ROUTINE DYNAMICS: ORGANIZING IN A WORLD IN FLUX

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ABSTRACT:

In this editorial, we present an overview of the papers featured in this volume, all centered around the theme of 'Routine Dynamics: organizing in a world in flux'. Recognizing the omnipresence of flux in organizational life, we identify key themes that emerged across the papers. These encompass temporality, improvisation, process and multiplicity, power and political dynamics, and scale. We elucidate the significance of each theme in the context of Routine Dynamics, highlight the advancements made by the respective papers in this volume, and underscore questions that warrant further exploration.

KEYWORDS:

1. Routine dynamics
2. Process
3. Practice theory
4. Change
5. Improvisation
6. Process multiplicity
7. Power
8. Politics
9. Temporality
10. Scale

INTRODUCTION

At first sight, it seems that organizational routines and flux are in opposition. Routines are associated with stability and inertia, whereas flux is associated with novelty and continuous change. Yet, when we adopt a process ontology (Cloutier & Langley, 2020; Langley & Tsoukas, 2017; Rescher, 1996; Tsoukas & Chia, 2002), it makes sense to consider the relation of organizational routines and flux as a generative nexus of constant becoming.

Routines are inherently processual, and the stream of research that we call *Routine Dynamics* is rooted in process ontology (Feldman, 2016; Feldman et al., 2021). This commitment to process ontology is signaled by the slogan "beyond routines as things" (Feldman et al., 2016). Routines are "repetitive, recognizable patterns of interdependent actions, carried out by multiple actors" (Feldman & Pentland, 2003, p. 95), but they are effortful and emergent accomplishments, not mindless. In the *Constitution of Society*, Giddens (1984, p. 86) argues that:

> *Routine is founded in tradition, custom or habit, but it is a major error to suppose that these phenomena need no explanation, that they are simply repetitive forms of behavior carried out "mindlessly." On the contrary, as Goffman (together with ethnomethodology) has helped to demonstrate, the routinized character of most social activity is something that has to be "worked at" continually by those who sustain it in their day-to-day conduct.* (Giddens, 1984, p. 86)

While Giddens (1984) argued that routines are essential to all social phenomena, routines are especially prominent in organizations and are widely considered their building blocks (Nelson & Winter, 1982). Routine Dynamics scholars have examined how day-to-day routines in organizations are shaped and sustained over time. Through dozens of field studies (Dittrich, 2021), we have learned that routines are as much engines of stability as they are engines of change (Danner-Schröder & Geiger, 2016).

For this reason, organizational routines are essential to understanding the process of organizing in a world in flux. The notion of flux is exemplified by the idea that one can never step into the same river twice (Birnholtz et al., 2007; Cohen, 2007). As ever, the world remains in flux in countless ways, from social phenomena to the ongoing reproduction of nature. Taking flux as given invites us to examine and explore how social and organizational phenomena remain seemingly stable. Routines, as conceptualized in the literature on Routine Dynamics, offer a particularly appropriate lens on organizing in a world in flux.

The remainder of this editorial unfolds as follows. First, we offer a brief background to the origins of this volume. Second, we introduce the papers in this volume, which place an emphasis on five main themes (i.e., temporality, improvisation, process and multiplicity, power and political dynamics, scale). For each of those themes, we also identify avenues for future research.

BACKGROUND TO THE VOLUME

The idea of the volume was sparked during a meeting arranged by the 'Routines.Research.Community'[1], hosted by Aalto University (Helsinki) in May 2019. The meeting was intended to mark the 20th anniversary of Feldman's (2000) landmark publication on organizational routines. Martha Feldman and Brian Pentland kicked off the program with an experiential 'keynote' event entitled, 'Routine Dynamics: 20 years in and just getting started.' As the title suggests, the idea was to summarize accomplishments and identify new directions.

To set the stage, they distributed two sets of children's toy handbells to the participants (see Figure 1). Each bell could sound one note in a scale (do-re-mi-fa-so-la-ti-do). Martha instructed the participants to 'play a song.' As expected, the bell holders looked at each other, played one note at a time (at first rather cautiously), each note triggering the next, like the card players in Cohen and Bacdayan's (1994) classic experiment on routine formation. The toy bells provided an engaging, hands-on experience with forming, repeating, and varying sequences of action visible to those observing.

FIG 1 HERE

Everything was going as planned until someone handed a bell to Kenneth Goh. When Martha asked the participants to play another song, Kenneth started playing his bell with a steady, repetitive beat. Instead of just playing one note and then letting the next person play the following note, like everyone else, he just kept ringing his bell at a moderate tempo (not too fast, not too slow). People around the room gave him the evil eye, but he persisted, loud and steady. Eventually, the others chimed in, and the group started to play a rhythmic chorus.

The effect was electrifying. Together, they created a new "repetitive, recognizable pattern of interdependent actions, carried out by multiple actors" (Feldman & Pentland, 2003, p. 95) but sequential triggering from one action to the next no longer had anything to do with it. The persistent beat of Kenneth's bell had transformed the lecture hall into a rhythmic rave. We went from notes to chords, from threads to fabric (Gherardi, 2016).

This anecdote helps illustrate two things about Routine Dynamics. First, as a research community, we have been studying repetitive patterns of action for quite a while (for literature overviews, see Feldman et al., 2021; Parmigiani & Howard-Grenville, 2011). We have an established research tradition based on close ethnographic observation of practices in organizations: the doings and sayings of specific people in specific situations (e.g., Kenneth ringing the bell). Second, the example demonstrates the excitement and surprise that we feel when we see or experience something new. In Helsinki, when Kenneth kept ringing his bell, he pointed us towards a richer, rhythmic way to think about 'patterns of action' in organizing. We can zoom in to see the individual threads or we can zoom out to see the fabric.

The papers in this volume offer similarly exciting, provocative examples of Routine Dynamics in a world in flux. These concrete examples are useful to advancing the sociology of organizations because science progresses when we take a closer look at the phenomena we study. In physics, they take a closer look at sub-atomic particles. In biology, they take a closer look at proteins. In organizational studies, we take a closer look at routines. Routine Dynamics provides a lens for taking a closer look at the repetitive, recognizable patterns of action that are constitutive of social organization.

Looking back over the last 20 years, scholars working on Routine Dynamics have placed an emphasis on stability and change in routines (e.g., Bucher & Langley, 2016; D'Adderio, 2014; Danner-Schröder & Geiger, 2016; Dittrich et al., 2016; Feldman, 2003; Goh & Pentland, 2019; Kremser & Schreyögg, 2016; Pentland et al., 2020; Turner & Rindova, 2012). The papers in this volume continue and extend that tradition in a variety of ways. We asked scholars who had participated in the Routine Dynamics subtheme at the EGOS colloquium in recent years to speak to a common theme: 'A World in Flux.' The papers here provide a remarkable variety of examples and interpretations of that theme, from pop music creation (Schwendener & Grand, 2024) to industrial restructuring (Balzarin & Zirpoli, 2024) to unicorns (Birnholtz, 2024).

THEMES IN THIS VOLUME

Building on the papers in this volume (see Table 1 for an overview), we emphasize five distinct themes to further our understanding of routines in a world in flux: temporality, improvisation, process and multiplicity, power and political dynamics, as well as scale. Each theme provides a research avenue expanding the research foci on Routines Dynamics.

TAB 1 HERE

Theme 1: Temporality

Flux is an inherently temporal phenomenon. Without temporality, there is no flux. Temporality has always been a core aspect of Routine Dynamics research, but it has only recently been examined more explicitly (Bygballe et al., 2020; Geiger et al., 2021; Turner & Rindova, 2018). As Turner and Rindova (2021, p. 266) note, "although time plays a vital role in understanding Routine Dynamics, research on the topic remains scant." Scholars, thus, started to examine various characteristics of temporality, such as clock and event time (Turner & Rindova, 2018), temporal orientations (Howard-Grenville, 2005), or timing (Geiger et al., 2021). Several papers in this volume advance our understanding of temporality in the context of organizational routines.

Xu and Carlile (2024) point out that Routine Dynamics has a theoretical blind spot regarding the future. They start from Emirbayer's and Mische's (1998) influential framework, which states that agency is oriented toward the past, present, and future. Xu and Carlile argue that current theory on Routine Dynamics is oriented towards the present (performing) and the past (patterning), but they argue that there is a theoretical gap when it comes to the future. To the extent that agency is an essential engine of Routine Dynamics, there should be a future-oriented component. To fill this gap, they suggest the idea of 'projecting'. Spee et al. (2024) focus on routine formation at new ventures. They regard routine formation as a layered process. Thus, looking at routine formation from a temporal lens shows its sequentiality, i.e., that new routines do not replace established routines but continue to run in parallel. Ritter et al. (2024) show how temporal orientations matter in the performances of routines. In their study of Scrum teams, they show that different routines may enact different temporal orientations towards the past, present, or future. Balzarin and Zirpoli (2024) show in their study of a major transition of an automotive supplier how routines, and by that temporal continuity, were interrupted. Actors experienced temporal voids, i.e., they did not know what to expect in the future and felt disconnected. As these studies show, temporality is not only a matter for researchers, but it is also important to consider temporality 'from within', that is, from the perspective of people performing routines.

Building on the contributions in this volume, we believe that there are ample opportunities to further advance our understanding of the relationship of routines and temporality. This may also enable closer connections between Routine Dynamics scholars and scholars that focus on the role of temporality in organizing more specifically (e.g., Bansal et al., 2022; Hernes et al., 2021; Stjerne et al., 2022). Some relevant questions are:

- *Questions related to temporal orientations (i.e., past, present, future):* How do the temporal orientations of insiders and outsiders matter for the dynamics of routines? How do temporal orientations of specific routines change over time? What happens when multiple routines in a routine cluster have different/similar dominant temporal orientations? Could we open up the notion of future, for instance, by differentiating between close and distant future, and how would this shape our understanding of routines?
- *Questions related to clock and event time:* How do clock and event time relate in the dynamics of routines? When and how are actors oriented toward clock and when toward event time? How 'objective' is clock time, and may actors construct clock time as well? How are the performances of routines entrained in larger institutional temporal structures?
- *Questions related to rhythm and tempo:* How are actors patterning the rhythm of a routine, and how do multiple actors align on a certain rhythm (reconsider Kenneth ringing the bell)? When do the performances of routines speed up or slow down? Which processes accelerate, paralyze or freeze routine performances? How do different tempos interrelate in the performance of routines, for instance, are phases of low tempo required for subsequent phases of high speed, or vice versa? How does the rhythm of a routine change over time?

Theme 2: Improvisation

Improvisation has been a central theme in Routine Dynamics from the start (Feldman, 2000). When confronted with situational contingencies, actors need to improvise to keep routines on track. Feldman and Pentland (2003, p. 102) suggested that "just as musical improvisation involves listening to what others are playing, improvisation in organizational routines involves

attending to the actions taken by relevant others and the details of the situation." Several of the papers in this volume shed light on the relationship of improvisation and routines.

Schwendener and Grand (2024) take us into the recording studio with the pop artists 'We Are Ava'. They show how digitalization of the recording process enables the artists to capture improvisation in a way that is not possible in live performance. They refer to this routine as 'looping.' This technological innovation forces a new understanding of concepts like 'performance' and 'improvisation.' It also provides a dramatic example of strategy-as-practice because the improvised performances are captured and deployed *strategically*, to position recordings to compete in various markets. By connecting the dots from improvisation to strategy, via the looping routine, the authors offer a novel example of how organizational routines can be integral to organizational strategy. Dillenberger (2024) examines the disruptive influence of the COVID-19 Pandemic on the teaching and student coaching routines at a business school. She shows how actors changed their routines, which over time led to the emergence of a new normal. In this process, improvisation was crucial as it enabled actors to come up with new ways of performing their routines. Stanway and Meisiek (2024) focus on how some improvisations stick while others don't. They trace the use of the Chinese social media platform WeChat at an Australian university and show how improvisations (i.e., path expansions and contractions) were a thing of the organizational underlife up to the point that the organization was faced with the Covid-19 pandemic requiring them to rethink how they communicate with their international students. Suddenly, WeChat was no longer the unwanted or risky tool but turned into a critical means for interacting with students. Consequently, improvisations were transformed from hidden acts into overt acts.

Going forward, there are a number of ways that research on improvisation could contribute to research on Routine Dynamics, and vice versa. Addressing these questions may help to foster closer connections between the Routine Dynamics community and scholars of improvisation (e.g., Ciuchta et al., 2021; Cunha et al., 2017).

- *Conceptual issues:* What are the conceptual similarities and differences between routines and improvisation? Does performing and patterning always include improvisation or are there cases in which improvisation does not play a role? What does each lens (i.e., routine versus improvisation) help us see and what does it hide?
- *How improvisation occurs in routine performances:* When does an improvisation 'stick' and become part of a new, ongoing pattern? When do routine participants try to prevent improvisation, and how do they accomplish this (or not)? How do patterns of actions enable or prevent improvisation? When routines become increasingly populated with technology, such as artificial intelligence, how does this influence improvisation?

Theme 3: Process and multiplicity

Over the last years, organization studies has increasingly adopted a strong process ontology to better understand organizational phenomena (Cloutier & Langley, 2020; Hernes, 2008; Tsoukas & Chia, 2002). Through this lens, the social world does not consist of stable entities, but it is always in flux. Thus, stability is only a product of the moment and needs to be actively accomplished. This ontological reversal has substantially shaped our way of thinking, and it has put flux center stage.

Routine Dynamics has also been at the forefront of this movement. Several papers in this volume showcase how focusing on process can deepen our understanding of routines and other phenomena. Birnholtz (2024) examines the evolution of the 'Unicorn', a tradition

spanning several decades at the summer camp 'Sherwood'. The unicorn (i.e., a staff member dressed as a magician riding a horse that wears a horn) was initially intended to prevent children from littering, and it was considered a magical experience. Over time, however, this tradition became increasingly prominent, attracting many people who cheered for the unicorn to come, which also included increasing safety regulations. Dillenberger (2024) shows that adopting a process ontology helps to see that the 'new normal' is not a stable state, but that it evolves in waves of normality formation over time. Hence, even though we might believe that the new normal is a stable entity, it is actually in flux over time when we look at it processually. Stanway and Meisiek (2024) studied the use of WeChat before, during, and after a crisis. Their processual approach shows that routines are in constant flux and continuously reconsidered as the context evolves. However, these processes do not always run that smoothly. As Balzarin and Zirpoli (2024) reveal, routine change may disrupt existing connections and create voids that need to be filled in order to keep the flux.

Moreover, papers in this volume reveal how viewing processes as multiplicities may help to better grasp the dynamics of routines. Pentland et al. (2020) suggested that a process should not be seen as a unitary sequence of actions, but rather as a space of possible paths. Here each path refers to a possible way to perform a routine (Goh & Pentland, 2019), and there are many paths of how actors could perform a routine. Over time, actors may expand or contract the space of possible paths, eventually changing the routine. This perspective, for instance, offers a fresh view on routine change because it emphasizes the unfolding possibilities in the performance of routines (Feldman & Sengupta, 2020).

Several papers in this volume connect to the notion of paths and process multiplicity. Stanway and Meisiek (2024) and Dillenberger (2024) both employ such a focus, which helps them to see which paths gain traction, potentially changing the patterning of routines. Similarly, in Birnholtz's (2024) study of a summer camp, the 'Unicorn' could be seen as "a plausible, if seemingly improbable, path through a network of possible litter reduction strategies" (p. 70). When the tradition became more prominent, moreover, actors had to find other paths that were in line with safety needs. In all of those papers, the question is how new and potentially fragile paths get enacted and become "deeper ruts in the road" (Goh & Pentland, 2019, p. 1920). Other papers focus on the expansion and contraction of the space of possible paths. Ritter et al. (2024) show that setting clear goals for a software development Sprint contracts the space of possible paths, temporarily leading to a more constrained set of actions. Alvarenga et al. (2024) also show how actors who strive for the continuity of their routines may expand and contract the space of possible paths. In sum, these papers show that the notions of process multiplicity and paths are useful concepts to describe the dynamics of routines. At the same time, they open up new possibilities for research on Routine Dynamics:

- *Questions related to the enactment of paths:* How and under which conditions do actors employ a new path? What influences whether these paths become deeper ruts in the road? How may deep ruts in the road become more shallow and eventually fade away?
- *Questions related to expanding and contracting:* How do actors expand and contract the space of possible paths? Which role do embodied skills, temporal orientations, material tools, and roles play in this process?
- *Questions related to the management of routines:* Does the notion of process multiplicity help us to make managerial recommendations? For instance, could it help to design routines that are more resilient to exogenous shocks or that facilitate creativity, agility, and innovation?

Theme 4: Power and political dynamics

Since Nelson and Winter (1982) introduced the notion of 'routines as truce', power and politics have been essential to any explanation of why routines form and change. Metaphorically, a truce represents a temporary halt in hostilities, and an agreement to proceed even though an underlying disagreement has not been fully resolved (Salvato & Rerup, 2018). D'Adderio and Safavi (2021) note that the concept of truce appears widely in the literature on routines, although it has often been developed in the context of other topics, such as conflict or competing interests. While several of the papers in this volume touch on the theme of power implicitly, two of the papers address it more directly.

Desbiens and Langley (2024) examine power and politics in a healthcare setting: the routines inside and outside the surgical operating rooms in a general hospital. The setting is replete with power differentials due to occupational status (e.g., surgeons vs. anesthesiologists vs. nurses vs. orderlies), as well as the relative urgency and importance of particular cases, which introduce a constant stream of negotiations. Through careful attention to the interests and strategies of each group, they "open up the originally rather static notion of 'truce' to an inherently more dynamic and processual view of the micropolitics underpinning routines." (p. 83). Their analysis reveals the political dimension of patterning, which has been conceptualized as a core mechanism of Routine Dynamics (Feldman et al., 2021). Power relations between occupational groups help explain changes that persist versus changes that dissipate over time. Their analysis provides a theoretical foundation and methodological roadmap for the analysis of power relations in routines. Alvarenga et al. (2024) offer a 24-month ethnographic study of the first cohort of female officers in the ground combat training course of the Royal Air Force (RAF). They employ a dialectic perspective, which is a particularly useful way to examine the relative balance of power between opposing forces. The military training context provides vivid examples of the power dynamics that surround the formation and revision of truces. Their work speaks to the integration of historically excluded groups in organizations, as well as the general theme of dealing with a world in flux.

Given a world in flux, the analysis of power cannot be overlooked. These papers signal new possibilities for bringing the analysis of power into the study of routines and they raise a number of themes and questions that deserve further investigation:

- *Patterning and power:* Building on the idea of truce dynamics (D'Adderio & Safavi, 2021; Salvato & Rerup, 2018), how can we describe and explain the formation and revision of truces? How do political factors influence whether action patterns persist or dissipate? In other words, how does power shape routines?
- *Performing power:* Conversely, we can also ask how routines shape power. The concept of power itself has evolved from an entitative view (a thing that actors can possess) to a more performative view (a process that is enacted or performed). This change in perspective raises the question of the extent to which power requires or exists because of routine (Sele et al., 2024). The studies in this volume clearly indicate that routines can be instruments of power, but the theoretical implications of this idea could be further elaborated.

Theme 5: Scale

The notion of scale has been a challenge for Routine Dynamics research. For instance, ethnography is an important methodology in Routine Dynamics (Dittrich, 2021), as it enables close examination of the doings and sayings of individual actors at specific times and places.

However, it has also been recognized that this methodological approach has limitations, as it is constrained in its temporal and spatial scope (Mahringer & Pentland, 2021). Moreover, scholars emphasized the significance of small-scale routines for larger phenomena (Rerup & Feldman, 2011; Salvato & Rerup, 2011). Sele et al. (2024), however, argue that understanding the connections between routines and large phenomena (grand challenges in their case) require approaches that go beyond traditional hierarchical conceptualizations of scale.

The papers in this volume begin to stretch the concept of Routine Dynamics to a larger scale. In their conceptual argument about the importance of granularity, Kremser and Geiger (2024) suggest that "actions" can be conceptualized at different scales. They identify three dimensions of scale: actors, locations, and duration. At the "fine-grained" end of the spectrum, we have actions that involve one actor, in one location, with a duration of a few seconds. At the coarse-grained end of the spectrum, we have actions performed by multiple actors, across many locations, with duration of days, months, or longer. Kremser and Geiger suggest the possibility that the core principles of Routine Dynamics (performing/patterning, process multiplicity, and relationality) can be applied at macro-level time scales. As shown by Balzarin and Zirpoli (2024) the transformation in the automotive industry and changes in dominant technologies are affecting organizations and the enactment of routines on a very fine-grained level of situated actions. Other papers show the value of broadening scale beyond situated actions. Birnholtz (2024), for instance, examines traditions and argues that the time scale under consideration influences whether we can see them in flux. He argues that broadening the temporal scale helps to understand that traditions, that seem to be stable, are actually in flux.

While we have some initial glimpses of how we could approach issues of scale, there are many open questions related to this important topic. However, it is important for Routine Dynamics to clarify issues of scale because it helps to see how routines are connected to phenomena such as grand challenges, capabilities, innovation, or agility.

- *Onto-epistemological questions:* What are the advantages and downsides of different conceptualizations of scale (e.g., hierarchical layers versus flat ontology) in understanding the dynamics of routines? What does each ontology help us see and what does it hide? How do these selections influence our methods?
- *Questions related to the broader implications of routines:* Under which conditions are routines decisive for large phenomena, such as organizational capabilities, grand challenges, or innovation? What may couple or decouple these links?
- *Questions related to temporal and spatial scale*: How do routines evolve over a long period of time, and how is this evolution shaped through situated actions? How are routines in many different locations related to each other? How do routines diffuse geographically?

CONCLUSION

The papers in this volume shed light on a variety of themes that are important for Routine Dynamics: temporality, improvisation, process and multiplicity, power and political dynamics, and scale. Each paper substantially contributes to enhancing clarity of those themes, but it also became apparent that more work is to be done. Like any other phenomenon, research on Routine Dynamics is in flux. This volume represents a small moment within this movement, and we invite you to join us in shaping its future journey.

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FOOTNOTE

[1] The 'Routines.Research.Community' refers to a group of like-minded scholars who share an interest in routines and like to get together to share research here and there.

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FIG 1: Toy handbells provide an unexpected insight

TAB 1: Overview of the papers in this volume

Paper	Empirical case	Key insights
Alvarenga et al. (2024)	Integration of first female officers in the Royal Air Force's ground combat training course	● Truce-making is an effortful process as new routine participants are integrated ● Evolution of routine adaptations and truce reformations characterized by three dialectical cycles: tentative truces, experimental truces, and enacted truces
Balzarin and Zirpoli (2024)	Transition from internal combustion to electric propulsion systems at an automotive supplier	● Costly side effect of routine change: established connections decay and lead to relational and temporal voids ● Highlight the importance of connections within configurations of routines
Birnholtz (2024)	Evolution of the 'Unicorn' tradition (i.e., a staffer dressed as a magician riding on a horse that wears a horn) at the summer camp 'Sherwood'	● Traditions change over longer periods of time ● Which audiences are engaged (e.g., curators, regulators, participants) shapes how traditions evolve ● The study sheds light on the mutual relationships of traditions, rituals, and routines
Desbiens and Langley (2024)	'Lean' process improvement in a hospital	● Power relations drive the micro-dynamics of routines ● Truces are constantly re-negotiated among different occupations in different parts of their work
Dillenberger (2024)	Covid-19 induced disruptions of teaching routines at a German business school	● The new normal is defined as the accepted patterns of actions at a particular point in time. As these patterns change in waves, the new normal is better understood as a pulsating process of normality formation

		● The study identifies six patterning mechanisms that underpin normality formation. Some of these mechanisms help to seize changes in routines (i.e., experimenting, maturing, praising), while others help to minimize change (i.e., simplifying, enduring, debasing) ● These patterning mechanisms emphasize the role of improvisation in routines
Kremser and Geiger (2024)	Conceptual paper	● Research on Routine Dynamics depends on the granularity of data ● Phenomena look different depending on the granularity ● Granularity of actions/events depends on the number of actors and locations, as well as the duration
Ritter et al. (2024)	Agile software development teams of an IT firm	● Each routine within the Scrum framework has a designed temporal orientation toward the past, present or future ● Performing this single temporal orientation through temporal demarcating enables organizational benefits ● Temporal integrating (i.e., performing multiple temporal orientations) enables learning and anticipating problems
Schwendener and Grand (2024)	Creation of songs in the German electro pop band 'We Are Ava'	● Innovation in digital recording technology allows musicians to capture improvisations in the studio through a new routine called 'looping' ● The looping routine provides a practical nexus between strategy and improvisation
Spee et al. (2024)	Routine formation in the technology-enabled startup 'MatchMe'	● Consequences of routines informs their formation ● New routines form and established routines remain in place ● Routine formation as a layered process, guided by performance aspirations and monitoring of their attainment
Stanway and Meisiek (2024)	Uptake of the Chinese social media platform WeChat at an Australian university before, during, and after the Covid-19 pandemic	● Improvisational expansions in routine paths may or may not stick (lead to new patterns) over time ● Identification of improvisational conditions (i.e., whether actors respond to opportunities or unexpected events) and how they enable respectively constrain how improvisations influence paths or patterning
Xu and Carlile (2024)	Conceptual paper	● Relational approach to agency and action (temporal, spatial, and social dimension) ● Trans-action between intentionality of individual action and directionality of social action ● Preserving, sustaining, and transforming change as three possible modes of routine dynamics