenomenologists such as Berger and Luckmann and Schütz apply the concept of typification to face-to-face encounters, we use it to explain how individuals and groups in the work setting encounter, and make sense of, unfolding events. This has significant implications, as we are not interested in behavioral or interaction dynamics (i.e., reciprocal typifications) but rather in the sensemaking processes enacted in event-based dynamics.

References

- Adam B (1995) Timewatch: The Social Analysis of Time (Polity Press, Cambridge, UK).
- Ancona D, Chong C-L (1996) Entrainment: Pace, cycle, and rhythm in organizational behavior. Cummings L, Staw B, eds. Research in Organizational Behavior, Vol. 18 (JAI Press, Greenwich, CT), 251–284.
- Ancona D, Chong C-L (1999) Cycles and synchrony: The temporal role of context in team behavior. Mannix EA, Neale MA, eds. *Groups in Context*, Research on Managing in Groups and Teams, Vol. 2 (JAI Press, Greenwich, CT), 33–48.
- Ancona DG, Okhuysen GA, Perlow LA (2001) Taking time to integrate temporal research. Acad. Management Rev. 26(4):512–529.
- Argote L (1982) Input uncertainty and organizational coordination in hospital emergency units. Admin. Sci. Quart. 27(3):420–434.
- Baker T, Nelson RE (2005) Creating something from nothing: Resource construction through entrepreneurial bricolage. Admin. Sci. Quart. 50(3):329–366.

- Barley SR (1988) On technology, time, and social order: Technically induced change in the temporal organization of radiological work. Dubinskas FA, ed. *Making Time: Ethnographies of High Technology Organizations* (Temple University Press, Philadelphia), 123–169.
- Bechky BA, Okhuysen GA (2011) Expecting the unexpected? How SWAT officers and film crews handle surprises. *Acad. Management J.* 54(2):239–261.
- Berger PL, Luckmann T (1967) *The Social Construction of Reality* (Doubleday, Garden City, NY).
- Berkowitz D (1992) Non-routine news and newswork: Exploring a what-a-story. *J. Commun.* 42(1):82–94.
- Bigley GA, Roberts KH (2001) The incident command system: High-reliability organizing for complex and volatile task environments. *Acad. Management J.* 44(6):1281–1299.
- Bluedorn AC, Denhardt RB (1988) Time and organizations. *J. Management* 14(2):299–320.
- Boczkowski PJ (2004) Digitizing the News: Innovation in Online Newspapers (MIT Press, Cambridge, MA).
- Brown SL, Eisenhardt KM (1995) Product development: Past research, present findings, and future directions. Acad. Management Rev. 20(2):343–378.
- Butler R (1995) Time in organizations: Its experience, explanations and effects. *Organ. Stud.* 16(6):925–950.
- Catino M, Patriotta G (2013) Learning from errors: Cognition, emotions and just culture at the Italian air force. *Organ. Stud.* 34(4): 437–467.
- Charmaz K (2006) Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis (Sage, London).
- Clark PA (1985) A review of theories of time and structure for organizational sociology. Bachrach SB, Mitchel SM, eds. Research in the Sociology of Organizations, Vol. 4 (JAI Press, Greenwich, CT), 125–176.
- Clarke L (1993) The disqualification heuristic: When do organizations misperceive risk. Res. Soc. Problems Public Policy 5(1):289–312.
- Crossan M, Pina e Cunha M, Vera D, Cunha J (2005) Time and organizational improvisation. Acad. Management Rev. 30(1): 129–145.
- Eisenhardt KM (1989) Making fast strategic decisions in high-velocity environments. *Acad. Management J.* 32(3):543–576.
- Emirbayer M, Mische A (1998) What is agency?. *Amer. J. Sociol.* 103(4):962–1023.
- Epstein EJ (1973) News from Nowhere: Television and the News (Ivan R. Dee, Chicago).
- Faraj S, Xiao Y (2006) Coordination in fast-response organizations. *Management Sci.* 52(8):1155–1169.
- Feldman MS (2000) Organizational routines as a source of continuous change. *Organ. Sci.* 11(6):611–629.
- Feldman MS, Pentland BT (2003) Reconceptualizing organizational routines as a source of flexibility and change. *Admin. Sci. Quart.* 48(1):94–118.
- Fried Y, Slowik LH (2004) Enriching goal-setting theory with time: An integrated approach. *Acad. Management Rev.* 29(3):404–422.
- Gans HJ (1979) Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek, and Time (Vintage, New York).
- Garfinkel H (1967) Studies in Ethnomethodology (Prentice-Hall, Englewood Cliffs, NJ).
- Gersick CJ (1989) Marking time: Predictable transitions in task groups. Acad. Management J. 32(2):274–309.
- Gersick CJ (1994) Pacing strategic change: The case of a new venture. Acad. Management J. 37(1):9–45.
- Glaser B, Strauss A (1967) The Discovery of Grounded Theory: Strategies for Qualitative Research (Aldine, Chicago).



- Hassard J (1991) Aspects of time in organization. *Human Relations* 44(2):105–125.
- Hatch MJ (1998) The Vancouver Academy of Management Jazz Symposium—Jazz as a metaphor for organizing in the 21st century. Organ. Sci. 9(5):556–568.
- Jacques E (1982) The Form of Time (Heinemann, London).
- Jett QR, George JM (2003) Work interrupted: A closer look at the role of interruptions in organizational life. Acad. Management Rev. 28(3):494–507.
- Kaplan S, Orlikowski WJ (2013) Temporal work in strategy making. Organ. Sci. 24(4):965–995.
- Klein KJ, Ziegert JC, Knight AP, Xiao Y (2006) Dynamic delegation: Shared, hierarchical, and deindividualized leadership in extreme action teams. Admin. Sci. Quart. 51(4):590–621.
- Klinenberg E (2005) Convergence: News production in a digital age. Ann. Amer. Acad. Political Soc. Sci. 597(1):48–64.
- Lee H, Liebenau J (1999) Time in organizational studies: Towards a new research direction. Organ. Stud. 20(6):1035–1058.
- Levine RV (1997) A Geography of Time: The Temporal Misadventures of a Social Psychologist (Basic Books, New York).
- Levinthal D, Rerup C (2006) Crossing an apparent chasm: Bridging mindful and less-mindful perspectives on organizational learning. *Organ. Sci.* 17(4):502–513.
- Louis MR, Sutton RI (1991) Switching cognitive gears: From habits of mind to active thinking. *Human Relations* 44(1):55–76.
- Lowrey W (2008) News routines. Donsbach W, ed. The International Encyclopedia of Communication (Blackwell, Malden, MA), 3271.
- Madsen P, Desai V, Roberts K, Wong D (2006) Mitigating hazards through continuing design: The birth and evolution of a pediatric intensive care unit. *Organ. Sci.* 17(2):239–248.
- Maitlis S, Christianson M (2014) Sensemaking in organizations: Taking stock and moving forward. Acad. Management Ann. 8(1): 57–125
- March JG, Simon HA (1958) Organizations (John Wiley & Sons, New York).
- McGrath JE, Rotchford NL (1983) Time and behavior in organizations. Cummings L, Staw B, eds. *Research in Organizational Behavior*, Vol. 5 (JAI Press, Greenwich, CT), 57–101.
- Merton RK (1948) The self-fulfilling prophecy. *Antioch Rev.* 8(2): 193–210.
- Milliken FJ (1987) Three types of perceived uncertainty about the environment: State, effect, and response uncertainty. *Acad. Management Rev.* 12(1):133–143.
- Miner AS, Bassof P, Moorman C (2001) Organizational improvisation and learning: A field study. *Admin. Sci. Quart.* 46(2):304–337.
- Molotch H, Lester M (1974) News as purposive behavior: On the strategic use of routine events, accidents, and scandals. *Amer. Sociol. Rev.* 39(1):101–112.
- Okhuysen GA, Bechky BA (2009) Coordination in organizations: An integrative perspective. *Acad. Management Ann.* 3(1):463–502.
- Olson JM, Roese NJ, Zanna MP (1996) Expectancies. Higgins ET, Kruglanski AW, eds. *Social Psychology: Handbook of Basic Principles* (Guilford Press, New York), 211–238.
- Orlikowski WJ, Yates J (2002) It's about time: Temporal structuring in organizations. *Organ. Sci.* 13(6):684–700.
- Patriotta G (2003a) Detective stories and the narrative structure of organizing: Towards an understanding of organizations as texts. Czarniawska BB, Gagliardi P, eds. *Narratives We Organize By* (John Benjamins, Amsterdam), 149–170.
- Patriotta G (2003b) Sensemaking on the shopfloor. *J. Management Stud.* 40(2):349–375.

- Pentland BT, Rueter HH (1994) Organizational routines as grammars of action. *Admin. Sci. Quart.* 39(3):484–510.
- Perrow C (1967) A framework for the comparative analysis of organizations. *Amer. Sociol. Rev.* 32(2):194–208.
- Rerup C (2009) Attentional triangulation: Learning from unexpected rare crises. *Organ. Sci.* 20(5):876–893.
- Roberts KH (1990) Some characteristics of one type of high reliability organization. *Organ. Sci.* 1(2):160–176.
- Roth JA (1963) Timetables: Structuring the Passage of Time in Hospital Treatment and Other Careers (Bobbs-Merrill, Indianapolis).
- Sandelands LE, Stablein RE (1987) The concept of organization mind. *Res. Sociol. Organ.* 5:135–161.
- Schlesinger P (1977) Newsmen and their time-machine. *British J. Sociol.* 28(3):336–350.
- Schlesinger P (1978) Putting "Reality" Together: BBC News (Routledge, London).
- Schudson M (1978) Discovering the News: A Social History of American Newspapers (Basic Books, New York).
- Schudson M (1986) Deadlines, datelines and history. Manoff RK, Schudson M, eds. Reading the News: A Pantheon Guide to Popular Culture (Pantheon Books, New York), 79–108.
- Schütz A (1967) *The Phenomenology of the Social World* (Northwestern University Press, Evanston, IL).
- Strauss A, Corbin JM (1990) Basics of Qualitative Research: Grounded Theory Procedures and Techniques (Sage, Newbury Park, CA).
- Thompson JD (1967) Organizations in Action: Social Science Bases of Administrative Theory (McGraw-Hill, New York).
- Tuchman G (1973) Making news by doing work: Routinizing the unexpected. *Amer. J. Sociol.* 79(1):110–131.
- Tuchman G (1978) Making News: A Study in the Construction of Reality (Free Press, New York).
- Turner SF, Rindova V (2012) A balancing act: How organizations pursue consistency in routine functioning in the face of ongoing change. *Organ. Sci.* 23(1):24–46.
- Vogus TJ, Welbourne TM (2003) Structuring for high reliability: HR practices and mindful processes in reliability-seeking organizations. J. Organ. Behav. 24(7):877–903.
- Weick KE (1993) The collapse of sensemaking in organizations: The Mann Gulch disaster. *Admin. Sci. Quart.* 38(4):628–652.
- Weick KE (1995) Sensemaking in Organizations (Sage, Thousand Oaks, CA).
- Weick KE (1998) Improvisation as a mindset for organizational analysis. *Organ. Sci.* 9(5):543–555.
- Weick KE, Roberts KH (1993) Collective mind in organizations: Heedful interrelating on flight decks. *Admin. Sci. Quart.* 38(3):357–381.
- Weick KE, Sutcliffe KM (2007) Managing the Unexpected: Resilient Performance in an Age of Uncertainty, 2nd ed. (Jossey-Bass, San Francisco).
- Weick KE, Sutcliffe KM, Obstfeld D (1999) Organizing for high reliability: Processes of collective mindfulness. Sutton RI, Staw BM, eds. Research in Organizational Behavior, Vol. 21 (JAI Press, Greenwich, CT), 81–123.
- Wiebe E (2010) Temporal sensemaking: Managers' use of time to frame organizational change. Hernes T, Maitlis S, eds. *Process*, *Sensemaking and Organizing* (Oxford University Press, Oxford, UK), 213–241.
- Yakura EK (2002) Charting time: Timelines as temporal boundary objects. Acad. Management J. 45(5):956–970.
- Zerubavel E (1979) Patterns of Time in Hospital Life: A Sociological Perspective (University of Chicago Press, Chicago).



Gerardo Patriotta is professor of management and organization at the Nottingham University Business School, UK. He received his Ph.D. in business studies from the University of Warwick. His research has examined processes of sensemaking in the context of controversies, transitions between routine and nonroutine events, face-to-face interaction, alliance negotiation, performance evaluation, learning from errors, and identity work.

Daniel A. Gruber is an assistant professor in the Medill School of Journalism, Media, Integrated Marketing Communications and Kellogg School of Management (by courtesy) at Northwestern University. He completed his Ph.D. in management and organizations at the University of Michigan's Ross School of Business. His interdisciplinary research focuses on organizational sensemaking, the media industry, and managing integration.



Copyright 2015, by INFORMS, all rights reserved. Copyright of Organization Science: A Journal of the Institute of Management Sciences is the property of INFORMS: Institute for Operations Research and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.