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Translating the Distant into the Present: How actors address distant past and future events through situated activity

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Abstract

Situated views demonstrate how ongoing activity is both framed by temporal structures and serves to reproduce those same structures. Yet, recent research on temporality shows that addressing distant events enables actors to reflect on and eventually transform the temporal structures that frame their ongoing activity. We develop a theoretical framework of how actors address distant events through situated activity in organizations in three steps. First, we discuss the notion of situated temporality to describe how actors go beyond, and potentially transform, the temporal structures within which they operate as they address distant events through situated activity. Second, we introduce the concepts of singular and exemplary events to show how distant pasts and futures comprise different combinations of events. Third, we discuss how certain areas of organization studies that advocate a situated view, notably practices, routines and materiality, may benefit from a situated temporal view. At the paper's conclusion we suggest the concept of 'temporal translation' to describe the process of how actors may combine different temporalities through situated activity.

Keywords

distant events, temporal structures, practice theory, routines, materiality, process theories, structuration, temporal translation, time, situated views

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Introduction

The killing of Karolin Hakim, an innocent 31-year old mother and medical doctor, who was shot in a street in Malmö, Sweden, on 26 August 2019, became widely known as yet another senseless killing in Sweden. The country, traditionally having low rates of gun-related crimes, has experienced a steep rise in shooting-related deaths in recent years. This and other similar events prompted Swedish police to search for solutions, which made them realize that it took 150 days for investigators to obtain results from the forensic laboratory. A delay of 150 days considerably diminishes the chances of resolving cases, which involves identifying suspects, interviewing witnesses and gathering other circumstantial evidence. Drawing on the experience of police in New Jersey, USA, Swedish police now aim to reduce the forensics turnaround time from 150 days to a matter of hours, which would alter the moment-to-moment work of investigating. Police in New Jersey have demonstrated how, by reducing forensics turnaround to a few hours, the very temporality of investigations changes. Such a change in the temporal structure of investigations into shooting deaths, they believe, will help prevent events such as the death of Hakim (Aftenposten, 2019; Aftonbladet, 2019).

This anecdote exemplifies how actors reproduce the temporal structures within which they operate, while their situated activity also takes part in the transformation of those structures. The concept of temporal structure is important because it conditions ongoing activities of investigators, such as their practices and routines, by setting expectations about when during the investigation significant activities and events will take place. A 150-day wait for forensic results implies that other activities will take place between the event of the crime and the event of receiving the results than if the wait is just a few hours. By radically shortening the forensic routine upholding the temporal structure actors bring the event of the killing more sharply into focus. Therefore, if we were to analyse the impact of such transformation of the temporal structure it would be important to define the events that the activities are oriented towards.

The main event, of course, is the killing itself, which is subject to multiple efforts to hypothesize the exact circumstances of the killing. The main event fades into the distant past as investigative activities become guided by everyday routines and other, more general events, such as getting the results from forensics. A comprehensive analysis of what happens as actors transform the way they work needs to take account, not just of the temporal structures that frame their activity, but also of the more distant events that may or may not fall within those temporal structures. In this paper we draw an important distinction between types of events that actors address through ongoing activity. Events, such as the killing, fall into the category of what we call singular events, which appear more unique and succinct to actors and are addressed differently through their activity than the category of exemplary events, which are of a more repeatable and general nature, such as getting data during the investigation. We will illustrate how distant pasts and futures are constituted by both these two types of events, which influence how actors relate to their temporal structures

This paper's main contribution is to show how actors transcend the temporal structures within which they operate by addressing what we call distant events that lie beyond those structures, as illustrated by the above story. The underlying puzzle discussed in this paper is how actors, while acting to uphold a structure, may simultaneously contribute to its transformation through their ongoing activity. To paraphrase Emirbayer and Mische (1998, p. 984), the question relates to how while immersed in a temporal flow, actors move 'beyond themselves' by transcending the temporal structures through which they operate. In order to better understand how actors 'move beyond themselves' it is necessary to take a situated view, which we define as focusing the analysis on how actors produce and reproduce the structures guiding their activity. Central areas of organization theory that take a situated view of actors, such as studies of practices, routines and materiality, focus mainly on how actors maintain temporal structures through their activity. Our argument is that such a focus is crucial, but it does not

explain well how temporal structures may be transformed, which requires a more explicit temporal lens that takes into consideration the influence of addressing distant events.

Temporal, guide most activities in organizations (Kunisch et al., 2017). Whereas definitions of temporal structures vary, scholars generally agree that they consist of recurring actions and events that are produced and reproduced reflexively by actors. We propose a dual definition of temporal structures. One the one hand they are descriptive of the pacing, speed, rhythm and timing of events and activities, (Orlikowski & Yates, 2002); On the other hand, express the temporal orientations (Das, 2006; Reinecke & Ansari, 2015) of those activities and events, including their reach into the past and/or future (see also Rowell, Gustafsson, & Clemente, 2017). The assumption is that activities and events that come to form part of temporal structures do not just take place in time, such as quarterly reporting taking place every three months. Events and activities of temporal structures also embody temporal orientation, such as quarterly reports being oriented three months into the past.

With this dual definition of temporal structures in mind, we engage selected areas of organizational research that apply a situated view, such as practices (e.g. Jarzabkowski & Spee, 2009; Kaplan & Orlikowski, 2013), routines (e.g. Feldman & Pentland, 2003; Feldman, Pentland, D'Adderio, & Lazaric, 2016) and materiality (e.g. Suchman, 1987) to argue how actors may address distant events that lie beyond their temporal structures. We argue that studies in these areas tend to be underpinned by the assumption that the activities uphold and reproduce temporal structures but are less focused on how such structures may be transformed through situated activity. Such studies typically assume a reflexive relationship between actors and temporal structures (e.g. Orlikowski & Yates, 2002). Reflexivity implies a mutually iterative relationship between actors' activities and the temporal structures they inhabit. The very definition of reflexive is to perform acts without having to resort to conscious thought. Nevertheless, actors sometimes address events beyond those temporal structures, as

shown in the above anecdote, which requires that they *reflect* on the structures, which in turn makes it possible to transform those same structures. This suggests that while actors entertain a reflexive relationship with their temporal structures, they may also entertain a *reflective* relationship with their temporal structures as they reach beyond them to address more distant events. When actors reach 'beyond', they can question and reflect on the temporal structures that frame their activities and lay the basis for the transformation of those same structures.

When we use the term 'reflection', we do not imply introspective processes of individual reflection but socially performative 'acts of reflection'. Schütz (1967, p. 51) elaborates the importance of 'acts of reflection' in his critique of the reflexive view. Schütz argues that 'reflection' enables actors to 'differentiate' the lived experience and move beyond the ongoing flow of activities by bringing distant experiences into the present. Schütz refers to the acts of bringing past experiences into the 'now' as both retrospective and projective reflections on events. Mische (2009) echoes Schütz's critique of reflexive views by pointing out that sociologists have not paid sufficient attention to how actors imagine distant futures (we can argue the same for distant past events). For example, she critiques the sociology of practice, arguing that it has largely led researchers to overlook the distant future orientations of actors. Drawing on Schütz's (1967) sociology of time and Mead's philosophy of time, we aim to develop the conceptualization of a reflective-cum-reflexive relationship between actors and the temporal structures within which they operate. We stress that our contribution does not mean to exclude a reflexive view but to extend it to include reflection. As actors address distant events through situated activity, they reproduce by default those same temporal structures that they transcend.

The paper first shows how temporality is an emerging view across several areas in organization studies, leaving a gap in our understanding of the activities through which actors address distant pasts and futures. We elaborate the concepts of events by proposing how actors address past and future events while being guided by temporal

structures. Next, we advance the concept of situated temporality, drawing upon Mead's (1932) notion of 'materials of the present' in our theorizing of how actors address distant past and future events. Third, we suggest a distinction between singular and exemplary events in order to substantiate what actors address in past and future events as they reflect beyond their temporal structures. Fourth, we show how this situated view of temporality may both challenge and extend three important areas in organization studies: practices, routines and materiality. Finally, we discuss how the concept of 'temporal translation' may help explain how actors bring distant events into their temporal structures, and vice versa, through processes of displacement and transformation.

Temporality in Organization Studies

Scholars have developed and applied a growing volume of temporal analysis in areas such as sensemaking (Gephart, Topal, & Zhang, 2010; Wiebe, 2010), narratives (Cunliffe, Luhman, & Boje, 2004), identity (Schultz & Hernes, 2013), institutions (Rowell et al., 2017), organizations and environment (Slawinski & Bansal, 2012), change (Hernes & Pulk, 2019; Hussenot & Missonier, 2016; Reinecke & Ansari, 2015), temporary organizations (Stjerne & Svejenova, 2016), history (Hatch & Schultz, 2017; Suddaby, Foster, & Trank, 2010) and strategy research (Kaplan & Orlikowski, 2013; Schultz & Hernes, 2019). Such works have helped shift the research focus on organizations from viewing time as a resource to be managed in terms of speed, rhythm, duration, or timing, to time as the very medium through which actors address and translate their realities. Emerging views of organizational temporality typically assume that the agency of time is located in the present, which serves as the locus of defining pasts and futures. This makes the temporal present a constant source of organizational continuity and change, of routine and opportunity, of decisions and controversy, of historicizing, forecasting and anticipation. Similarly, pasts and futures projected in the present are neither given nor stable but require constant attention and negotiation in an ongoing present (Schultz & Hernes, 2013).

Several studies address the question of how pasts and/or futures are addressed in the present. Although the works vary in how they combine present, past and future, they share the underlying ideas that the present is the locus of experience (Mead, 1932) and the past and future are inextricably linked through the activities of the present. Consequently, these studies avoid the prevalent idea from earlier mainstream works that present, past and future may be considered separate temporal segments; instead, recent studies focus on how the past and future become related through ongoing activities. For example, Suddaby et al. (2010) explain how actors use selected historical events for future strategic purposes. Kaplan and Orlikowski (2013) show how strategies emerge through what they call 'temporal work' in the present. Schultz and Hernes (2013) show how distant futures and pasts may be connected to redefine the development of an organization's identity. Slawinski and Bansal (2012) show how firms that persistently connected past and future events to the present were better able to respond to distant climate changes, compared to firms that did not make these connections. Reinecke and Ansari (2015) show how, when actors integrate 'processual' and linear clock-based time in their operations, they may respond better to the complex demands of the market. Works such as these have advanced the theoretical agenda of temporality in organization studies by replacing the foregrounding of chronological, or 'Newtonian', time with event- and process-based views.

Although most of the temporal research described above goes beyond conceiving the present, past and future as separate temporal segments, it reflects two lacunae, both of which hamper its ability to extend a broader temporal understanding to organizational research that subscribes to a situated view of activity. First, research employing a temporal lens needs to focus more explicitly on the activities through which actors address distant past and future events. Whereas studies within practices, routines or materiality have yet to offer fully developed temporal views that show how actors may, through their activities, address events beyond the scope of their temporal structures, temporal studies of organizations lack the situated

activity dimension offered by areas, such as practices, routines and materiality. Temporal research should therefore engage the activities through which actors imagine pasts and futures that lie beyond the scope of their temporal structures. Temporal structure, as we define it, describes past and/or future activities and events that actors reproduce through their activity, and the scope of those structures describes the temporal distancing of those activities or events from the present. For example, strategic plans, a common temporal structure in organizations, include the configuration of events that typically guide managers. The scope of those structures may vary, although it typically includes three to five years into the future combined with reports of past results for six to twelve months (Schultz & Hernes, 2019).

Second, although temporal research engages how actors address the past and future in ongoing activities, it does not adequately specify the nature of those pasts and futures, particularly the more distant pasts and futures. As noted, we use the concept of 'events' to further elaborate the nature of the past and future. 'Events' tend to be used indiscriminately to refer to a brief segment of time that causes surprise, disruption, or change. Events are periods, occasions, or happenings marked by beginnings and ends (Hendry & Seidl, 2003; Hernes, 2014) that actors retain or address as they move through time. As actors encounter new experiences and those experiences fade into the past, they are combined and stored as events. Past events may consist of particular experiences, occasions, or periods that are available for actors' recall. Events do not have defined durations, as they are more like clusters of many occasions that crystallize into 'events'. Someone may recall the wink of an eye (Hernes, 2014) years later and make it significant by relating it to other happenings that have occurred since then, just as a yearslong period of change may be referred to as an event when someone looks back on it from a more distant future. Future events consist of projected or hypothesized happenings that actors use as a reference for moving into the future. This may be a dinner someone is hosting tomorrow for friends as well as the aspiration to become carbon

neutral in 2050. Thus, events are not defined by their duration but by their particular significance to organizational actors. When we suggest the term 'distant' events, we do not mean distant in a chronological sense but, rather, as that which lies beyond the scope of actors' current temporal structures.

Situated Temporality, Temporal Distancing and the Becoming of Events

Although assumptions about time by definition underpin situated views, scholars rarely make those assumptions explicit. A main argument of this paper is that actors, through their situated activity, reproduce their temporal structures while they may also address distant events. Although the distant and the present are treated as temporally different phenomena, they are not only intertwined, but the distant may also be seen as flowing from the present, which is why it is important to consider the two as closely interrelated. Scholars of the philosophy of time generally concur that any temporal experience takes place in the present, the 'raw experience prior to an individuated conscious being' (Helin, Hernes, Hjorth, & Holt, 2014, p. 4). In social settings, the 'raw experience' consists of undifferentiated flows (Hernes, 2014) that still have no future or past but are grasped as they unfold. As actors strive to extend those flows into past and future as part of their sensemaking, they assign flows to events. Mead explains how actors continually encounter streams of experiences in the present which do not occur as delineated events but may begin to crystallize as events as they wane into the immediate past. Drawing on Schütz (1967), who describes how projections of future events are woven into the present, we could argue that a similar process occurs in the formation of future events.

We adopt the concept of situated temporality for how actors address past or future events through situated activity. Mead (1932, p. 29) used the expression 'materials' of the present as a medium through which events are made intelligible in the present. Mead's point was that as

the 'seat of reality', the present furnishes the materials out of which the past (and the future) are constructed, and that those materials (images, data, etc.) shape how past and future events are addressed by actors. Mead left the notion of 'materials' quite broad. According to Mead, accessing the past may occur through memory images that actors possess in the present. While the events waning into the past represent a distancing from the present (Mead, 1932), actors still face ongoing streams of experiences in the present. Extending Mead's argument, we conceptualize a dual situation in which actors make sense of past events through their 'materials of the present', which is the stuff from which events were derived in the first place. There is no way to separate the two except through analysis because those streams never stop; nor does the crystallization of new events from current and past experiences ever terminate:

All such lived experiences, whether passive or active, are lacking in meaning and discrete identity. At the same time, they are actually lived through, they are not given to us as separate and distinct entities. However, once they have receded a slight distance into the past, that is, once they have 'elapsed,' we may turn around and bring to bear upon them one of the aforementioned Acts of reflection, recognition, identification, and so forth. (Mead, 1932, p. vii)

Just as Mead paid particular attention to the past, Schütz (1967) was equally clear that the future is understood through the lens of events. In arguing that actors act toward a predefined distant future act, he emphatically described the imagined future accomplished act as 'a full-blown, actualized event, which the actor pictures and assigns to its place in the order of experiences given to him at the moment of projection' (Schütz, 1967, p. 61). Note that Schütz described future events as rooted in the spontaneous activity of the present, through which actors perform 'phantasying' of the future (p. 59). Schütz articulates that future events derive from the activity of the present, in much the same way that Mead saw past events as derived from the present.

Following Mead and Schütz, we argue that 'temporal distancing' occurs as events are created

and recreated retrospectively or prospectively beyond actors' ongoing temporal structures as the actors move through time. Such views resonate with how Orlikowski and Yates (2002) view actors as temporally (and spatially) embedded through their practices, a view they share with scholars such as Suchman (1987) and Schatzki (2006). However, whereas these works confine actors' attention to the scope of their ongoing temporal structures, we extend the view beyond the scope of temporal structures to include distant past and future events. This is consistent with our definition of temporal structures as not being just descriptive of recurring events and activities, but also expressive of the temporal orientation of those events and activities.

The emphasis on temporal distancing has several implications for how actors reflect on events. First, investigating the question of how actors may transcend their temporal structures is not only important for a deeper theoretical understanding of the temporal dynamics of organizing; in empirical terms, it brings better understanding of how organizations may be able to sustain focus on their long-term goals, such as those related to climate change (Wright & Nyberg, 2017). For example, while more organizations have developed goals to become carbon neutral by 2050, few realize how this may significantly challenge their current temporal structures. However, as actors find ways to look beyond their ongoing temporal structures, they are better able to reflect on the broader implications of what they are doing, while simultaneously looking at what they are doing in the present through those broader implications.

Second, temporal distancing raises the question of what actors address in past and future events. As noted, sociological studies of time describe pasts and futures in general terms of events (Mead, 1932; Schütz, 1967), just as works in economic sociology, such as Beckert's (2016), refer extensively to events but tend to assume that events simply wait to happen to actors. Among organization studies, Ancona, Goodman, Lawrence, and Tushman's (2001, p. 648) rendering reflects this view, whereby events 'don't just transpire every day; they occur at specific times throughout the day', and this view also portrays

Characteristic	Singular events Unique	Exemplary events Representative
Rationale/motive	'Because of'	'In order to'
Relationality	Autonomous	Interdependent
Context	Choice, ambiguity and agency	Alignment, connecting, bridging
Consequentiality	Highly consequential	Moderately consequential
Actors in the event	Few and given	Multiple and changing

Table 1. Definitions of singular and exemplary events.

events as exogenous to actors. While we do not refute the idea that events happen independently of actors, we work from the idea that actors respond to their own interpretations of past events or imagine future events, which may become embedded in and eventually transform the temporal structures of actors. For example, to many companies, climate change started as a future 'exogenous' event which was to be addressed by society and political actors. However, companies increasingly internalize climate change as events of activity that become part the companies' own trajectory of experience, upon which they need to reflect.

Finally, a situated temporal view not only assumes that distant events are addressed through actual activities, but it also invites investigation of the various features that describe the events actors address. By suggesting a distinction between singular and exemplary events, we answer the question of 'what' actors address in past and future events, and elaborate that distinction further below. Although every event is, in principle, unique (Hernes, 2008), we assume that actors find ways of distinguishing unique events from those that serve as proxies for multiple events. It is important to draw such a distinction primarily because the two event types perform different explanatory functions to actors as they reflect in the present.

Singular and Exemplary Events

Although the notion of events is prominent in organization studies, few scholars have

attempted to develop models of how actors establish different categories of events as they move through time. Yet, developing clearer distinctions between events is key to conceptualizing how actors relate to distant pasts and futures. For example, as actors perform temporal distancing of experience by a crystallization of such experiences into events, some events stand out as particularly distinct, and some events leave traces through time because they have essential, vivid features that stand out, such as certain people performing certain acts or making certain utterances. An example of such an event is Steve Jobs's legendary pitch to Pepsi CEO John Scully, in which he asked Scully whether he wanted to continue to sell sugar water for the rest of his life or come with Jobs and change the world. Other events leave traces through time because they represent related experiences and events and, therefore, have lessintrinsic and more-general features, as they capture and embody multiple experiences in the present. We refer to these two categories as singular and exemplary events. The distinction is inspired in part by temporal construal theory in psychology, developed by Trope and Liberman (2003, 2010), who distinguish high-construal and low-construal events. We have summarized the distinctions between singular and exemplary events in Table 1, which reflects the several dimensions along which they vary.

Singular events

Singular events are primarily evoked by virtue of what happened, how it happened, or what

might happen. They are typically characterized by which actors were present and how their interactions unfolded, such as Bowden's (2012, p. 163) rendering of President Obama's decision to go after Osama bin Laden in spite of tremendous uncertainty:

So as the conversation around him about levels of certainty wore on, the president . . . interrupted. 'This is fifty-fifty,' he said. That silenced everyone. 'Look guys, this is a flip of the coin. I can't base this decision on the notion that we have any greater certainty than that.'

In the flow of the situation, none of the involved actors could know for sure that this meeting would become a pivotal, singular event in the war on terrorism, as it could undoubtedly have been one of many failed attempts to bring down Osama bin Laden. But this 'flip of a coin' decision actually led to the termination of bin Laden and thus made it stand out, retrospectively, as a singular and highly consequential event.

Singular events are instances that help actors reflect on how things were in the past or how they may become in the future. Singular events may be described as unique, highly consequential events from which other events may evolve. Singular events stand out because of their distinctive, intrinsic qualities (Barreto & Patient, 2013). They need no external, other rationale or motive; they provide motive for action in the form of what Schütz (1967) called 'because of', by which he meant events that are necessary for other events to materialize. With regard to their features, singular events correspond to high-construal events in that they are relatively 'simple, decontextualized representations that extract the gist from the available information' (Trope & Liberman, 2003, p. 405).

When viewed retrospectively, singular events tend to be uniquely perceived historical occasions that embody particular symbolic or practical agency (e.g. Rowlinson, Hassard, & Deckert, 2014). Singular events may also be in the future, as actors imagine concrete instances that illustrate what the future will be like, or project events into the future. For example, Martin Luther King's 'I have a dream' speech includes the famous sentence, 'I have a dream

that one day on the red hills of Georgia sons of former slaves and the sons of former slaveowners will be able to sit down together at the table of brotherhood.' Such events are 'singular' because they are unique and vivid; they are easily evoked, communicated and visualized because they have essential features that are readily recognizable. And they tend to include few key actors. For this reason, people also readily recognize their context and relations to other events. For example, scenario planning may involve future singular events for actors when they can agree on the concrete consequences of possible future trajectories, such as a dramatic drop in share value or a comprehensive cyberattack. Finally, singular events may acquire emotional or institutional importance to members of an organization, as these events invite more-profound reflections of 'why' they occur. As of this writing in October 2019, a projection into a future in which the United Kingdom has left the European Union is a singular event with almost unprecedented emotional importance emerging from streams of different reflections about why this is bound to happen. This event cannot be repeated (at least not in the foreseeable future), which enhances its significance.

Exemplary events

Exemplary events represent by far the most frequent type of events in organizational life. Exemplary events may lack the uniqueness of singular events, and they are perceived to be less consequential than singular events, but they are important because they illustrate trajectories over time by showing interconnectedness between events. Exemplary events may also represent multiple instances during a certain period, a feature they share with Trope and Liberman's category of low-construal events exhibiting less-essential features, enabling them to be classified into relatively large categories (Trope & Liberman, 2003, p. 405). Executing a routine, for example, may be an important exemplary event to people, especially if people have executed it repeatedly over many years, which suggests that the routine has exhibited

robustness over time. Exemplary events may never have actually occurred or be expected to occur, but they may be understood as similar to or derivative of a larger group of events (Kahneman & Tversky, 1972) during a time period. People may see these events as 'ideal types' of multiple related events, by combining common features of broader sets of events, along the lines of 'that was how it used to happen during the past period' or 'that is how it is expected to happen during the coming period'.

In terms of rationale or motive, exemplary events represent what Schütz (1967) called an 'in order to' motive, meaning people see them as vehicles for moving on in time, because they serve as connectors or bridges between sets or trajectories of events. When people reflect back on the Brexit situation in 2019, it is highly likely that the numerous debates and votes related to Brexit in the UK's House of Commons will emerge as exemplary events; the individual votes will be long forgotten but will stand out as the 'voting events' that occurred as part of attempts to reach an agreement in parliament. In a situated temporal view, exemplary events may be seen as forming a trajectory of events leading to some expected result or set of consequences, such as the 'voting events' that eventually enable the UK to move ahead. Exemplary events may also occur through categories of organizing, such as when different types of teams mobilize in organizational transformation processes in order to enable reflections on, for example, how existing temporal structures can adapt to new environmental goals. A comprehensive change of the temporal structure, such as introducing actionable targets for the distant future may, in turn, become a singular event. Often, exemplary events lead up to or derive from singular events.

Dynamics between singular and exemplary events

The distinction between singular and exemplary events enables analysis of how actors address salient features of the past and future through their activities. A situated temporal construction, however, is most likely a shifting

combination of singular and exemplary events, as the following example from Hernes and Pulk (2019) illustrates. In their analysis of change processes at a ship-building company, Hernes and Pulk describe one event that we interpret as a singular event. The event had occurred about a decade before their research began and was commonly referred to by people interviewed as having occasioned a novel strategy in the company. The singular event was described by interviewees as a meeting between in-house naval designers and a client CEO, which led to the novel design and a distinct change in the company's strategy. Most of the people interviewed for the study retold the event as the visiting CEO having caught a glimpse of a mock drawing on the cover of the ship-building company's in-house magazine. The drawing featured a radically new way of designing ships by using a backward-sloping bow, the so-called NewBow. When the CEO inquired about the drawing, the designers explained the philosophy underlying the radically new bow idea. The discussion between the visiting CEO, his technical director and the naval designer led to a decision to mount the new bow on a ship that had already been contracted, thereby influencing the company's temporal structures with respect to customization and innovation practices. The meeting became later known as the NewBow event and details from the meeting were related in vivid terms to the researchers by people at the company. The singularity of the event made it a central event in the unfolding narrative of how the new strategy unfolded with other, related innovations, which fit with our description in Table 1 of exemplary events.

The above example illustrates several points regarding the dynamics between singular and exemplary events. First, it suggests how singular and exemplary events may be mutually related. Several years after the event, it was to stand out as a singular event to the people involved in it. At the same time, the people interviewed stressed the related, exemplary events that led up to but also derived from it, such as steps taken in its wake.

Second, the features of the singular event are important for how people imagine implications of past events for the future. Remember that the visiting CEO glimpsed a *drawing* that showed how a vessel with the new bow would look in real life. He then discussed the philosophy of the design, which led him to envisage how the construction could materialize. The materiality of the drawing likely played a role. The interactions at the meeting were also framed by an overarching projection of making something possible for the future while calling on past events. This suggests that the material activities in which the actors engage influence the actors' envisaging of past and/or future events.

Third, reflections on the distant past and future provide a new view of existing temporal structures, which may motivate and enable actors to reorient the scope of those temporal structures. In this case, the company operated according to temporal structures defining specific deadlines for ships' design changes and how to calculate them, creating a tight structure for customer interaction. The singular event eventually enabled actors to imagine a different trajectory for the future (i.e. a fleet of ships with the new bow) and led them to reorient the temporal structures towards the events that had taken place. Remember that we work with a dual definition of temporal structures as both being descriptive of the events and activities that are temporally related and how events and activities are oriented into past and future.

Fourth, we emphasize that, in the above story, singular and exemplary events all refer to the focal organization's past and future. This is not always the case, as organizational actors may address singular and exemplary events related to multiple contexts. This occurs in the paper's initial story, in which actors in the Swedish police address a category of past exemplary events of investigations among the New Jersey police in order to create similar events in their local future. By the same token, the Brexit events are addressed not only in the British parliament but also in numerous

companies, as both past exemplary events and a future singular event.

Finally, although we distinguish between singular and exemplary events here, such distinctions in practice may not always be obvious. A risk to analysis may arise if researchers are too categorical in seeking either type of event. We recognize that the types are more like Weberian ideal types and do not exist in pure form. The types may be considered as existing on two ends of a continuum, where events take on different shades of singularity or exemplarity through analysis.

Implications of Situated Temporality for Practices, Routines and Materiality

In this part we discuss the implications of our proposed theoretical framework for situated temporality for three major areas of organization studies that subscribe to a situated view. For each of the areas (practices, routines and materiality), we substitute Mead's notion of 'materials of the present' with the activity of the area of organization studies. To highlight how a situated view of organizational temporality contributes to these studies of temporal structures, we illustrate our framework in Figure 1.

The figure illustrates how our key concepts of singular and exemplary events are located beyond the scope of the temporal structures addressed by organizational actors. While singular and exemplary events may be intertwined in multiple ways, we distinguish between a retrospective and prospective orientation in the conceptualization of how organizational actors address distant past and future events. Whereas practices, routines and materiality reproduce temporal structures, as actors reflect on past and future events their reflective acts may facilitate a transformation of existing temporal structures, as illustrated in the above case. While actors may maintain and adjust temporal structures, they remain within the scope defined by the temporal structures.

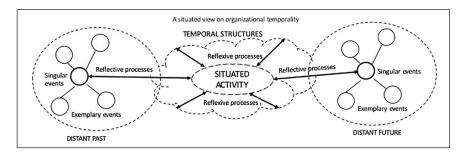


Figure 1. A theoretical framework of situated temporality.

Situated temporality of practices

Although the concept of practice may be defined in broad terms, the ontology of a practice view, as defined in recent works, relates to 'understanding how boundaries and relations are enacted in recurrent activities' (Orlikowski & Scott, 2008, p. 462). In temporal terms, practices describe a continual 'stretched-outness' in time (Schatzki, 2006, p. 1871) between the past and future as actors continually engage in collective activity. The temporal 'stretched-outness' of practices determines the scope of their temporal structure as practitioners become accustomed to what they should pay attention to in their immediate future and past. However, Mische (2009) criticizes foundational works in practice theory, starting with Bourdieu, for their exclusive focus on reflexivity, which prevents them from conceptualizing actors' future orientations. Mische's point is that foundational works, particularly those of Bourdieu and Giddens, sacrifice human actors' ability to project their action upon a more distant future in the efforts of these works to counter extremely voluntarist conceptions of human behaviour in order to make room for the reflexive dynamics between and across the structures the actors inhabit.

Practices may underpin ongoing temporal structures (Orlikowski & Yates, 2002), which frame how actors address pasts or futures through continuous enactment. For instance, Cattani, Dunbar, and Shapira (2017) analyse the legendary Steinway pianos. A central point in their analysis is the unrelenting commitment to

craft-based production since the company's founding in the mid-nineteenth century. Cattani et al. note, for example,

Being one of the only piano makers in the United States to have remained fully committed to craftsmanship since its founding, users and especially virtuoso performers have always valued the unique characteristics of Steinway pianos. Steinway & Sons never strayed from its craftbased manufacturing approach and consistently over time kept on improving its pianos and production methods. Cattani et al., 2017, p. 31)

They also describe how the practices of mounting the hammers, which made the Steinway & Sons' pianos famous in the nineteenth century, is still part of the company's craft-based production. In-house mounting of hammers is expensive and labour-intensive and is done in response to events in the company's history that lie beyond the immediate task of manufacturing a piano. The decision to reintroduce the Model K upright piano at the original premises in New York in 1982 enabled the company to maintain a traditional temporal structure of production, which had been introduced in 1903 and discontinued in the wake of the Great Depression (Cattani et al., 2017, p. 33). Although this singular event has now waned into the distant past, it may still serve as the 'because of' motive for actors as they reflect on why they should maintain such expensive and demanding practices.

Practices may also be oriented toward distant future events in ways that help actors reflect on

the basis of what they are doing at the moment. Such practices may include strategizing, which might be carried out during strategic planning, or performance/financial review (e.g. Jarzabkowski & Spee, 2009). An example is scenario planning, which is not part of the strategy-as-practice tradition but nevertheless illustrates how singular events may appear in strategy practice. The Shell company has included scenario planning as a standard practice (Sarpong & Maclean, 2011). De Geus (1988) rendering of how Shell used scenario planning in the 1980s may be captured in the following passage:

We then described a case in which the price plummeted at the end of 1985 and concluded by saying: 'And now it is April 1986 and you are staring at a price of \$16 a barrel. Will you please meet and give your views on these three questions: What do you think your government will do? What do you think your competition will do? And what, if anything, will you do?' (p. 73)

What De Geus did not discuss, but Wack (1985a, 1985b), the conceptual architect of scenario planning, explained in detail was the practice of carrying out scenario planning (see Chermack & Coons, 2015, for discussion). Although a scenario may be described as a singular event, a unique occasion corresponding to Schütz's 'because of' motive mentioned above. scenario planning also includes numerous exemplary events imagined as leading up to and resulting from the singular event scenario. Such events may include events along a plot line of possible futures related to the main scenario. Such events come close to Schütz's (1967) 'in order to' motive mentioned above and correspond to the category of exemplary events. Scenario planning is an example of how temporal structures are transformed in response to distant events that may occur suddenly, as the object of the practice is to provide a readiness to respond to crises. Although activities and events of temporal structures do not change much, the idea of the practice is for the temporal structures to be oriented towards what may happen so that the effects of, say, a sudden drop in value may be absorbed by ongoing activity.

Situated temporality of routines

Since the foundational work of March and Simon (1958), scholars have increasingly accepted routines as important building blocks of organizing and organizations (Feldman et al., 2016). Routines are essentially temporal structures (Feldman, 2000) that, through their cyclical nature, help people orient their work over time. The temporal scope of routines typically includes the cycle of the routine with which actors are occupied. For example, in their study of a video game-development studio, Goh and Rerup (2019) show how routines occupy stretches of time, regulated by the immediate temporal context of the execution of the routines. Routines are temporally structured through a cyclical temporal scope marked by, for example, cycles of annual forecasting, strategy evaluation and quarterly reporting (Perlow, Okhuysen, & Repenning, 2002).

Still, scholars have yet to investigate the broader temporal implications of routines. To date, scholars of routines have largely focused on the workings of routines as they occur in time and space (Goh & Rerup, 2019), including the accomplishment of routines in time (Feldman & Pentland, 2003), their persistence through time (Goh & Rerup, 2019) and their replication over time (d'Adderio, 2014). Works such as these demonstrate primarily the reflexive relationship among actors, their actions and routines. For example, in their important paper on routines, Feldman and Pentland (2003, p. 95) suggest that while routines are ways to reenact the past and express future realities, the performance and adaptation of routines is an ongoing, reflexive process. Routine research tends to assume implicitly or explicitly an inward temporal orientation of routines towards iteration of cycles and emphasizes to a lesser extent how actors evoke pasts that lie beyond the previous cycle of iteration or envisage a future that lies beyond the next cycle of iteration. However, looking beyond the temporal scope of routines enables actors to make sense of the routines in a broader context and to reflect on scope for change.

We have been at pains to find, in the literature on routines, examples of actors addressing

distant events while executing routines. The difficulty of finding such instances may result from the fact that such instances are rare or unnoticed (Feldman & Pentland, 2003), which may explain why they are underreported in the relevant literature. Given that routines emerge incrementally over time and are continually modified through improvisation and problemsolving, they reflect hard-won learning that emphasizes successes over failures (Levitt & March, 1988). Nevertheless, studies show how actors may address distant events by engaging in routines in ways that modify present routines. Longitudinal studies of new product development include, for instance, the study by Salvato (2009) in which he relates how the Italian designer firm Alessi adjusted their manufacturing routines as they launched what they called a 'new edition of historical projects' in 1996, which entailed revitalizing a series of old products from the 1970s onwards. We would argue that actors conduct such revitalizations by imagining past exemplary events that are illustrative of past routines. Although the alterations emerged from ordinary activities, actors imagine them as a series of events in which designers, engineers, or consumers were involved with the past products through design, manufacturing, or consumption. Such events correspond to our definition of exemplary events above: events that represent multiple instances in a certain period.

While such examples suggest the impact of past and possibly future exemplary events in the execution of routines, risk and safety analysis is an area of research on routines that indicates a different impact on the temporal structures of singular and exemplary events. For example, past accidents, such as the *Challenger* disaster, the Bhopal tragedy and various nuclear power plant failures, exemplify singular events in the sense that some of their actual features are well known, they have acquired a sense of uniqueness, and the actors involved are known and few. Marcus and Nichols (1999, p. 483), for example, mention how, in the *Challenger* disaster, the 'engineer responsible for O-rings warned of seal problems that could cause

"catastrophe". Because actors see such events as historical singular events, the events influence how safety systems are temporally structured, such as in routines and follow-up at other installations around the world.

On the other hand, whereas singular events may impact temporal structures, exemplary events within the organization may not have a similar impact. Marcus and Nichols' (1999) analysis of empirical evidence from the nuclear industry shows that whereas singular events, such as the Challenger accident, may influence the temporal structures of actors, events emerging during the functioning of their own plants may not be equally compelling to actors. Marcus and Nichols refer to such events as 'unusual events', which correspond to our definition of exemplary events, as they are multiple and interconnected. For example, the authors write, 'During an outage, an incident took place in which equipment in one of PH's reactors suffered severe damage. Personnel at PH should have known that there was the potential for this failure because of past events' (Marcus & Nichols, 1999, p. 594). Marcus and Nichols point out that such exemplary events could be ignored in the adjustment of routines and implicitly classified as what Perrow (1984) calls 'normal accidents'.

Situated temporality of materiality

Views of materiality in organization studies have mainly focused on how materiality is used to measure (Clark, 1985; Orlikowski & Yates, 2002; Reinecke & Ansari, 2015; Yakura, 2002) or organize time (e.g. Beunza & Stark, 2004). Regarding the latter, for example, Beunza and Stark (2004) report in their study of traders how instruments enabled the traders to monitor the market and search for recurrent patterns over time, which enabled them to time their transactions. There are, however, also works that discuss how materiality, rather than being used to measure time, also embodies time (Hernes et al., forthcoming). However, most material studies are based on a reflexive relationship between actors' activities and temporal

structures. For example, Suchman's (1987) study of navigation shows how material artefacts helped the Trukese people navigate from moment to moment. Latour (1999) describes in detail how Pasteur and the substance interact through time, as Pasteur tries to influence the fermentation process without being able to fully control it, so instead he chooses to accompany the fermentation process through time. In such studies, materiality upholds existing temporal structures, but the studies do not show how those structures may be transcended as actors imagine distant events through material activity. For example, we find it useful to think, in Suchman's (1987) case of Trukese sea navigators, that they were not just navigating by responding to factors that lay ahead of them but that certain situations might have brought memories of tales of ancient navigation events. We do not imply that past and future events replace immediate experience but that the two sometimes operate simultaneously. The Trukese navigators operate continuously by responding to imminent factors that occur as they are sailing, but occasionally their ongoing experiences may crystallize into events to be called forth from the past at a later stage, such as how they overcame a dramatic storm.

Considerable evidence indicates how actors may address distant past or future events through material artefacts. Several studies (for example, Blagoev, Felten, & Kahn, 2018) have described materiality's ability to act as a medium for imagining distant events, although it has yet to be pursued systematically. For example, during the later stages of his life, Steve Jobs would pay daily visits to the Apple laboratories. Holding various models in his hands, he would inspect them and raise issues about where the company was headed into the future (Isaacson, 2013). Jobs might not have specified the future point at which a feature might be important, but it is clear that he considered futures beyond the Apple production and planning cycles. It is also reasonable to assume that the distant past events of functionality and minimalist design factored into his assessments.

While materiality acts as the means through which pasts and futures are addressed in the present, it may also serve as a means through which to imagine distant future or past events. A distinguishing feature of materiality is its ability to offer physical and sensory experience to actors (Schultz & Hernes, 2013), which may create a particular sense of social attachment to an unfinished product of the future (Nicolini, Mengis, & Swan, 2012). Hernes, Feddersen, and Schultz (forthcoming), for example, use the concept 'material temporality' to describe how people at Carlsberg Group prepared to create a bottle made from sustainable wood fibres. The idea met with some resistance from within the company. For example, some people argued that because the bottles would be biodegradable, they might be thrown into nature after use because users would not bother to circulate them, which would harm the company because fibre bottles with their logo might be lying about in nature. This exemplifies how people imagine the 'disposing of the empty bottles' as exemplary events in the distant future and how they see those future events as significant in the present. One of the architects of the Green Fibre Bottle project, as it was called, also mobilized imagined events from the company's distant past. He evoked the founder, who ran the company until the 1880s and was a fervent believer in progress and science, by imagining him acting and thinking as an ecologist. In both these two cases related to the same project, actors applied imagination to exemplary past and future events, which influenced how the temporal structuring of producing and consuming green fibre bottles became maintained or transformed.

Toward a Concept of 'Temporal Translation'

We extend current research by showing how activities that reproduce temporal structures also enable actors to address distant events through those same activities, thereby enabling them to reflect on and potentially transform the temporal structures framing those activities. Our distinction between singular and exemplary events has

helped us develop a more nuanced view of events than found in current research. While singular events are unique events that enable actors to reflect on how things were in the past or may become in the future, exemplary events are actual or imagined events that capture periods or categories of events that connect over time. The retrospective and/or prospective dynamics that unfold between the two types of events advance our understanding of how actors reflect on salient features of the past and future through their ongoing activities. Our focus on actors addressing distant events complements the temporally reflexive view, to form a more comprehensive temporal theoretical framework of situated activity.

Relating the reflexive and reflective

Whereas the distinction between temporally reflexive and temporally reflective is useful, we have yet to consider how temporally reflexive and temporally reflective activity intertwine while remaining analytically distinct (Schultz & Hernes, 2019). The above example regarding ship building illustrates how activities address both prevailing temporal structures (i.e. building the ship) and simultaneously address distant events beyond those same temporal structures. Whereas the reflexive and the reflective may be analytically distinct, in actors' perception they become folded (Deleuze, 2006), or translated, into one another. We have noted above how situated activity is guided by temporal structures, which consist of recurring events and activities that actors orient their activities towards. The forensics example from Sweden is illustrative of how getting results much sooner from the laboratory represents a radical change in the temporal structuring of criminal investigations. Such a change in the temporal structure would also alter the practices and routines of investigations, as we assume a reflexive relationship between practices and routines on the one hand and the temporal structures on the other. In parallel there is the possibility that actors address events that lie beyond the temporal structures, which is what happened in this

case, which means that the two processes, one reflexive and the other reflective, go on simultaneously. Remember the point made above that situated activity is framed by temporal structures as it may transcend those structures in addressing distant events, which may lead to the transformation of those same structures.

We have so far considered reflexive and reflective processes to take place in parallel. However, the analysis may be taken further by considering how the two processes become intertwined with one another. 'On the ground', practitioners work in a world of seamless temporal flows without being conscious of being reflexive or reflective.

Drawing on basic ideas of the sociology of translation (Callon, 1986a, 1986b; Latour, 1993, 1990, 2004), we suggest the concept of 'temporal translation' to explain how actors combine reflexive and reflective processes through their activities. The sociology of translation takes its inspiration from Serres' (1982) emphasis on the role of the 'third', which is that element or medium through which translation processes pass. For example, actors do not react to each other directly but translate each other's intentions into their respective actor-worlds. Similarly, in a situated temporal view, temporal structures serve as an intermediary for actors when they address distant events through their ongoing activities. In this view, temporal structures serve as intermediaries of translation between situated activity and distant events. Temporal structures are convenient intermediaries of translation particularly in view of the dual definition we have given them as both being expressive of recurring events and activities and of the temporal orientation of those events and activities.

The temporality of translation

The sociology of translation assumes that translation involves two processes. The first is *displacement*, by which the qualities of an object are shifted to other locations to become part of other actor-worlds. An example is Latour's (1999) analysis of the process of soil sampling in the Amazon forest, where actual soil samples

extracted in situ are analysed in laboratories and then archived in databases. The second process is that of *transformation*, which happens to objects as they become part of other actorworlds. In Latour's soil-sampling analysis, the transformation of the soil samples took the form of being abstracted into data as they were archived in databases.

We suggest the concept of 'temporal translation' in this vein. Temporal translation implies that actors, through their activities, translate situated activity and distant events into their ongoing temporal structures. They evoke 'displaced' distant events into their temporal structures while transforming those events so that they make sense in relation to their ongoing activities. They also project situated activity onto distant events via ongoing temporal structures. They may, for example, ask questions such as, 'How would this routine unfold if we were facing certain distant events right now?' This is the sort of question asked in scenario planning, for instance (Wack, 1985a, 1985b) in which a two-way process between activity and distant future goals is envisaged. Alternatively, they may project their ongoing activities into distant events and ask questions such as, 'If we were to carry out this practice in the distant future, what would be the resulting temporal structure?' In both these two examples the idea of displacement, which is viewed spatially in the sociology of translation, may be likened to the concept of temporal distancing that we suggest in this paper.

While actors may address numerous distant events through temporal structures, the concept of temporal translation implies that distant events are brought into the present in ways that transform current temporal structures, and vice versa. For example, our study of Arla, a dairy corporation, shows how the ancient routines (described as exemplary events) from the Viking era of making fermented yogurt on the farm are brought into the temporal structuring of manufacturing. Here, the use of newly developed nano-filtration technologies transforms those routines in ways that enable large-scale manufacturing while preserving the origin of the product (Hernes et al., forthcoming). A similar process may work the

other way around, as actors imagine how their ongoing temporal structures might be affected (transformed) if the structures were projected (displaced) to address distant events. In the project to develop the Green Fibre Bottle, mentioned above (Hernes et al., forthcoming), actors 'displaced' the bottles into a distant future by questioning whether the bottles would end up in nature even more easily than current glass bottles and aluminium cans do, thereby envisioning the possibility as a future temporal structure of production and consumption.

The simultaneity of translation

The underlying idea of temporal translation would be that the displacement/transformation working from the present towards the distant past or future and that working from the distant past or future towards the present would take place simultaneously, both being translated through temporal structures. Put differently, both distant events and ongoing activity are seen as folded (Deleuze, 2006) into temporal structures, making temporal structures the prism through which situated activity and distant events are processed. The simultaneity, as opposed to sequentiality, of the processes allows a dynamic view of time and enables important questions to be asked, for example, about actors' ability to keep sustained focus on distant events, such as climate change (Slawinski & Bansal, 2012; Wright & Nyberg, 2017). In relation to climate change, which takes into consideration distant future events, actors would translate the here-and-now impact of working towards climate goals and ask how they might orient their ongoing temporal structures. They might also at the same time consider how the temporal structures would evolve as they move towards the events expressed by the climate goals. A similar dynamic would apply to distant past events. Distant past events might be brought into the present by imagining how the ongoing temporal structure would be affected. Conversely, they might imagine their ongoing temporal structures as taking place at the distant past events.

The concept of temporal translation helps overcome the duality between present and past or future that tends to be assumed in several areas of organizational research. In sensemaking research, for example, it is assumed that actors imagine past or future events (Maitlis & Christianson, 2014), but assuming present and past or future as two static points in time. Using the concept of temporal translation enables analysis of how actors make collective sense of the effects of projecting themselves onto the distant past or future and simultaneously the effects of imagining the distant as imminent. Temporal translation may also apply to analyses that consider interplay between different temporal structures. In their analysis of the interplay between organizational identity and strategy, Schultz and Hernes (2019) report on how the different temporal structures of identity and structures interact throughout time in the Carlsberg Group. They find that when identity and strategy are expressed as mutually consistent temporal structures, there are better chances of sustained interplay between them. Sustained interplay, however, also means that different temporal structures becomes translated into one another. Sustained interplay happens as actors imagine how activity relating to strategy is understood in terms of distant events and how distant events are understood in terms of ongoing strategy. Temporal translation is also applicable to situations where actors with different historical trajectories need to define a new common future, such as for example in the case of company mergers. Acknowledging how their different histories consisting of distant events may translate into their respective temporal structures may create a basis for imagining a common future, the point being that they translate between their own temporal structures and the history of the other part of the merger.

Conclusion

It is arguably important that the dynamics between situated activity and distant events becomes the subject of more systematic theorizing than has occurred until now. Our contribution in this paper has been to develop a framework that hopefully inspires further conceptual and empirical work on how organizational actors address distant events while not losing sight of their imminent concerns, translated through temporal structures. Scholars have theorized such issues by assuming that actors pursue different temporalities and that 'temporal tensions' (Slawinski & Bansal, 2015) develop. Such tensions become acute in times of crises, conflicts of interest, powerplays or lack of resources, resulting most often in short-termism (Laverty, 1996) or other forms of temporal myopia. It is important to develop deeper understanding of temporal tensions, but it is equally important to develop better understanding of how temporalities are translated or folded into one another through situated activity. It is through this latter view that alternative frameworks and models may emerge to explain a productive interplay between different temporalities, including how distant time orientations may be folded into the imminent and vise versa.

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Note

. Trope and Liberman distinguish between highconstrual events, which in their conception have a few essential and abstract terms, and lowconstrual events, which are represented through incidental and concrete details. However, while Trope and Liberman conceive of 'temporal distance' as a noun in a linear, chronological sense, a situated view conceives of 'temporal distancing' as the processes through which actors are brought to reflect upon the temporal structures within which they operate at a given moment in time. In addition, our concepts of singular and exemplary events go beyond temporal construal theory in that we consider both future and past events.

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Majken Schultz is Professor of Management and Organization Studies at IOA since 1996. She is an International Research Fellow at the Centre for Corporate Reputation at Oxford University, Saïd Business School, and member of the Royal Danish Academy of Sciences and Letters. Currently she focuses her research on developing a temporal perspective for how organizations reconstruct their identity in the flow of time with a special focus on the interplay between short- and long-term time horizons pointing both backwards and forwards in time. She is actively involved in the Danish business community through a variety of networks and holds positions on several company boards.