Coordination & Control in Contemporary Organizations

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Coördinatie en controle in hedendaagse organisaties

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I urge you to please notice when you are happy, and exclaim or murmur or think at some point, "If this isn't nice, I don't know what is."

- Kurt Vonnegut

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Jun Xiao Reims, 2021

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1. TALES OF THEORIZING 21ST CENTURY ORGANIZATIONS

Work today is organized in increasingly novel and diverse ways. More and more, organizations adopt new ways of working that diverge from traditional bureaucracies. Bygone are the days where firms could dominate competition by using bureaucratic administration to exploit mass production (e.g. Taylor, 1911; Weber, 1978). An increasingly open, interconnected and uncertain competitive environment calls for new forms of organizing.

The term *new forms of organizing* refers to post-bureaucratic ways of accomplishing work within the complex and plural systems we call organizations. Spotify, ING, LEGO, Heineken, P&G and Zappos are just a few examples of organizations that innovate and experiment with new forms of organizing. They reorganize work in various ways: by promoting self-management, by emphasizing adaptive problemsolving, by democratizing corporate governance. As firms' experiences fill practitioner press, their ways of working are adopted by and adapted into other businesses. Some become formalized as management practices: Agile, SAFe, Scrum, Holacracy, Sociocracy – the list goes on. All aim the following goal: for organizations to thrive in today's VUCA (volatile, uncertain, complex, ambiguous) world. Anecdotal evidence relates the difficulties of transitioning from traditional to new forms of organizing, and warns that successful outcomes are far from

assured. Yet such mitigated outcomes have done little to dampen practitioner enthusiasm. According to a 2019 KPMG survey, 38% of organizations are experimenting with Agile, 18% have already established it in parts of their organization and 70% are in the process of scaling its implementation within their enterprise.

Against this backdrop, scholarship on organization theory has lagged behind. This was not always the case. For much of the 20th century, business schools and practitioners corroborated on how to best organize work. Both considered bureaucracy to be the cornerstone of industrial organization. Within bureaucracies, work is organized around the tripartite principles of rational resource allocation within closed systems; internal focus on growth by scaling; and power and control through a unitary hierarchy. In a pre-globalized world where firms faced relatively simple competitive challenges, Weberian bureaucracy was a winning organizational template.

With sociological, technological and market forces drastically changing the competitive landscape in the late 20th century, practitioners didn't wait for scholars to try new ways of organizing to keep their businesses adrift. At the same time, business schools took a more academic turn that created distance between organization theory and the new realities of work. As scholars witnessed the decoupling between the study and practice of business, some questioned the adequacy of applying the concepts and theories developed for bureaucratic settings in contemporary organizational contexts. Daft and Lewin (1990) pointed to the growing irrelevance of organization studies against the changing design of business and government organizations. Fifteen years later, concerns had not attenuated. Scholars expressed mounting frustration over the lack of progress to theorize emergent forms of organizing (Starbuck, 2003; Ghoshal, 2005). Another decade mollified the tone. Consider Puranam, Alexy and Reitzig's (2014:162) matter-of-

fact synthesis:

The consensus diagnosis seems to suggest that our existing theories of organizing are too rooted in a context that no longer corresponds to present day reality—and that the need of the hour is to craft new theories that better correspond to this new reality.

This is not to say that organization theory hasn't made pace. In the sixties and seventies, scholars developed organizational-level concepts to describe post-bureaucratic forms of organizing. For example, *network organizations* and *boundaryless organizations* called to attention the fact that contemporary organizations can no longer rely solely on an internal focus for growth. Similarly, the recent concept of *agile organizations* reflects the increasing need for organizations to be responsive and flexible to change. In addition, macro theories of organizing targeted the environmental determinants shaping new organizational forms. Contingency theory, resource dependence theory and transaction cost theory all help explain how environmental conditions inescapably play a role in the rise and spread of new forms of organizing (Scott, 2004).

While these advances capture more modern conceptualizations of organizing, they are also subject to criticism. First, rather than being conceptualized in a stand-alone manner, terms like network organizations, boundaryless organizations and agile organizations are defined in a contrastive way to bureaucratic organizations. As a result they are faulted of *conceptual inversion* (Barley & Kunda, 2001). Conceptual inversion increases the risk of overstating the importance of these organizational forms in postbureaucratic organizing; overlooking the actual role of networks, boundaries, and agility in the emergence of new forms of organizing; and ultimately precipitating the obsolescence of such concepts. Second, higher-level theories that aim to capture determinants for an entire organization set, population or field are

prone to *environmentalism* (Pfeffer, 1982). This refers to the tendency of privileging environmental determinants to the detriment of more proximal reasons for variance, such as the role of human action. The *per contra* case by excellence, Barley's (1986) seminal account on the introduction of technology in the workplace, shows how human action can lead to different effects of technology on organizational structures. Environmentalism can thus lead scholars to overlook critical factors that contribute to variances in new organizational forms and practices. For some, organization-level and macro-level approaches leave us with images of organizing that are overly narrow, abusively simplistic, and incongruent with the realities of 21st century work (Miller, Greenwood & Prakash, 2009; Walsh, Meyer, & Schoonhoven; 2006).

Perhaps we've been too hasty in our pursuit to develop mid- and macro-range theories. The new millennia saw scholars beginning to converge on a partial root cause to the deficiencies of earlier theoretical developments: *insufficient grounding in concrete work activities* (Barley & Kunda, 2001, 77; Greenwood & Miller, 2010). In other words, to do our job and explain contemporary work and organizing, prior to zooming out, first we must zoom in.

To move forward, a stream of scholarship began exploring a third route to theorizing new forms of organizing: reintegrating work studies into organization theory. The prefix "re" is intentional: concrete studies of work practices used to be a common way to study organizational dynamics associated with different forms of organizing (see, for instance, work by the Tavistock Institute). But studying organizations through close-range and detailed studies can be rather challenging. For individual scholars, field studies require significant time and resource commitments, as well as embracing the methodological challenges that accompany the art of explaining complex organizational realities. The result is a slower publication pace that is incompatible with the career milestones of academia (Miller, Greenwood &

Prakash, 2009). For the field of organization theory, such a bottom-up approach is unlikely to yield a neat and unified theory of contemporary work. Though each completed study contributes to a repertoire of knowledge on new forms of organizing, how will the field make sense of the variety and complexity of situational accounts to build a global image of the changing nature of work?

The undaunted do not journey alone. Two research communities can be singled out regarding their contribution in shaping the progress of modern work studies. First, process research provides a useful lens to tease apart and explain complex organizational phenomena. Adopting a process orientation involves explaining the mechanisms by which development and change occur in organizations (Cloutier & Langley, 2020; Van de Ven & Poole, 1995). Weick (1974) was first to promote this view by advocating a shift from the noun *organization* to the verb *organizing*. Both terms address the challenge of coordinating action among multiple people that differ in their incentives, information, and interests. *Organizing*, however, breaks away from the image of organizations as immutable entities and ushers a more dynamic view of work. Conceptualizing organizations as ongoing work processes directs attention towards the centrality of change in organizational life, and is thus favored by scholars seeking to explain how new forms of organizing emerge and become.

Second, qualitative research supplies an expanding toolkit to study modern work practices. Though traditional forms of data collection and analyses retain their worth (see e.g. Bailey, Leonardi, & Barley, 2012; Petriglieri, Ashford, & Wrzesniewski 2019; Valentine 2018), novel forms of data and data analysis can help capture and develop theory on complex and dynamic phenomena that mix technical and social elements (Eisenhardt, Graebner, and Sonenshein, 2016). As work becomes less colocated, more digital, and increasingly takes place on multiple digital platforms, scholars have learned to incorporate video and digital trace data in their studies. Others have presented novel analytical moves to study dynamic, emergent and

complex organizational phenomena that overcome the straitjacket of more standardized templates of qualitative analysis (Pratt, Sonenshein & Feldman, 2020; Grodal, Anteby, & Holm, 2020).

Taking stock, this cursory review outlined three approaches to theorizing new forms of organizing. All contribute to the same problem space: resolving the disconnect between theories of organizing and modern work practices. Meso and macro approaches tend to espouse a black-box view of organizations, and theorize how new forms of organizing are influenced by environmental determinants. This dissertation adopts the third path to study modern work: micro approaches that focalize on intraorganizational dynamics via a grounded approach. Though the most emergent approach, it is arguably the most urgent: grounded accounts of 21st century organizing provide much needed contemporary images of organizing for management scholars, and comprise a necessary building block for meso- and macro-level theories anchored in reality. And perhaps deceptively so, this path offers the simplest starting point for the budding organizational scholar: To theorize contemporary organizations, engage with them.

1.1 ORGANIZATIONAL COORDINATION AND CONTROL

Pursuant to the motivation outlined above, the overall purpose of this dissertation is to develop our understanding of organizing processes in new forms of organizing. Approach-wise, I adopt a process perspective and conduct inductive research in contemporary organizations. Topic-wise, I work towards this goal by examining two organizing structures common in workplaces: power hierarchies and organizational routines.

Power hierarchies and organizational routines are pervasive in traditional bureaucracies because they are simple and effective mechanisms of coordination and control. Coordination and control are two fundamental challenges all organizations face. First, coordination problems involve cognition-oriented issues stemming from the complexity of dividing labor and integrating effort among actors with different resources, skills, and information. To address these challenges, organizations implement *coordination mechanisms* that address how collectives might organize information and interact to accomplish tasks and goals. Second, problems of control regroup motivation-oriented issues stemming from individual differences in power, personal incentives and preferences. Accordingly, *control mechanisms* address how managers attempt to direct their employees' attention, behaviors and performance to align with the organization's goals and objectives.

Below, I explain how power hierarchies and organizational routines act as mechanisms of coordination and control in traditional bureaucracies. I then contrast how they differ in modern organizations to introduce this dissertation's specific research questions.

Coordination and control in traditional bureaucracies

Power hierarchies. A power hierarchy is an explicit rank order of individuals with respect to control over resources. Hierarchies are effective mechanisms of organizational control because they function as simple incentive systems: the more a person sits atop a hierarchy, the more they receive formal rewards (such as higher salary, status symbols, responsibilities, leadership, ability to sanction) and informal rewards (such as status and respect). Facing this structure, individuals at lower echelons tend to be motivated to engage in work and cooperate with others to ascend in rank. Hierarchies also deter organizational conflict, as those who don't comply to rank order are often subject to sanctions. In addition, hierarchies address

coordination challenges because they clarify division of labor among organizational members. For example, when employees are unsure or disagree about how to complete tasks, they instinctively turn to higher ranked members for guidance. In stable hierarchies, such expectations lead individuals of all ranks to espouse and enact role-appropriate behaviors (Halevy et al., 2011).

Organizational routines. Organizational routines are repetitive, recognizable patterns of interdependent actions carried out by multiple actors. Routines are wellknown to address coordination challenges: establishing a way of doing something removes the hassle of figuring out how to accomplish recurring tasks and goals. Routines are thus "performance programs" that enable organizations to meet goals. They are flexible; those who perform routines collectively adjust how they are carried out when facing new coordination challenges and goals. Turning to the question of organizational control, routines also suppress intraorganizational conflict. Indeed the term "routine" itself evokes habitual actions that are enacted in a natural, unchallenged way. Scholars often refer to this function of routines as the routine-as-truce (Nelson & Winter, 1982). In the absence of a routine, members might conflict over how tasks are accomplished because they covet others' jurisdictions or carry political motivations. This "procedural warfare" (Feldman and Pentland, 2003, 98) is disruptive. So to get work done, participants move on by agreeing to set aside their differences. In this way, routines interlock members in a truce about the "rules of the game" of routine work. Changes in how routines are governed tend to be managed by external members such as organizational leaders or stakeholder groups instead.

New forms of organizing coordination and control

If much is known about the way hierarchies and routines function in traditional bureaucracies, they have scarcely been studied in modern organizations. Yet their functions and structures tend to diverge in such contexts.

Chapter 2. Unpacking dynamic hierarchies. First, though normally static in bureaucratic organizations, hierarchies are often dynamic in modern contexts. On the one hand, established organizations increasingly embrace less hierarchical forms of organizing in a bid to encourage bottom-up initiatives and reduce operational costs. Such firms flatten their hierarchies by engaging in organizational restructuring that downsizes the role of middle management and redistributes responsibilities to lower-ranked employees. Elsewhere, less hierarchical organizations are increasing the power distance between upper- and lower-echelons by adding layers of middle management. Examples of organizations that stretch hierarchies include scale-up enterprises, as well as firms such as Google and Medium that have learned to recognize the benefit of middle management.

The process of restructuring power hierarchies is unlikely to be straightforward. As organizations stretch and flatten hierarchies, they bestow and strip individuals of power. Power is a central to individuals' work identities, however, and individuals react differently when gaining and losing it. These differential reactions across echelons might influence the final shape of the hierarchy in a way that is diverges from what organizations originally intended. Identifying the key social identity mechanisms that can influence dynamic hierarchies can inform both scholars and practitioners of organizational change. This topic is developed in Chapter 2.

Chapter 3. Unveiling continuous truce dynamics. Routines, notably the routine-astruce, also differ in modern organizations. Truces are the underlying rules that govern routine accomplishments. They act as guidelines for how actors can change routines when facing coordination issues, and as guardrails that prevent actors to change routines in their own interest. While truces are typically unchanging in traditional bureaucracies, as modern teams and departments embrace self-

organization, so are the routines carried out by these actors. Self-organization thus invites the possibility that individuals can change the agreements on how routine tasks are carried out – in other words, dynamic truces. As we know that static truces serve an important role of suppressing intraorganizational conflict, studying self-governed routines holds important implications for the way conflict is managed in dynamic truces. This topic is elaborated in Chapter 3.

Chapter 4. Adopting a routine dynamics perspective to understand contemporary self-managed forms of organization. Because organizations are systems, changing one organizational aspect of organizations is likely to have repercussions on others. For example, an organization flattening its power hierarchy might adjust its physical structures, dismantling corner offices and adopting an open work plan to implement a more egalitarian office design. How hierarchical and routine dynamics interplay in modern organizations is less clear, though exploring how these structures interplay can contribute to advancing our understanding of new forms of organizing. Academic insight can play a key role in mapping the relationship dynamics between different organizational elements, explaining how unexpected outcomes might take place during reorganizations, and identifying the root causes behind best and worst practices. As a first step in this direction, we ask how studying flat organizations might provide new directions for routine dynamics theorizing. This topic is explored in Chapter 4.

1.2 DECLARATION OF CONTRIBUTIONS

To study modern forms of coordination and control, I engaged with practitioners and leaders working in and with contemporary organizations. Many insights in this dissertation were the result of internship learnings, informal discussions, meetings, trainings, and projects that both resulted and did not formalize into research

agreements. Few of these initiatives are reflected as data; in fact only one study foregrounds this approach explicitly. Most of it is closet qualitative research (Sutton, 1997) – where qualitative data inspired and guided the development of ideas, but its role has been downplayed and concealed in the final manuscript. And for good reason: sometimes the data led to good insights but were too weak to foreground; other times they were incompatible with the goals of the manuscript. Regardless, I remain indebted to members of the following organizations for their time and transparency: ANWB, Bol.com, Eneco, Energized, ING, KPN, RAAK, Rijkswaterstraat, Springest, Swisscom, Telenor, and TOPDesk.

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2. UNPACKING DYNAMIC HIERARCHIES: A MULTILEVEL MODEL OF IDENTITY PROCESSES DURING POWER HIERARCHY TRANSITIONS IN TEAMS

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ABSTRACT

An increasing number of organizations are changing the hierarchies that dictate who has power over whom within teams. Such hierarchical transitions dismantle existing power positions and relations, and thus disrupt the work identities and relationships that uphold power hierarchies in teams. Drawing from research on social identity and shared mental models, we propose that hierarchical shifts cause identity asymmetry, prompting identity processes at the intrapersonal and interpersonal levels that culminate into a shared mental model of power hierarchies in teams. In so doing, we unveil critical pathways that lead towards the formation, or collapse, of such transitions in teams.

2.1 INTRODUCTION

Team power hierarchies, defined as the relative power teammates have over each other (Halevy, Chou, & Galinsky, 2011; Magee & Galinsky, 2008), are in flux (Hollenbeck, Ellis, Humphrey, Garza, & Ilgen, 2011). Consider the recent surge of management systems such as Holacracy (Robertson, 2015), Podularity (Wal & Gray, 2014), Teal organizations (Laloux, 2014) and Agile management (Darrell, Sutherland, & Takeuchi, 2016). These popular systems purport flatter hierarchies members hold authority where individual team and decision-making responsibilities, and those in managerial positions facilitate—rather than dictate information sharing and decision-making. At the other end of the spectrum, organizations such as Google and Github have opted to steepen hierarchies by concentrating power to a few managers in teams (Tobak, 2016).

However, extant research on power has remained silent on such hierarchical changes. Prior research has been predominantly fragmented along static and single levels of analysis, for instance focusing on individual power levels or team level hierarchies (for reviews, see Galinsky et al., 2012; Sturm & Antonakis, 2014). A flourishing stream of research catches pace around a dynamic conceptualization of power in teams, examining the consequences of power gains and losses on individual performance and dyadic relationships (e.g. Georgesen & Harris, 2006; Hays & Bendersky, 2015; Sivanathan, Pillutla, & Murnighan, 2008), as well as how teams perform in situations of rotating leadership (e.g. Aime, Humphrey, DeRue, & Paul, 2013; Tarakci, Greer, & Groenen, 2016). These recent advances investigate the upwards or downwards movement of individuals within a hierarchy, yet leave the overarching hierarchical structure intact. With the notable exception of Barley's (1986) work showing that new technologies can reshuffle hierarchies in unexpected ways, the phenomena of hierarchical transitions has, to date, received scant attention

from the literature.

The lack of conceptualization of hierarchical transitions means that we remain unfamiliar with how teams and team members experience hierarchical transitions, what happens to the work relationships team members have established vis-à-vis their position in the initial hierarchy, and the dynamics by which teams regain stability within new power hierarchies. As these theoretical issues remain underdeveloped, practitioners and scholars may find it difficult to account for, and inform upon, the possibility that hierarchical transitions yield outcomes diverging from organizations' original intentions. The absence of an integrative framework for understanding the processes and outcomes associated with hierarchical transitions can raise several additional difficulties. For example, scholars may risk confounding the experience and consequences of hierarchical transitions with that of power gains and losses, or mistakenly attributing organizational behavior to power change, while hierarchical change is the actual driver.

To explore how hierarchical changes unfold when organizations mandate transitions from one hierarchical structure to another, we develop a multilevel process model. This model offers three contributions to the power dynamics and identity literatures. First, we advance prior research on power which considers identity processes to remain stable under static hierarchical conditions (Biddle, 1986; Magee & Galinsky, 2008). For example, the functionalist view of hierarchies (for a recent review, see Tarakci et al., 2015) associates stability and clarity of work identities with effective team coordination. In contrast, our model proposes that hierarchical transitions lift existing work identities and cause intrapersonal identity asymmetry—i.e., the misalignment of individuals' perceived professional image with how they see themselves in the context of their work-related identity (Chen, Langner, & Mendoza-Denton, 2009; Meister, Jehn, & Thatcher, 2014). We further explain how a shared mental model of team members' new power positions and relations

emerges within a team as identity processes take center stage at different hierarchical levels. By developing how power-related identities are developed and revised in teams, we advance research on the intrapersonal (e.g. Ibarra & Barbulescu, 2010; Meister et al., 2014) and interpersonal (e.g. DeRue & Ashford, 2010) nature of identity work.

Second, our theorizing shows that a same outcome—that is, hierarchical structure—can emerge via non-unique pathways. By bringing to the foreground the identity dynamics that unfold and interact during hierarchical structure changes, we unveil that hierarchical transitions are not experienced in a homogeneous way by all members of the team, nor is hierarchical stability an indicator of individual-level satisfaction within that hierarchy. Our model shows that depending on the outcomes of these lower-level processes, different degrees of intra- and interpersonal incongruences may be embedded within a same hierarchical structure. In other words, certain team members may become "locked" into dissatisfying power positions and relations at the conclusion of the hierarchical transition process. Such lock-ins challenge current power research that assumes individuals have internalized their power levels within stable hierarchies. In addition, they offer new insights as to why power struggles and conflicts occur and persist in teams.

Third, our research also informs the social identity literature of the ways groups resolve situations where the identities that certain members wish to espouse are not universally accepted by all members of the team (cf. DeRue and Ashford, 2010). We do so by delineating how team members can converge towards a common understanding of a power hierarchy, despite certain individuals not claiming their new power levels, or refusing to grant it to others. Consequently, we reveal the multiplicity of hierarchical structures that can emerge. In so doing, we advance the power hierarchy literature by articulating how divergent outcomes can take place following hierarchical transitions, and inform practitioners that the process of

hierarchical transitions may lead to structural outcomes that differ from what organizations originally plan.

2.2 IDENTITY PROCESSES DURING HIERARCHICAL TRANSITIONS

Identity Processes in Stable Power Hierarchies

Team hierarchies are multilevel, socially constructed structures bound by power identities and power relations (Clegg, 1989; Giddens, 1984). At the intrapersonal level, each team member holds a hierarchical position vested with power, which bestows them with the discretion to carry out their will despite resistance (Emerson, 1962: 32; Sturm & Antonakis, 2014: 139; Weber, 1978: 53). This conceptualization of power is both vested within individuals (Weber, 1947) and a property of social relations (Emerson, 1962). Accordingly, power relations between dyads embody the way individuals engage with others as a function of their own and others' power levels within a hierarchy (Emerson, 1962). Taken at the team level, hierarchies specify the network and distribution of power relations amongst all members of the team (Bunderson, Van der Vegt, Cantimur, & Rink, 2015): power concentrated at the top defines a vertical, steep hierarchy, whereas a flat hierarchy entails less power differences amongst team members (Greer & van Kleef, 2010; Tarakci et al., 2016). Transitions in team hierarchies consequently involve shifting towards a steeper (i.e., few individuals gain power at the expense of the majority of the team) or a flatter hierarchy (i.e., power is redistributed from a few power holders to team members).

Power is a central component to individuals' identities—the meanings attached to the self, both by individuals and by others (Ashforth & Mael, 1989; Gecas, 1982; Simon & Oakes, 2006). Indeed, social identity theorists have connected individuals'

concept of themselves—termed *self-concept* or *self-construal*—with the resources they control and the perceived value accorded by others (Wisse & van Knippenberg, 2009). Thus, power is part of the way people perceive themselves, both in terms of the material, knowledge and social assets that belong to them, and in terms of the value of these resources from the perspectives of others (Aron et al., 2004). This latter, interpersonal dimension of power is related to individuals' identity via hierarchical roles and relationships (Callero, 2003; Sluss & Ashforth, 2007; Stryker & Burke, 2000). In other words, work relationships embody processes by which individuals recognize and reinforce each other's roles within the hierarchy: the identity of a subordinate is thus contingent on, and defined by, the reciprocal power-dependence relation held with a powerholder (cf. DeRue & Ashford, 2010; Emerson, 1962).

Hierarchies also shape individuals' self-construal. Functionalist accounts of hierarchy purport that hierarchies act as self-reinforcing structures that guide and constrain changes in power positions and relations (for a review, see Halevy et al., 2011). First, power relations are strongly influenced by hierarchically differentiated positions and roles, which carry expectations about tasks, power levels and behaviors individuals should embody (Biddle, 1986; Magee & Galinsky, 2008). As such, an employee is more likely to comply with the way a manager exerts his or her power when this type of expression is consistent within a manager's position within the hierarchy. Second, when power positions and relations do change, it is through established norms and pathways. In other words, there are formal and informal rules team members adhere to in order to sort individuals into appropriate roles and ranks within the hierarchy. For example, career ladders, when perceived as legitimate, serve as incentive structures that couple individual motivation with organizational interests. While norms surrounding rotating leadership are more informal, the process by which individuals take positions of power in relation to a

specific task demand must also be perceived as legitimate amongst the team (Aime et al., 2013). These examples illustrate how hierarchies regulate power expressions and stabilize identity dynamics by clarifying the channels through which power flows within the hierarchy (Magee & Galinsky, 2008).

Hierarchical Transitions Disrupt Identity Processes

Organizationally mandated hierarchical changes are deeply disruptive. Hierarchical transitions fundamentally alter the underlying structures governing behaviors and tasks within teams (cf. Gersick, 1991; Johnson et al., 2006) by dismantling the functions that stabilize power-related identities and relations in the hierarchy. This is because shifts in the overall hierarchical structure not only reshuffle individuals' position in the hierarchy, but also uproot the positions themselves by redefining what positions exist, and the power relations that bind them together. To provide a more complete understanding of the repercussions of this disruption, we begin by examining the consequences at the intrapersonal level.

As power is part of the self, power changes associated with the transition to a new hierarchical role affect individuals' self-concept. As an illustration, let us follow a team transitioning from a traditional management system to Holacracy. Holacracy advocates for collaborative solution-finding within self-organizing, cross-functional teams. In contrast to traditional management systems, members of a Holacracy "circle" no longer work under a project manager who divides tasks amongst different individuals; instead, team members hold decision-making authorities (Robertson, 2015). Adopting Holacracy essentially requires existing teams to transition towards a flatter hierarchy as employees gain power at the expense of managers, who lose direct authority over their team and fall into facilitating roles. The following quote from a manager at Zappos describes her reaction to the loss of power she experienced as the company adopted Holacracy in 2013, highlighting her

anguish towards her new position following the hierarchical transition: "I said, 'I literally have no job.' I was freaking out." (Reingold, 2016). And in addition to affecting one's identity, the hierarchical shift disrupts existing power relations because managers can no longer dictate decisions, and employees are now involved in decision-making tasks and processes. Consider how an employee, upon being denied a request from his manager, describes the shift in power relations during the hierarchical transition: "As soon as I found out about how Holacracy worked, I was like, 'Actually, my boss can't tell me that." (Reingold, 2016).

Both examples suggest that the change in one's power and power relations affects individuals' work identity. These experiences are in stark contrast to the aforementioned functions that forge and reinforce power-related identities under stable conditions: hierarchical positions and roles that prescribe behavior and synchronize power relations amongst team members, along with clear mechanisms that demarcate when and how individuals can change these relations. Hence, what individuals at the bottom of the hierarchy and at the top share, in the context of hierarchical transitions, is a situation where they face a divergence between the power associated with their past power level, and that prescribed by the organization. In other words, individuals experience intrapersonal identity asymmetry.

Intrapersonal and Interpersonal Identity Reconciliation Processes

In situations of identity asymmetry, individuals experience cognitive dissonance, and fundamentally desire to resolve these internal incongruences (Sheldon & Kasser, 1995). This is because the experience of intrapersonal incongruence is unpleasant and stressful, which leads to decreased well-being, job performance, and worse interpersonal relationships (Meister et al., 2014; Swann, Johnson, & Bosson,

2009). Hierarchical transitions therefore involve team members engaging in responses to cope with and resolve the identity asymmetry they are experiencing between their own work identity and the one their organizations impose onto them. The two general mechanisms through which individuals can resolve their intrapersonal identity asymmetry are (1) resolutions based on internal efforts, where one *embraces* the change by altering his or her internal identity to match perceived external views, and (2) resolutions based on external efforts, where individuals *challenge* their new identity (Meister et al., 2014).

The first type of response consists of individuals embracing their new position by internalizing the identity associated with the new hierarchy. This creates an alignment between the role and behaviors desired by the organization, and that adopted by the team member. Recalling our previous example of organizations transitioning towards Holacracy, employees reconciling their intrapersonal identity asymmetry following this strategy would redefine their self-concept as holding increased power levels; similarly, managers would embrace a position associated with alleviated power levels.

The second type of response involves individuals striving to resolve their internal identity asymmetry by challenging the boundaries of the organizationally-prescribed power. The literature on role crafting (Wrzesniewski & Dutton, 2001), for instance, speaks to that effect, whereby employees actively design the work they do and who they are at work. Individuals are therefore able to create a different meaning of their new position, which can be desirable or undesirable for the organization. As an example, when organizations shift to more egalitarian hierarchical arrangements, a manager can challenge his or her lower-power identity by keeping certain decision-making powers that should be transferred to employees. As a result, this strategy mainly involves forging a new identity that fits with how an individual perceives it.

As individuals engage in the process of intrapersonal identity reconciliation by embracing or challenging their new identity, they strive to develop relationships with their teammates that reflect their desired identity. While power relations are balanced and stabilized between dyads in existing teams (Emerson, 1962), transitions in power hierarchies create ambiguity about who has power over whom. This ambiguity requires recalibrating power relations and renegotiating roles (Goffman, 1959). Therefore, as presented in Figure 2.1, we argue that hierarchical transitions entrain the process of *identity renegotiation* at the dyadic level.

Identity renegotiation is the process through which pairs of team members establish their respective identities (Swann, 1987), which, in turn, specifies the work relationship that ties them together (Swann, Johnson, & Bosson, 2009). Individuals infer their identity through social interactions (Mead, 1934), a process involving *perceivers* and *targets*. At work, a perceiver initially appraises a target's identity, and expects targets to behave in ways according to these expectations. Targets, on the other hand, try to get perceivers to treat them in ways that are aligned with their own work identity (Swann et al., 2009). This process unfolds iteratively, as individuals are fundamentally motivated to achieve interpersonal congruence (Swann, Rentfrow, & Guinn, 2003), defined as the compatibility between how they perceive themselves and how team members perceive them (Polzer, Milton, & Swann, 2002).

Power relations constitute the core relationship of interest during hierarchical transitions. As individuals go through the process of identity reconciliation, they engage with others in ways that reflect their position towards this internal reconciliation process. In the case of flattened hierarchies, for instance, managers strongly relating to their previous work identity might interact in the same way they did prior to the hierarchical shift, while employees embracing their power gains within the new hierarchy will behave and engage in a more empowered manner with

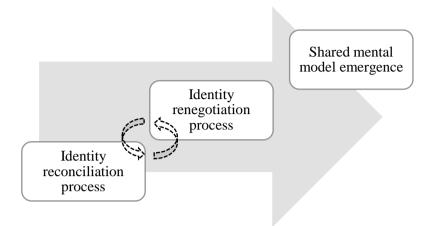


FIGURE 2.1 Social Identity and Cognitive Processes Underpinning Hierarchical Transitions in Teams

their colleagues. Targets signal their newfound powers in active and passive ways, be it in how they pose, dress, decorate their office or speak to others (Cuddy, Wilmuth, Yap, & Carney, 2015; Rafaeli & Pratt, 1993). For example, individuals experiencing power gains may speak up more in team meetings, make decisions without consulting their manager, or relax their dress code. On the flipside, perceivers also communicate their beliefs of the power levels targets are supposed to embody, such as through acts of resistance or deference (Hogg, 2001; Tyler, 1997). These interactions between the target and perceiver constitute the process of identity renegotiation.

When targets notice that perceivers hold views of them that conflict with their own self-view, they can adopt two strategies: *acquiesce* or *amplify* (Swann et al., 2009). Acquiescing involves accepting that there will be divergences between one's self-view and that held by others. In contrast, amplifying strategies involve affirming one's work identity by behaving in more exaggerated ways, so as to solicit responses from perceivers that are congruent with one's self-view. At work, if a targets hold and display self-views associated with high power but receive feedback from

perceivers that reflects a more subordinate position, they may therefore choose to reassert their identity by behaving in a more dominant fashion, or to pursue identity negotiation following a lower-powered identity.

Together, the processes of intrapersonal identity reconciliation and interpersonal identity renegotiation are tightly coupled, meaning that individuals seek alignment between their own views and those of others. As described previously, these identity processes are linked in a bottom-up fashion, whereby the intrapersonal process of reconciling with one's new work identity influences how individuals engage in dyadic identity renegotiation. They are also coupled from a top-down manner, whereby resolutions at the dyadic level can cascade down to the intrapersonal level: when individuals receive feedback from others during identity renegotiation, they may integrate these perceptions in their own self-views as a part of their identity reconciliation. That is, when individuals acquiesce at the intrapersonal level to power relations that differ from their own perceived power levels, they may consequently adjust their self-views to reflect the work relationships they have established.

Team-Level Emergence of Shared Mental Models and Stabilizing Power Hierarchies

As team members' identities are being redefined intrapersonally and renegotiated interpersonally, teams develop a shared mental model of each other's position in the new power hierarchy. Shared mental models (SMMs) refer to "an organized understanding or mental representation of knowledge that is shared by team members" (Mathieu, Heffner, Goodwin, Cannon-Bowers, & Salas, 2005: 38). SMMs are characterized by their *strength*—the degree of sharedness in perception between team members (DeChurch & Mesmer-Magnus, 2010)—regarding taskwork and teamwork (Mathieu, Maynard, Rapp, & Gilson, 2008; Mohammed,

Ferzandi, & Hamilton, 2010). Taskwork SMMs refer to a team's shared understanding about how to accomplish team tasks. Teamwork SMMs relate to the degree of shared understanding concerning who teammates are and how they interact with each other (Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000; Mathieu et al., 2008), which, in relation to power, means what type of power hierarchy binds members of the team. Because hierarchical transitions overhaul existing relationships without necessarily altering the tasks that teams undertake, we consider hierarchies to be principally associated with teamwork SMMs. Multilevel in nature, SMMs are shaped by social interactions within a team (Klimoski & Mohammed, 1994; Marks, Mathieu, & Zaccaro, 2001). Accordingly, SMMs constitute emergent states by which the cognition of individuals are manifested as a collective phenomenon (Kozlowski & Klein, 2000; Mohammed et al., 2010).

We propose that the emergence of a team SMM is contingent upon the strategies individuals adopt to reconcile their intrapersonal identity asymmetry, and to renegotiate their identity with others. Indeed, when individual team members embrace the new power position that is prescribed to them during the hierarchical transition, these identity processes unfold relatively linearly as members develop power relations in accordance to the hierarchy organizations intend to implement. By opting to resolve their intrapersonal identity asymmetry through internal efforts, individuals align their self-views with the roles and behaviors associated with their new position in the hierarchy. At the interpersonal level, they may consequently adopt an amplifying strategy to establish power relations that are congruent both at the intra- and interpersonal levels. Individuals' mental models subsequently converge towards a strong SMM of the power identities and relations that bind members of the team.

However, team members adopting divergent strategies to reconcile their intrapersonal identity asymmetry will hold different views towards the power

relations that should be developed with regards to their new power-related work identity. These divergent strategies engender repercussions at the dyadic level as team members communicate their different views when they adopt amplifying strategies to signal their work identities to others. In other words, two individuals challenging and embracing, respectively, their organizationally-prescribed position in the hierarchy will seek to develop different types of power relations with each other. Moreover, this scenario implies that if one of these two team members adopts an acquiescing strategy during the identity renegotiation process, that party would concede to a power-relation that leaves them in a situation of interpersonal incongruence. To prevent the unpleasant experience of interpersonal incongruence, the conceding party can pursue a different strategy at the intrapersonal level by adopting a self-view that reflects the power relation they acquiesce to at the dyadic level. Alternatively, he or she may strive to prevent the experience of intrapersonal incongruence by following an amplifying strategy to renegotiate their identity more forcefully. In turn, this will trigger a response from the other teammate, who must decide whether to acquiesce to the power relation, or amplify his or her self-views. Over time, an SMM emerges as members calibrate their identities and balance their power relations. As such, the pathway towards a team SMM is non-linear and recursive, driven by individuals' desire to seek intra- and interpersonal congruence.

At the extreme, if all team members hold and amplify divergent views of what each other's power-related work identities should be, their opposing behaviors generate disagreements and conflict within the team regarding who has power over whom, and on what. In this instance, the aforementioned identity processes do not result in a common understanding of the team power hierarchy that should govern behavior within the team. If sustained, this dysfunction causes the process of hierarchical transition to collapse—that is, no SMM takes shape and teams remain in a state of hierarchical instability. This implies that the process of building the teams' shared

mental model has not been finalized, and that teams' power-related identities and relationships are still in flux.

Thus far, we have examined how individuals experiencing intrapersonal identity asymmetry reconcile work identities, and how dyads reestablish work relations in the aftermath of hierarchical transitions. We have proposed that, together, the processes of identity reconciliation and renegotiation lead team members contribute towards the emergence of a SMM of "who has power over whom" in teams. And, when a dominant SMM of the power identities and relations emerges in a team, a stable hierarchy takes place. Otherwise, the lack of a team SMM signifies that team hierarchies are unstable because members do not understand who should defer to whom in the workplace (Bunderson et al., 2015; Simpson, Willer, & Ridgeway, 2012).

In the following section we shift our focus from the multilevel processes involved in hierarchical transitions to the structural outcomes of this process, and to the implications of this process on team members' incongruence. We develop how reaching hierarchical stability does not necessarily assure that team members are sorted in positions and power relations congruent with their self-views. Nor does it guarantee that shape of the hierarchy corresponds to the ones organizations originally prescribe to the team.

2.3 EMERGENT POWER HIERARCHIES AND (IN)CONGRUENCES

Power Change and the Identity Reconciliation Process

We begin by proposing that individuals experience hierarchical transitions differently, based on the power change they experience, as well as their newfound

power levels in the team. Subsequently, we argue that these differences shape the way individuals resolve identity asymmetry at the intra- and interpersonal levels.

At the intrapersonal level, those gaining power are more likely to opt for embracing the new identity imposed by hierarchical change, as gaining power constitutes an overall positive experience (Anderson & Galinsky, 2006). Indeed, higher power accords individuals with a sense of security and safety as individuals become more autonomous and less dependent on others (Friedman & Förster, 2010). People who experience elevated powers behave in ways that are less inhibited, more action-oriented and experience more positive affect (Anderson & Berdahl, 2002; Smith & Bargh, 2008). Therefore, we argue that those who gain power in a hierarchical shift are more likely to embrace their new identity than challenge it.

In contrast, those who lose power are more likely to challenge the new identity imposed upon them. Here, we draw on previous research linking the experience of power loss to feelings of self-threat, a core explanatory concept within the social identity framework (Scheepers & Ellemers, 2005). In laboratory experiments, individuals at the risk of losing planning, monitoring and assessing powers were found to experience self-threat (Sligte, De Dreu, & Nijstad, 2011), as were individuals who risked losing respect and admiration in the eyes of others (Marr & Thau, 2014). Therefore, we formulate the following proposition:

Proposition 1: During hierarchical transitions, individuals experiencing power loss are more likely to challenge than embrace their new power-related work identities.

Power Asymmetry and the Identity Renegotiation Process

At the interpersonal level, we argue that the strategy individuals subscribe to depends on the level of perceived power inequality between dyads. The large body

of research on identity negotiation shows that amongst power-equal individuals, identity renegotiation largely involves targets behaving in ways that bring perceiver's views in line with their own (cf. Swann et al., 2009). In other words, most dyadic relationships are formed with individuals adopting amplifying strategies, while a smaller portion of team members might acquiesce to perceiver's view of them (Swann, Milton, & Polzer, 2000).

The process of identity renegotiation unfolds differently when one individual is perceived to hold higher power than another. This perception of power inequality is rooted both in individuals' newfound structural power, and influenced by their experience of power gain or power loss. First, in unequal power dyads, people with less structural power engage in negotiations with lower aspirations, lower approach, take less risk and make more concessions (Anderson & Berdahl, 2002; Anderson & Galinsky, 2006; De Dreu & Van Kleef, 2004; Galinsky, Magee, & Gruenfeld, 2003; van Kleef, De Dreu, & Manstead, 2004). Second, power changes influence the identity renegotiation process because those who lose power perceive their situation as being precarious, and are motivated to resist their loss. Experimental evidence shows that when power is perceived as unstable, individuals are willing to engage in more risk-taking (Jordan, Sivanathan, & Galinsky, 2011), and may behave aggressively when they have a low ability to influence others (Fast & Chen, 2009). More explicitly, Georgesen and Harris (2006) have shown that when the powerful occupy insecure positions, they hold onto their power during interactions with their subordinates, even retaining resources from them.

As a consequence, these two abovementioned factors can interact in different ways during the process of identity renegotiation amongst asymmetrically-powered dyads. Structural power reinforces the threat of power loss when individuals are asked to redistribute some of their power to others, but still hold power over their teammates. Such a case could emerge when firms transition from vertical to flat

hierarchies under Agile management: managers are asked to reallocate decision-making authority to employees, but still control the power to hire and fire. A second possible scenario solely involves the experience of power loss, such as when firms erase a hierarchical layer, and middle managers are demoted to the same hierarchical rank as their once-subordinates. Consequently, these managers remain motivated to resist power loss although they hold no structural power over their team mates. Third, when firms steepen hierarchies, employees can lose power but end up in an unfavorable structural position. In this instance, only the effect of power loss is present.

Proposition 2: During hierarchical transitions, dyads with equal power are more likely to renegotiate power relations by adopting amplifying strategies, whereas the powerless acquiesce to the relation amplified by the powerful in dyads with unequal power.

Extending the power research examining how individuals respond to power gains and losses, as well as the impact of these power changes on interpersonal negotiation processes, we propose that these will result in repercussions at the hierarchical level as they affect formation of a shared mental model in the team. The previous arguments suggest that when flattening hierarchies, those with high power are likely to resist power loss and work towards establishing power relations where they would retain such powers. As these individuals retain a higher rank over their subordinates, to whom they should transfer powers, they will likely develop power relations that favor power retention. Subsequently, a team SMM emerges in favor of the perception of the amplifying party, resulting in a new hierarchy is less "flat" than organizations intended. This situation is more apparent in case of a transition toward a steeper hierarchy where many team members will challenge and resist losing their power, and follow an amplifying strategy. The small minority towards whom power is redistributed will not be sufficient to fight that resistance, and consequently the

new power hierarchy is less "steep" than organizations intended.

Proposition 3: The more hierarchical transitions involve power loss and unequal power relations, the more a shared mental model emerges around those who lose power, favoring hierarchies that are less steep (flat) than organizations prescribed.

Embedded Incongruences in Newly Stable Hierarchies

In this section we develop how new hierarchies can consolidate around identities and power relations that leave individuals in states of incongruence, and specify the cross-level consequences of such behaviors at the intrapersonal and team levels. In so doing we build upon previous literature examining the reciprocal nature of identity work, which has noted the difficulty of establishing identities in situations where individuals disaffirm others' identity signals (e.g. DeRue & Ashford, 2010). We advance and nuance this research by focusing on the cognitive and behavioral divide developed when individuals engage in power relations that reinforce others' identities, but hold themselves in states of interpersonal incongruence.

On the one hand, teams can converge towards a SMM that leaves all members in a state of intrapersonal and interpersonal congruence. Such is the scenario where team members align with organizations' prescribed hierarchy by embracing their new work identity at the intrapersonal level. Moreover, we have established how team members adopting acquiescing strategies during the identity renegotiation process can concede to power relations that leave them in a state of interpersonal incongruence. However, since people are motivated to resolve their own interpersonal congruence, those adopting an acquiescing strategy may therefore pursue a different strategy at the intrapersonal level: they internalize the expectations of the amplifying party by embracing a work identity that entails a power level consistent with others' expectations (Meister et al., 2014; Swann et al.,

2000). As a result, a team SMM emerges based on converging views between team members, who experience intrapersonal and interpersonal congruence within the new power hierarchy.

While it is possible that teams institute a power hierarchy that is coherent with the one organizations prescribe, hierarchical stability does not imply that the new team hierarchy aligns with the one desired by the organization initiating the transition. In the previous example, individuals resolve their interpersonal identity asymmetry by adjusting their self-views and achieve congruence at both the intra- and interpersonal levels. However, the resulting team hierarchy's structure departs one desired by the organization initiating the transition: if team members have conceded certain powers to individuals who were supposed to transfer them, the resulting hierarchy is less flat (steep) than originally intended by the organization. Alternatively, it is also possible that teams develop hierarchies identical to the previous one at the conclusion of the transition process, meaning that all teammates would have challenged the new position and agreed with each other to keep their previous work relationship.

On the other hand, it is not necessarily the case that all team members converge towards the same SMM. A dominant SMM can take place in the team leaving certain members in incongruent states. Based on research on power dynamics, we have argued that during hierarchical transitions, team members who lose power are likely to adopt opposing strategies to reconcile their intrapersonal identity asymmetry, and those gaining power acquiesce to powerholders' pursuit in establishing the power relations within the team. As such, team members gaining power eschew confrontation by suppressing their identity-related motives when dealing with individuals withholding power, and behave correspondingly to the power relations imposed by the latter. A team SMM emerges as individuals converge and consolidate their understanding in accordance to this behavior (cf.

Klimoski & Mohammed, 1994; Mathieu et al., 2000), and hierarchical stability is consequently achieved. In this situation, whereas powerholders are in a state of intrapersonal and interpersonal congruence, other team members are locked into a state of interpersonal identity incongruence.

If our previous scenarios sees low-powered individuals conceding to power relations that leave them in a state of interpersonal identity incongruence, they may also strive to resolve their incongruences by following an amplifying strategy and renegotiating their identity more forcefully. This can be the case when organizations flatten hierarchies, where managers must distribute decision-making authorities to employees. As a consequence, managers confronted with an increasing opposition from those employees receive signals from others that diverge from the high power identity they defend, and experience the disagreeable state of interpersonal incongruence. To resolve their own interpersonal congruence, managers must pursue a different strategy at the intrapersonal level: they internalize employees' expectations by embracing a work identity that entails low power. Yet, research on power suggests that changing self-views is especially difficult for powerholders, as they tend to hold a more rigid sense of self than the powerless (Anderson, John, & Keltner, 2012; Galinsky, Magee, Inesi, & Gruenfeld, 2006; Lammers, Galinsky, Gordijn, & Otten, 2012), and see power-relevant attributes (such as wealth, intelligence, physical attractiveness and power) as important components to their self-definition (Inesi, Lee, & Rios, 2014). Managers who are otherwise unable or unwilling to overcome these challenges must tolerate chronic discrepancies between their desired and the organizationally-prescribed work identity.

In this scenario where powerholders fail to embrace a low power position, SMM development depends on how they negotiate their identity with employees at the interpersonal level. Managers may decide to endure interpersonal incongruence and acquiesce to employees' expectations, and the team consequently converges

towards a shared mental model where the new power hierarchy is instituted. When employees' SMM takes hold at the team level, hierarchical stability is achieved and managers are locked into this state of interpersonal incongruence.

Proposition 4a. During hierarchical transitions, when team members hold compatible identity renegotiation strategies, a shared mental model of the hierarchies emerges where team members are in a state of intrapersonal and interpersonal congruence.

Proposition 4b. During hierarchical transitions, when an amplifying party's mental model dominates at the team level, the acquiescing party may be locked into a state of interpersonal incongruence.

2.4 DISCUSSION

Organizational practices that overhaul hierarchies cause deep changes to individuals' power-based work identities and team members' power relations. Our model argues that hierarchical transitions cause identity processes at the intra- and interpersonal levels to unfold, which may culminate into a shared mental model of new power hierarchies. The pathway towards new hierarchies is non-linear and recursive, and may result in a hierarchy different than what the organization wished for as well as embedding certain team members in states of incongruence.

Our model of hierarchical change in teams, and the identity processes they entrain, contribute to the growing literature on power and hierarchical dynamics in several ways. First, our study advocates a dynamic and multilevel perspective on power hierarchies. Prior research has been fragmented along single levels of analysis (for reviews, see Galinsky et al., 2012; Sturm & Antonakis, 2014). For example, social

psychologists have built a rich knowledge repository regarding what it means to have or lack power in terms confidence (Fast, Sivanathan, Mayer, & Galinsky, 2012), taking others' perspectives (Galinsky et al., 2006), experiencing positive affect (Keltner, Gruenfeld, & Anderson, 2003) and reciprocal emotions (Van Kleef et al., 2008), taking action (Galinsky et al. 2003), violating social norms (Bendahan, Zehnder, Pralong, & Antonakis, 2015) as well as risk seeking (Anderson & Galinsky, 2006). Similarly, team researchers have been primarily concerned about team level outcomes of hierarchical structures. For example, Greer and van Kleef (2010) and (Tarakci et al., 2016) investigate whether a flatter or steeper hierarchy fosters team performance.

We believe this division between individual power and team hierarchy offers an incomplete understanding of organizational behavior, especially in the context of hierarchical change. This is because power and hierarchy are interwoven: a team member's power derives its meaning in comparison to other members' power, and consequently governs dyadic relationships that structure the team's overall power hierarchy. And when hierarchical transitions affect team members' sense of identity, a multilevel conceptualization is essential to develop an understanding of how this may affect work relationships, and impact the way individuals develop a shared mental model of the overall team hierarchy. Moving onward, scholars investigating power dynamics can integrate the forward effects of power change on the relational checks and balances that shape the emergence of these SMMs.

Second, we contribute to research on power and hierarchy by highlighting their interplay with social identity. We argue that team members' power indicates not only their relative position in the hierarchy, but also becomes internalized as a salient part of their individual work identity. Hierarchies prescribe expectations about tasks and behaviors in relation to one's power position. Accordingly,

approaching hierarchical dynamics with an identity lens has enabled us to illustrate that certain team members may be "locked" into dissatisfying positions and relations as new hierarchies stabilize. This perspective opens new avenues regarding how team members' self-categorization defines their relationships with other team members, and why power struggles and conflicts occur and persist in teams. Our model thus informs scholars in the domains of identity and power about the factors that may give rise to individual action in teams.

Third, we extend our understanding of what hierarchical dynamism means and entails for power researchers. Our presentation of intrapersonal and interpersonal identity processes triggered by hierarchical transitions contributes to a burgeoning discussion on hierarchical change, which has so far offered a structural account of such transitions (e.g. Hollenbeck et al., 2011) and established that they trigger behavioral responses that differ from those observed under conditions of hierarchical stability (e.g. Hays & Bendersky, 2015). Our model is also contextually salient for research on team processes and individual behavior in teams, by conceptualizing a link between two streams of literatures on team hierarchies: the growing literature examining dynamics occurring within stable hierarchies (e.g. Aime et al., 2013; Tarakci et al., 2016) and the traditional views of hierarchies-asstructures (e.g. Anderson & Galinsky, 2006; Gruenfeld et al., 2008; Magee & Galinsky, 2008). By arguing that stable hierarchies are not hollow structures, but animated by self-reinforcing identity processes, we lay the theoretical groundwork for explaining how and why dynamics occur in otherwise stable structures.

Theoretical Extensions

Our model focuses on the proximal processes that occur during transitions in power hierarchies. In the interest of narrative clarity, we have refrained from elaborating potential boundary conditions of our model. For example, at the intrapersonal level, individuals' disposition towards power—beliefs about one's ability to exercise power—could influence the degree towards which teammates are likely to accept or challenge the power levels associated with their new position in the hierarchy. Also, the extent to which individual's self-construal is rooted in his or her personal (independent) self or social (interdependent) self is likely to impact the identity renegotiation process (cf. Aron, Aron, Tudor, & Nelson, 1991; Wisse & van Knippenberg, 2009). At the dyadic level, prior research has proposed how an individual's self-efficacious beliefs can influence identity-related processes (Ashforth & Saks, 1995). And, at the team level, team diversity and faultlines may accentuate or attenuate identity-related processes during hierarchical transitions (cf. Lau & Murnighan, 1998; Shemla, Meyer, Greer, & Jehn, 2014). Future research can thus leverage our conceptual groundings to examine how such factors influence power processes occurring at multiple levels within teams undergoing hierarchical change.

Moreover, we have focused on hierarchical transitions without considering their immediate impacts on individual and team effectiveness. We encourage future empirical work to investigate how unresolved intrapersonal and interpersonal incongruences affect the power relationships and team effectiveness in the consequent power hierarchies that take shape. Indeed, research on both hierarchies (e.g. Groysberg, Polzer, & Elfenbein, 2011; Overbeck, Correll, & Park, 2005) and SMMs (for reviews, see DeChurch & Mesmer-Magnus, 2010; Mohammed et al., 2010) suggests that teams with low SMMs fail to function and coordinate effectively. Further research on such individual, dyadic and team-level outcomes of our model will contribute to a deeper understanding of power hierarchies and their dynamics in teams.

Managerial Implications

Adopting novel management systems often requires teams to change who has what powers, and over whom. Our model offers practitioners a better understanding of the repercussions of hierarchical transitions on individuals, work relationships, as well as the consequent power hierarchies that emerge within teams. This dynamic theory provides a basis to develop better change practices than those founded solely upon on static-based perspectives (Nohria & Beer, 2000).

We highlight that some individuals can consider their work identities to be immutable; especially those who hold positions of power. Our model indicates how these individuals can ultimately drive the development of team hierarchies that are less steep or flat than desired. By acknowledging the possibility of such outcomes, organizations can validate what type of power hierarchy takes shape as teams undergo hierarchical transitions. Active involvement, such as communicating which power positions and power relations are desirable, can help teams align with organizational goals. Deeper interventions are also possible; as our model argues, some stable hierarchies encompass inherent states of intrapersonal asymmetry. Providing the means for such individuals to exit the organizations (e.g. Taylor, 2008, 2014) may ultimately be beneficial for successful hierarchical transitions.

2.5 CONCLUSION

Team hierarchies change. When organizations institute such transitions, they dismantle the existing work identities and relationships that interlock to form stable team power hierarchies. As a result, transitions in power hierarchies entail profound change for teams and their members. To unpack the effects of such transitions on work relationships, we have built a multilevel process theory based on the notion of

identity processes. We have argued that understanding hierarchical transitions requires re-conceptualizing hierarchies as multilevel structures interwoven with social identity to discover the way intrapersonal and interpersonal identity processes twist and unfurl towards a new stable hierarchy, or a house of cards.

3. PLAYING THE RULES OF THE GAME: UNVEILING CONTINUOUS TRUCE DYNAMICS IN ROUTINES

This chapter has received an invitation to revise and resubmit. Co-author: Claus Rerup.

ABSTRACT

Research on routine dynamics has highlighted the pivotal role that actors can play in solving outcome-related problems through collective routine patterning. Yet routines also host problems of governance and control. When routines bring together actors with divergent interests and motivations, conflicting perspectives arise about the routine-as-truce – the implicit "rules of the game" that govern how routines can be performed and patterned. Past research has undertheorized this important aspect of routines by assuming that individual participants have little influence on the underlying rules that govern routine accomplishments. Through an inductive study of scrum teams in infrastructure management services, we show how individual participants engage in *jurisdictional patterning* of the routine-astruce to change who is allowed to do what during routine performances. By theorizing truces as continuously negotiated, and re-negotiated, in ongoing routine accomplishments, we contribute to knowledge about the way truce dynamics explain stability and change in organizational routines.

3.1 INTRODUCTION

Good conceptualizations are essential to theory and practice: they shape how we see and think, create order out of chaos, and discriminate the important from the trivial (Weick, 1989). In organizational routines, reconceptualization has shifted our perceptions of how routine tasks are performed, from inflexible and inert standard operating procedures (Cyert & March, 1963; March & Simon, 1958), to sources of organizational flexibility and change (Dittrich, Guérard, & Seidl, 2016; Feldman & Pentland, 2003; Kremser & Blagoev, 2020; Turner & Rindova, 2018).

While routines are a means of accomplishing tasks, they are also a means to govern and manage conflict (Coriat & Dosi, 1998; Feldman & Pentland, 2003). Conceptually, the metaphor of the routine-as-truce construes routines as agreements on how to carry out work, despite inevitable differences in interests, incentives, and influence among participants (Nelson & Winter, 1982). Yet the notion of a truce fosters a view of routine governance as relatively fixed and unchanging (Salvato & Rerup, 2018; Zbaracki & Bergen, 2010). Although conflict in organizational life is inevitable (Bucher & Langley, 2016; Cacciatori 2012; March, 1962), a static conceptualization of the routine-as-truce cannot theorize ongoing conflict and governance dynamics. It thus restricts our ability both to understand how such dynamics relate to routine stability and change, and to integrate conflict and governance into the conceptualization of routines (Cohen et al., 1996; Lazaric, 2000; Feldman, 2016).

We puzzled over this issue during an inductive, qualitative study of scrum routines, a popular self-governing project management routine (Dönmez, Grote, & Brusoni, 2016; Goh & Pentland, 2019; Sutherland & Sutherland, 2014). In our setting, governance was not settled or suspended; it was an "effortful accomplishment"

(Pentland & Reuter, 1994) that involved ongoing management of process conflict – an awareness of controversies regarding how task accomplishment will proceed (Cronin & Bezrukova, 2019; Jehn, 1995, 1997). Challenged to reconcile our observations with theory, we pursued the following research question: how are conflict and governance dynamics enacted in ongoing routine performances?

In regarding conflict as integral to routines, we develop new theory on how truces are continuously negotiated and re-negotiated in ongoing routine accomplishments. Our evidence places jurisdictional patterning as key to seeing and theorizing about ongoing truce dynamics in routines. By jurisdictional patterning, we mean "doings and sayings" (Feldman, 2016: 39) that aim to change who is allowed to do what during routine accomplishments. Indeed, in our study routine participants did not break truces to address their conflict (Kaplan, 2015). Rather, they carried out routines all the while engaging in subtle and mundane moves to change the jurisdictional boundaries of the routine-as-truce.

Jurisdictional patterning highlights the routine-as-truce as a locus of routine action. In so doing, it establishes a new class of endogenous routine dynamics. Current theory tells us that routine dynamics emerge when participants engage in efforts to direct routine performances toward consistent or novel task outcomes — what is known as routine patterning (Feldman, 2016; Goh & Pentland, 2019). In contrast, we found that participants act to shape the underlying rules that govern how routines can be carried out — truce patterning. Not only can participants play out routines in different ways, they can also alter the rules of the game. By articulating how such truce dynamics interplay with routine dynamics, our theory proposes a new way of seeing and theorizing sources of routine stability and change.

3.2 ORGANIZATIONAL ROUTINES, CONFLICT AND TRUCE DYNAMICS

We draw on a dynamic view of routines (Feldman, 2000) and define them as "repetitive, recognizable patterns of interdependent actions, carried out by multiple actors" (Feldman & Pentland, 2003). By emphasizing actions, scholars have established that endogenous routine dynamics occur as participants accomplish their work while *performing* routines and engaging in doings and sayings that create new patterns of actions in the routine (i.e., *patterning*) (Feldman, 2016; Goh & Pentland, 2019). Within this view, routines hold two critical functions: accomplishing organizational tasks and goals, and addressing conflict within organizations (Cohen et al. 1996; Pentland & Feldman, 2005). The latter role is often termed the *routine-as-truce* (Kaplan, 2015; Nelson and Winter, 1982), which is "an implicit agreement among routine participants to perform the routine task ... for a period of time while suspending disputes about how to perform the routine task that would otherwise be engendered by their diverging interests" (Salvato & Rerup, 2018: 171).

Governance and Conflict in the Routine-as-truce

To understand the routine-as-truce, we first observe that organizational routines are inherently generative: carrying out the routine can lead to endogenous change (D'Addario, 2008; Pentland, Haerem, & Hillison, 2011). Yet despite the many possible combinations of actions, and the reality that individual differences "create problems of individual incentives, vested interest, and influence" (Zbaracki & Bergen, 2010: 955), routine participants are rarely surprised by each other's behavior as they accomplish tasks and goals (Becker, 2004; Coriat & Dosi, 1998). Their actions – performing and patterning alike – follow invisible rules of the game (Pentland, 1992). The implicit agreement, or truce, to enact these rules of the game, along with the mechanisms of incentives and control that are "patterned in ways that

reflect features of the underlying problem of diverging individual member interests" (Nelson & Winter, 1982: 111), are what enables participants to get work done despite their differences. Truces govern routine accomplishments.

Yet although *routine-as-truce* captures the idea that achieving governance entails effort and action, it does not reveal how routine participants manage conflicting incentives and maintain order. A truce refers to an outcome, not a process. To surface truce dynamics, we summarize two perspectives in Table 3.1 on how routines manage conflicting interests. In what follows, we first discuss the differences in these conceptualizations. We then introduce the notion of *moves*, which we use to examine how participants navigate process conflict in routines.

Conflict as suspended in the routine-as-truce. A first stream of literature views conflict as suspended in the routine-as-truce (Nelson & Winter, 1982; Zbaracki & Bergen, 2010). When truces are absent, diverging member interests, conflict over roles (Barley, 1986) and jurisdictions (Bechky, 2003, 2019) generate intraorganizational conflict that impedes members from working in the routine. As such, once participants agree on a way to govern the routine, the resulting truce is considered valuable. Established truces are clearly delineated: participants act within jurisdictional boundaries, where they can perform and pattern the routine freely (Zbaracki & Bergen, 2010). These "zones of discretion" (Nelson & Winter, 1982: 108) are also fixed, because participants monitor each other's actions to defend their own interests under the truce. With disruptive causes of conflict rendered latent, residual expressions of conflict are considered inoffensive: predictable manifestations of the more contentious terms of the routine-as-truce that minimally affect how routines are governed (Nelson & Winter, 1982).

Two areas of research adopt the view of conflict as suspended in routines. The first highlights the supporting function of the routine-as-truce by examining conflicts

Table 3.1 Suspended vs. Regulated View of Conflict in Organizational Routines

	Suspended	Regulated
View of routine-as-	The routine-as-truce	The routine-as-truce is a
truce	sUppresses conflict among	site of ongoing conflict
	participants	management among
		participants
Core reference	Nelson & Winter (1982)	Salvato & Rerup (2018)
Implication for	Punctuated equilibrium	Continuous change model
truce dynamics	model of truce change:	of truce dynamics: during
	during routine	routine accomplishments,
	accomplishments, truces	truces are performed and
	are performed.	patterned
Implication for	Stable truces enable routine	Stable truces are a source
routine (task and	dynamics	of routine dynamics
goal		
accomplishment) dynamics		
Consequent model	Douting as trues locally	Douting as trues into anotad
Consequent model	Routine-as-truce loosely	Routine-as-truce integrated with routine
	coupled to routine accomplishments	
Research focus	External shocks to stable	accomplishments Endogenous truce
Research focus		dynamics, and
	truces, <u>or</u> Endogenous routine	Endogenous routine
	dynamics	dynamics
Examples	Truce collapses: Cohendet	Conflicting perspectives:
Examples	& Simon, 2016;	Bucher & Langley, 2016;
	Edmondson et al. 2001;	Dittrich & Seidl, 2018;
	Kaplan 2015; Zbaracki &	Howard-Grenville, 2005;
	Bergen, 2010.	Rerup & Feldman, 2011;
	Routine dynamics:	Turner & Rindova, 2012.
	Cacciatori, 2012; Deken et	Routine resistance: Barker,
	al. 2016; Dittrich et al.	1993; Prasad & Prasad,
	2016; Feldman 2000;	2000; Ybema & Horvers
	Sonenshein, 2016.	2017.
	2010110111, 20101	Truce dynamics: Bertels et
		al. 2016; Salvato & Rerup,
		2018.

caused by exogenous shocks that break or collapse truces. Here, scholars trace conflict episodes that begin when existing governance systems break down and conclude when new ones emerge. Their empirical evidence shows that stable truces are necessary for functioning routines: when truces are broken, conflict erupts amongst participants, causing the routine to collapse (Cohendet & Simon, 2016; Edmondson, Bohmer, & Pisano, 2001; Kaplan, 2015; Zbaracki & Bergen, 2010).

The second area examines how tasks and goals in routines are accomplished. It focuses on the endogenous dynamics that occur when participants face problems in achieving such outcomes. Problems that motivate participants to engage in "routine work" (Deken et al., 2016) include unintended and undesirable routine outcomes such as mistakes and delays (Feldman, 2000; Dittrich et al., 2016), and promoting creativity and novelty (Feldman et al., 2016; Sonenshein, 2016). Here, this focus often means dynamics that are associated with participants' conflicting interests are neglected, though they can impede problem solving initiatives (Cacciatori, 2012; Lazaric, 2000). Taken together, the view of conflict as suspended in the routine-astruce yields a loosely coupled model of truces and routines: once established, the routine-as-truce governs routine accomplishments in a set way.

Conflict as regulated in the routine-as-truce. In contrast, another stream of research sees conflicting interests as regulated in routines. This research considers organizations as systems of unresolved conflict and coalitions (Feldman, 2016; March 1962; Mithani & O'Brien, 2020) involving multiple actors whose interests are "continually negotiated and renegotiated" (March & Simon, 1993: 215). Conflict is both rooted in structural aspects and subjectively valued and perceived (Boulding, 1963; Jehn, 1995; Simons & Peterson, 2000). Even when truces are established, participants struggle for advancement, power, and perquisites. They also disagree about how to accomplish tasks, who is responsible for what, and how to delegate work (Jehn, 1995, 1997; Pine & Mazmanian, 2017).

As a result, rather than treating truces as passive providers of stable routine governance, this research sees truces as effortful and ongoing accomplishments. The routine-as-truce is performed *and* patterned. Participants might express their conflict through forms of disapproval that break truces and halt work, but they normally prefer subtler expressions of resistance and disagreement (Barker, 1993; Prasad & Prasad, 2000; Ybema & Horvers, 2017). In this view, conflict may not be overtly expressed, but is meaningful insofar as those who experience it can draw on diverse strategies to flexibly enact the routine-as-truce (Bertels et al., 2016).

Thus far, most routine dynamics scholarship has examined conflicting perspectives and ongoing truce dynamics separately. Some of this work has highlighted how routines comprise individuals with divergent orientations and perspectives (Dittrich & Seidl, 2018). Howard-Grenville (2005) documented how routine embeddedness in multiple structures can generate misaligned artifacts and expectations, which in turn provide competing information that shape routine participants' intentions and orientations (focus on the past, present, and future). Later research highlights the role of trial and error (Rerup & Feldman, 2011), shared spaces for experimentation (Bucher & Langley, 2016), and improved connection between participants (Turner & Rindova, 2012) as ways to reconcile divergent perspectives in routines. These studies suggest that participants can hold conflicting perspectives within a routine, without addressing the implications for how these routines are governed.

In contrast, prior work on continuous change in truces has typically viewed endogenous truce change as resulting from collective patterning among participants. For example, Salvato and Rerup (2018) found that participants created junctures for collaboration across jurisdictional boundaries delineated by the routine-as-truce. These junctures enabled routine participants to collaboratively achieve conflicting organizational goals through the same routine. In a similar vein, Bertels et al.'s (2016) study of the process of integrating an external routine into Oilco showed that

participants' shared understanding of organizational culture led them to interpret and flexibly enact truces, which in turn generated new routine patterns.

Taken together, the view of conflict as regulated in routines yields an integrated model of routine dynamics and truce dynamics: continuous changes in established truces can occur, which may affect routine accomplishments. Yet we understand little about how these factors are linked. Rather than looking at conflict episodes, a deeper understanding of the smaller, incremental *moves* (Cronin & Bezrukova, 2019; Goffman, 1969; Pentland, 1992) participants take to navigate conflict can have important implications for research on multiple and divergent perspectives in routines, and their consequences for routine dynamics.

Moves and Truce Patterning in Routines

A move is "a specific action taken by one party to update the perception of and reaction to conflict in the others involved" (Cronin & Bezrukova, 2019: 776). Adopting the perspective of moves to study conflict in routines offers two theoretical advantages. First, moves reflect and enact structures, thereby manifesting the underlying routine-as-truce. Pentland (1992) introduced the concept of *organizing moves* to highlight how situated performances, such as when routines are performed, reflect existing organizational structures. Rather than freely patterning routines, participants' moves are constrained by three types of structures: (1) physical structures, such as material affordances; (2) ritual structures, such as the routine-as-truce; and (3) competence structures, involving cognitive resources distributed among individuals in the organization (Pentland, 1992; Pentland & Rueter, 1994). Each move expresses the structures in place.

In addition to surfacing the implicit structure of the routine-as-truce, moves capture actions related to truce patterning. Since structures are socially constructed, their boundaries are in flux, continually becoming, and subject to human agency (Langley

& Tsoukas, 2017; Langley et al., 2019). Research on the routine-as-truce has begun to theorize how participants structure truces (Kaplan, 2015), but is unclear about how they can do so when truces are unbroken. As strategic courses of action, participants' moves are made with intimate consideration of others' attitudes, preferences and knowledge of the rules of the game – which they may in turn exploit (Eberhardt et al., 2019; Goffman, 1969: 95). To trace ongoing truce dynamics, moves offer "the desirable properties of being meaningful to the interactants, related to structural properties of the situation, and yet under the willful control of the interactants" (Pentland, 1992: 530).

In our study, participants often experienced process conflict when they were limited by the structure of the routine-as-truce. Adopting the concept of moves let us see the truce elements that were at the source of this conflict. When the routine-as-truce constrained how participants could address their conflict, many resorted to patterning the truce – changing the rules that govern routine accomplishments. The notion of moves revealed the delicate nature of truce work: mundane and subtle actions and interactions that pattern the jurisdictional boundaries of the routine-as-truce.

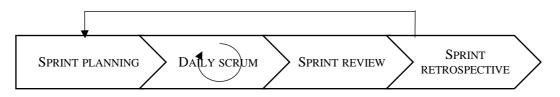
3.3 METHODS

We conducted a qualitative, inductive study using grounded theory approaches (Glaser & Strauss, 1967; Pratt, Sonenshein, & Feldman, 2020). Such research lends itself to developing theory, especially for process-related topics such as truce dynamics. Given our research question, we selected a context that enabled us to observe governance and conflict in routines. We chose a project management routine with complex and detailed "rules of the game": scrum (Cohendet & Simon, 2016; Dönmez, Grote, & Brusoni, 2016; Goh & Pentland, 2019).

To unpack the routine-as-truce, we first explain the project management routine. Figure 3.1 shows that scrum projects differ from traditional projects because they are done incrementally and iteratively rather than cumulatively and linearly. A cross-functional team works towards a project goal in fixed time blocks, typically two or three weeks long, called sprints. In the teams we studied, relationships between routine participants were defined through three core roles: a stakeholder representative called the *product owner*, a team facilitator called the *scrum master*, and the cross-functional development team members. Within each sprint, team members iterate on deliverables associated with their project goal by coordinating work during four key events: (1) the sprint planning, (2) the daily standup, (3) the sprint review, (4) the sprint retrospective. As illustrated by the recursive arrow in Figure 3.1, a new sprint begins immediately after the sprint retrospective. By iterating on intermediate deliverables, scrum teams work in a way that could flexibly integrate feedback, be it to a product's design or changes in product requirements that are normally difficult to incorporate in more traditional project management approaches.

Scrum provides a compelling context to study truce dynamics because it emphasizes self-management by a cross-functional team guided by numerous rules. Our scrum teams followed the most widely distributed and typical reference on scrum, The Scrum Guide (Schwaber & Sutherland, 2017), which totals 19 pages of descriptions of roles, events, and use of artifacts to guide scrum teams as they complete project work. Examples of the minutiae outlined in The Scrum Guide include: who is responsible for each artifact, when artifacts can be edited, how long events last, how often events occur, and which role is responsible for what task during each event. These detailed rules suggest complex truces with nuanced delineations of routine participants' jurisdictions. Because of the multiple touchpoints during each sprint,

Figure 3.1 The Scrum Project Management Routine



Sprint planning

- · First day of the sprint.
- · Define sprint goal
- · Forecast work capacity
- Select sprint tasks
- Estimate task complexity
- Assign task priority

Daily scrum

- Each day of the sprint
- Provide status updates
- · Coordinate team efforts
- Signal process impediments

Sprint review

- · Final day of the sprint
- · Discuss upcoming work
- · Assess sprint goal completion
- Demonstrate results to stakeholders

Sprint retrospective

- · Final day of the sprint
- · Identify and resolve areas of conflict
- Discuss and plan process improvements
- Assess team performance

The scrum project management routine breaks down a project into *sprints*. Each sprint is a routine iteration that consists of cross-functional team members working collaboratively to accomplish the project. The participants coordinate across four events within each sprint: the sprint planning event, the daily scrum (circular arrow), the sprint review, and the sprint retrospective. A new sprint begins immediately upon termination of the previous sprint, assuming there was one (overarching, recursive arrow). Most events require the active involvement from team members representing many or all of the following roles: product owner, scrum master, and development team. As a result, all events are enacted at the group level. The sub-points shown under each event are important examples, but they do not constitute an exhaustive list of the tasks accomplished per event. Sprints may include other events.

routine participants can quickly observe behaviors that adhere to or deviate from the routine-as-truce. Because the cross-functional team is non-hierarchical, we suspected that participants would be more likely to express their reactions towards any transgressions. Scrum's emphasis on self-management also makes it easier to change truces: although scrum masters may act as group leaders, the development team is responsible for how it accomplishes the work delineated in each sprint. In sum, the scrum routine provides an extreme setting for capturing ongoing truce dynamics. Such extreme settings are well-suited for building theory: since their dynamics tend to be highly visible, they bring to light processes and nuances that might be less easily observable in other contexts (Bamberger & Pratt, 2010).

Exploratory study. To provide insight on our research question and empirical context, we conducted an exploratory study. The first author conducted recurrent interviews (n = 21) and informal observations (n = 11 days) of two scrum teams in a medium-sized company over six months. During this period, the notion of process conflict and truce patterning began to emerge. First, although we established that routines were accomplished in a coordinated way, numerous respondents qualified the team's performances as "not very scrum," "not strictly scrum," "distorted," "not correct," or "not right" - towards which they expressed irritation, annoyance, tension, and frustration. This caused us to "pause in puzzlement" (Grodal, Anteby, & Holm, 2020: 15): contrary to the conceptualization of conflict as suspended in routines, scrum routine participants appeared to accomplish their tasks while managing their experiences of process conflict. Second, we noticed evidence of truce patterning. Respondents brought up the routine-as-truce in terms of "rules," "way of working," aspects of an "unspoken rule," and what was "allowed" or not during sprints. Facing these constraints, they shared tactics of purposefully "skipping" a rule, or "putting ideas in people's heads" to attenuate their process conflict. These preliminary findings supported interviews as a means of data collection, and provided the grounds for a more targeted examination of truce dynamics in scrum teams.

Data Collection

Participants of 10 scrum teams within the information services division of a large organization, Proco, form our core sample for this study. Proco is an established organization of over 9,000 employees that manages and develops government-mandated road and water systems projects. Reflecting this mission, the scrum teams were involved with projects developing IT infrastructure (hardware, software, and networking) for projects related to ship, water, and road traffic management; generating dashboards for monitoring environmental data; as well as revamping and maintaining Proco's corporate intranet and website.

Our primary sources of data were semi-structured interviews, observations, and documents. A middle manager, blind to the specific research objective, provided contact information of employees working in 10 projects following the scrum approach. Employees who volunteered to participate in the study were asked about their experience of accomplishing their current project using the scrum routine, and how they dealt with specific instances where they disagreed with how the routine was being accomplished (see Appendix 1). Since the interview topics touched on organizational conflict, they were conducted in a private setting such as a company conference room. As summarized in Table 3.2, we conducted 50 semi-structured interviews with participants diversified across scrum roles (9 scrum masters; 7 product owners; 16 developers; 8 expert stakeholders) and team-specific experience with the routine (1 to 93 sprints). Fourteen participants had prior experience with the scrum routine from a previous job. Four were part of multiple scrum projects and thereby offered additional insights by comparing and contrasting truces across routines within Proco. Interviews typically lasted 60 minutes and were recorded

with permission. Except for one corrupted recording, interviews were professionally transcribed, resulting in 830 single-spaced pages of transcripts. On occasion, we pursued follow-up exchanges via e-mail or further interviewing.

In addition, field notes were generated from participation in scrum training and informal observations. The first author participated in a two-day scrum project management training at Proco, during which team members learned about scrum roles, artifacts, and events. This "kickoff" training event provided a baseline understanding of the routine-as-truce binding scrum teams at Proco. She also conducted 29 site visits totaling 80 hours to informally observe informants as they conducted their project work. This included 12 scrum events where team members discussed project workflow and progress. Observations targeted the interaction patterns among team members. They enabled follow-up questions to clarify the various behaviors we observed, and our understanding of the interviewees' vantage points during specific encounters.

Finally, 70 documents totaling 98 pages were collected. These provided important details about the projects and scrum routine described by respondents. Examples include organizational charts, team dashboards and team self-evaluations from retrospective events. These alternative sources confirmed or enriched statements made during interviews.

Data Analysis

Our analytic approach involved four phases. Throughout, we leaned on the routine dynamics literature to guide our inquiry (Locke, Feldman & Golden-Biddle, 2020) and to inform our understanding of the social reality of scrum routine participants and process conflict.

Table 3.2 Overview of interview data

Respondent	Name	Team	Team role	# sprints¹	# interviews
1	Christian	1	Scrummaster	13-25	3
2	Liam	1	Product owner	5-12	2
3	Albert	1,6,8	Expert stakeholder	5-12	1
4	Ronald	2	Scrummaster	5-12	2
5	John-William	2	Delivery team member	13-25	1
6	Allison	2	Delivery team member	13-25	1
7	Walter	2,5	Expert stakeholder	50+	3
8	Solomon	3	Delivery team member	5-12	1
9	Inga	2,3	Expert stakeholder	5-12	1
10	Marc	2,3	Product owner	13-25	1
11	René	4	Scrummaster	5-12	2
12	Johan	4	Product owner	13-25	1
13	Paul	4	Delivery team member	5-12	1
14	Archer	4	Expert stakeholder	13-25	1
15	Gavin	4	Delivery team member	5-12	1
16	Mark	4	Expert stakeholder	5-12	1
17	William	5	Product owner	5-12	1
18	Arnold	5	Scrummaster	1-4	2
19	Marcella	5	Delivery team member	1-4	2
20	Jorge	5	Expert stakeholder	1-4	1
21	Markus	5	Delivery team member	1-4	1
22	Sebastian	5	Delivery team member	1-4	1
23	Alexander	6	Scrummaster	13-25	1
24	Joachim	6	Delivery team member	26-50	2
25	Hugo	6	Expert stakeholder	26-50	1
26	Bastian	6	Delivery team member	26-50	1

¹ Number of sprints with current team. Many participants had prior experience scrumming with other teams. Participants varied in how they related sprint experience: some counted sprints that they did not completely partake in (e.g., due to vacations) while others did not; some participants preferred relating their sprint experience in terms of number of sprint iterations, while others related in terms of calendar time. These five categories (1-4; 5-12; 13-25; 26-50; 50+) reflect approximate sprint experience per respondent.

27	Edward	6	Delivery team member	26-50	1
28	Omar	6	Product owner	50+	1
29	Janine	7	Product owner	50+	1
30	Sasha	7	Scrummaster	50+	1
31	Victor	7	Delivery team member	26-50	1
32	Gerard	7	Delivery team member	1-4	1
33	Marten	8	Scrummaster	5-12	1
34	Edwin	8	Delivery team member	13-25	1
35	Dereck	8	Delivery team member	26-50	1
36	Stephen	9	Expert stakeholder	50+	1
37	Matthew	9	Scrummaster	5-12	1
38	Martin	10	Delivery team member	5-12	1
39	Ruth	10	Product owner	26-50	1
40	Anna	10	Scrummaster	1-4	1
					50

Phase 1: Surfacing truces around scrum routine performances. Our first step was to surface the rules that "define the game within which players chose their moves" (Pentland, 1992: 531). To do so, the first author wrote vignettes (Miles & Huberman, 1994) describing the formal and informal roles, rules, and norms that formed the guidelines and guardrails underlying routine accomplishments in each team. Information was triangulated by comparing accounts across different team members, fieldnotes, and documents, and by reviewing our impressions with informants who were exposed to multiple scrum teams. Assigning team names helped us capture the gist of each teams' truce: for example, our shorthand for Team 6 was "The product owner is king," while Team 7's truce was focused on being a "Well-oiled machine". This type of grounded theory approach, which considers the meaning and implications of patterns from the standpoint of routine participants, has been used successfully in past research (Bertels et al., 2016; Dittrich & Seidl, 2018; Zbaracki & Bergen, 2010).

Phase 2: Initial coding identifying instances of process conflict. We began coding by reading each interview transcript in its entirety and flagging passages that

involved "an awareness of controversies about aspects of how task accomplishment will proceed," including "who is responsible for what and how things should be delegated" (Jehn & Mannix, 2001: 238; Jehn, 1997: 540). Passages consistent with process conflict were assigned initial in vivo codes, based on participants' own terminology such as "not following task priorities;" "not really sprinting;" and "not doing full Scrum." This step resulted in 274 instances of process conflict over 40 respondents. We also coded passages that deepened our understanding of the conflict and response context, such as how others reacted to a focal respondent's process conflict.

In tandem, we systematically identified and assigned initial labels to the concrete actions that routine participants used to address process conflict. A participant deliberately scheduling a personal meeting that conflicted with a scrum daily standup meeting was coded as "avoiding a useless meeting." Other codes included "probing and questioning team members," "initiating a pizza and beer meetup between teams," and "helping translate roles and titles."

Phase 3: Analyzing moves to uncover jurisdictional patterning of the routine-as-

truce. So far we could show that the structure of the routine-as-truce generated process conflict. We found different dimensions of process conflict and a range of responses to it – on the self, on artifacts, on team interactions – but we had difficulty connecting these responses to truce dynamics and surfacing the mechanisms by which they influenced routine dynamics. Confronted with the question of how to engage with our data, we returned to the literature. Reconnecting with the literature surfaced a key insight: while actors' moves reflect organizational structures, they also capture actors' intimate understanding of possible spaces in these structures that they might maneuver to their own advantage (Goffman, 1969; Langley et al., 2019).

Equipped with this insight, we targeted our analytical lens towards uncovering whether and how participants' actions related to the routine-as-truce. We accomplished this by combining our initial codes from Phase 2 with our understanding of the teams' routine-as-truce that came about through writing the vignettes in Phase 1. With both sources of information side by side, we began to connect process conflict to truce patterning: we discovered how moves accomplished micro-level changes in the routine-as-truce, even though they did not initially seem related. For example, when a participant avoided what he considered a useless scrum meeting by purposely scheduling a conflicting event, we paired this move with our understanding of the truce in Team 7, where attendance to these scrum events was implicitly mandatory. Team 7's truce constrained this participant's means of addressing process conflict: he could not simply skip a scrum meeting that he felt was useless. In this context, presenting a superficial but valid excuse enabled our respondent to take temporary respite from this daily event, and we coded the move as faking an excuse. Through this contrastive process, we developed first-order codes focused on how moves were geared to test, or change, the routine-as-truce. In total, we coded 200 moves.

Next, we compared the moves to understand their similarities and differences. We regrouped moves that similarly affected the routine-as-truce, such as *faking an excuse* and *pretending to forget about a rule*. This process generated second-order codes regrouping doings and sayings that targeted the jurisdictional boundaries of the routine-as-truce. These codes helped us conceptualize *jurisdictional patterning* as the work participants engage in to create new routine patterns by changing the jurisdictional boundaries of the routine-as-truce. They also suggested three distinct classes of jurisdictional patterning strategies: ones that decreased adherence to the routine-as-truce (recoiling); ones that increased deviation from the routine-as-truce (encroaching); and ones that changed the meaning of aspects of the routine-as-truce

(transuding²). Altogether, Phase 3 involved a reciprocal process whereby engaging the literature trained our eye to truce patterning. In turn, the patterns that emerged in our codes enabled a more finessed theorizing of truce dynamics (Locke et al., 2020). In Table 3.3, we clarify the percentage of tactics used and provide definitions and examples of different types of evidence.

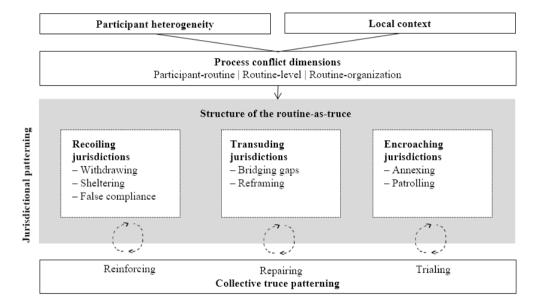
Phase 4: Tracing moves across conflict episodes to develop a model of truce dynamics in routines. To construct an overarching model of ongoing truce dynamics, we zoomed out from analyzing moves, the smallest unit of analysis of conflict change, and began analyzing episodes, periods of conflict management comprised of one or more moves (Cronin & Bezrukova, 2019). Our analysis targeted the linkages between process conflict, truce dynamics, and routine dynamics. This involved two parallel endeavors. First, we bracketed episodes of process conflict to understand the sequential arrangement of moves in each episode and the mechanisms connecting them (Langley, 1999). Each conflict episode comprised "strings of data" (Salvato & Rerup, 2018) from our initial codes in Phase 2 that involved the initial process conflict, efforts to address it, and the results of such efforts. Bracketing episodes highlighted new insights and patterns both within and across conflict episodes (Eisenhardt & Graebner, 2007). For instance, within episodes, we linked participants' moves to how other routine participants received them. In doing so, we found *collective truce patterning* was critical in shaping how truces were reappraised in routines across conflict episodes. Second, we elaborated and considered various theoretical frameworks to develop a process model that

² Transuding is defined as: "to pass through a pore or permeable substance" by the Merriam-Webster dictionary. We leverage this term to reflect our theorizing on how truce patterning affects boundaries of the routine-as-truce: in this case, transuding strategies take effect by slowly permeating through interstices of a truce's jurisdictional boundaries.

maintained the integrity of our informants' descriptions (Locke, 2001). Our systems dynamics model showcases our emergent theory on continuous truce dynamics in routines.

3.4 FINDINGS

Figure 3.2 Simplified Process Overview of Findings



To situate our emergent model, we first report our findings by sequentially laying out evidence of truce patterning in ongoing routine accomplishments. Figure 3.2 depicts the outcome of our analyses from the entry point of routine participants' experience of process conflict. We explain how process conflict arises during routine performances and follow how individual participants address these tensions. We show these efforts are first constrained by the routine-as-truce, then targeted towards changing it. Such truce work involved changing the jurisdictional boundaries of the routine-as-truce in three ways: recoiling, encroaching, and

 Table 3.3 Definition and strength of evidence by jurisdictional patterning strategy

Jurisdictional patterning strategy	Jurisdictional patterning tactics	Moves	% a	%b
Recoiling: Reducing adherence to the routine-as- truce through tactics that involve retreating, resisting and deterring from its jurisdictions.	Withdrawing	Physical or mental withdrawal, at times temporary, from adhering to aspects of the routine-as-truce. • "Taking distance and rolling back" on personal efforts; [20] • "Giving up" [25] • Ignoring a task [3] • Letting certain things go [36]	52%	67%
	Sheltering	Adding, adjusting or fortifying the boundaries of the routine-as-truce, such as role, functional and physical boundaries. • "Out of my hands" [1] • "I know there is a challenge but that's his job" [2] • "Not my call" [9]	30%	
	False compliance	Circumnavigating, at times temporarily, elements of the routine-as-truce through actions that appear cooperative or compliant. • "Leaning backwards" and leaving problems unattended when a product owner is on holiday [10] • Purposefully scheduling a meeting at the same time as a sprint review [30] • Wanting to say "Okay, we're going to organize this in a whole different way" but slowly waiting it out instead [33]	28%	

[%]a: percentage of respondents using a tactic | %b: percentage of respondents using a strategy.

TABLE 3.3 (continued)

Encroaching:	Annexing	Borrowing status or power from other structures to make changes in the	35%	65%
Increasing		routine-as-truce.		
deviance of the		Manager attending uninvited meetings to complain [32]		
routine-as-truce through tactics that involve exploiting, surveilling and making claims to its jurisdictions.		Using status to get team to reconsider task priority [18]		
		Having to "say goodbye to certain persons" [39]		
	Patrolling	Surveilling and correcting other participants' performances in order to ensure	42%	
		adherence to desired aspects of the routine-as-truce and make minor		
		jurisdiction claims.		
		• Always saying "hey guys, this is wrong, you're not doing it the right		
		way" [28]		
		Policing, reminding [30]		
		• "Sometimes you do these things, yes, are they part of your role? I don't		
		know." [38]		
Transuding:	Bridging	Reconciling "gaps" in understanding of jurisdictional boundaries of the	35%	67%
Changing the	gaps	routine-as-truce.		
meaning of		 Creating interest groups across teams [7; 33; 37] 		
aspects of the		Taking on the role of liaising between two teams [9]		
routine-as-truce via tactics aiming to create new interpretations of its jurisdictions.		 Purchasing a software out of pocket to see if it works better [24] 		
	Reframing	Downplaying, emphasizing or altering the understanding of an element of the	50%	
		routine-as-truce to facilitate further action.		
		• "It wasn't a lie, it's just – It was a convenient way of putting it" [29]		
		 Using an analogy of scrum as a "clothes hanger" [18] 		
		Self-organizing is not the same as self-steering [39]		

transuding jurisdictions. We then report on the collective component of truce change – collective truce patterning – to reveal three patterns of continuous truce change: repair dynamics, reinforcing dynamics and trialing dynamics. Once we theorize the boxes, we move towards foregrounding the relationships and dynamics that link actions addressing process conflict, performing and patterning truces, and accomplishing routines. Our emergent model illustrates the interplay between routine accomplishments, process conflict, and continuous truce dynamics (Figure 3.6).

The Scrum Routine as a Source of Process Conflict

Informants' accounts were infused with scrum jargon. Performing the scrum routine was referred to as *scrumming* and *sprinting*. *Agile* refers to the principles and values underlying the accomplishment of iterative, self-managed projects. Informants shared their experience of scrumming with their current team, at times drawing from prior experiences with other teams or in other companies to explain how certain situations were "laborious" [5]³, like a "Franken-process" [16], and left them feeling "angry, disappointed" [17] or with a sense of "frustration" [10]. Two factors, participant heterogeneity and the local context, contributed to the emergence of such tensions in the routine.

Participant heterogeneity and local context as sources of process conflict. Scrum team members differed in terms of occupation, expertise, experience with scrum, interest for project work and desired work-life balance. These factors were sometimes dynamic, as preferences were shaped by events such as becoming a

³ Numbers in square brackets identify respondents and teams in correspondence with Table 3.2.

parent [1] and getting scrum training [4]. Other preferences were considered more consistent, such as having a positive attitude towards transparency and knowledge-sharing [40]. For one respondent, scrumming had to be "in your genes... If it's in your genes to be an individual and to make your own decisions ... you will experience Scrum as a nuisance, as something that's in your way" [29]. Another used a metaphor to highlight a basic difference between him and his teammate Joachim:

Have you read Zen and the Art of Motorcycle Maintenance by Robert M. Pirsig? According to Mr. Pirsig, the Harley Davidson is a motorcycle for people who really like fixing motorcycles. The European people who buy European motor bicycles, BMWs, they just want to have a motorcycle that works and runs and gets you from A to B. I think Joachim is one of those people who, with his work environment, is really caring about how to fix the environment. I don't give a fuck. I just want people to give me jobs. ... I do it and then people say, "Thank you." Then I move on. [26]

How much the work context created ideal or problematic conditions for scrumming also varied. Some contextual factors were relatively static, such as organizational culture and having to use specific software to log project work. Teams also comprised members who were based in different locations; had different types of work contracts [10;32]; and had differing workloads outside the scrum project. Other factors were more dynamic: regulatory changes required urgent project readjustments [29], new team members had to be trained [10], and holiday periods came with reduced availability [13;34] that could create tensions in performing scrum.

Overall, the combination of different individual preferences and local context shaped differences in attitudes and ability towards scrum, providing fodder for process conflict to arise as participants completed work within the scrum project management routine.

Dimensions of process conflict in routines. We found three dimensions of process conflict: incompatibilities between participants and the routine, incompatibilities about routine accomplishments, and incompatibilities between the routine and the organizational context.

<u>Participant-level dimensions of incompatibility</u>. Performing scrum triggered some participants to question whether they, or others, were a good fit for the demands of scrum. This dimension of process conflict could derive from participants' personality, interests, beliefs, and personal circumstances. One respondent related process conflict to incompatibility between scrum and the work styles of other participants' occupations:

Some engineers are a bit artistic. You know what I mean? You really have to manage those tempers. ... The product owners don't really – They have complained a lot also to management: "I don't want to have those kinds of engineers in our team." [1]

This dimension of incompatibility could emerge over time. In the following example, a seasoned scrum master reflects on how the evolving demands of her personal life hindered her participation in the scrum team, and the ensuing tension she felt:

This team needs a Scrum Master for five days a week. ... I have three kids, I have two days off, Wednesday and Friday. So now I'm [a Scrum master] one day a week. ... I'm not going to be able to be the scrum master that I want to be able to be for this group. [40]

Routine level dimensions of incompatibility. Scrum performances and projects were

also topics of process conflict. Many believed that the performance of routines deviated from what they considered the "right" or "correct" way of scrumming, such as the team not being physically co-located [8;23] and not holding regular retrospectives [13]. One respondent noted the tension he felt when the shared task priority list drawn during sprint planning was ignored:

Something that really has bothered me in the last two years is our list of priorities. For me, it's important that if the product owner says, "this one is very important for me, this has Prio [priority] number one," then that means that's the one that we focus on. Whenever that is ready, we can move on to Prio two. But the engineers seem to just pick whatever they like to do. ... I just can't live with that. It really bothers me. [25]

Another described behaving like a "sourpuss" because of the way his team broke down and assigned the smallest of tasks – items the team referred to as "half points:"

We have a tendency to scrum everything ... we are always chronically overplanned. Just everything that costs half a point – I do want it to be registered because otherwise it will be gone [but the way we plan half points now] is such incredible waste. [31]

Participants also expressed routine-project incompatibility. The scrum routine was mostly regarded to facilitate continuous improvement and experimentation to enable development teams to accomplish projects with a level of uncertainty. Yet, some teams worked on projects that involved more standardized work, to which applying scrum, as this respondent shared:

It's not useful. It doesn't fit in the way we're working right now. [...] If you look at the idea of Agile to value working solutions over complete design, that's not what we're doing at the moment. [...] There's no real team effort in

building solutions. [15]

Routine-organization dimensions of incompatibility. Process conflict occurred when participants perceived incompatibilities between how the routine fit with its broader context. Performing scrum involves interacting with other aspects of work and connecting routines, and process conflict arose at these interfaces. For instance, some software developers were also responsible for resolving system bugs – known as incidents. Although team members committed to complete certain tasks during daily standups, unexpected incidents could interfere with those plans. One described being at a "disadvantage" when incident-work "polluted" their scrumming [18]. Another specified how working on incidents could conflict with scrum events: "I feel responsible for the incident… you cannot have time for a [scrum] meeting" [13].

Linking Process Conflict to the Routine-As-Truce. Our data indicated that most routine participants experienced one or more dimensions of process conflict. Some disagreements were overt, such as an informant's vivid account of the type of exchanges he saw between members of Team 6 during daily standups:

Respondent: The product owner says, "Can we test it?" "No, you cannot test it. It's really not finished. We have to implement the backup first, because if you got to test it, then I know it will be in production, and that if it fails, we don't have a backup." It's not like [the development team says], "Okay, you can test it, but watch out. I'm going to tell this once, there is no backup, so don't use it for your production." It's, "No." This is because they are very passionate indeed. They think they are not being listened to.

Interviewer: In a sense, the daily standup for them has a bit of a different meaning?

Respondent: Yes. Sometimes, I'm watching them. I sneak in the hallway, and I see some guy is banging his head on the wall.

Most times, though, participants did not share their experience of process conflict with others. The following quote illustrates a covert experience of process conflict during a daily standup:

For example, yesterday we had the first meeting with [the new product owner] on the phone, and he was wondering why the issue wasn't delivered on time. The excuse of my colleague was because we had too many incidents. Incidents have a higher priority. He disagreed because [he thought] his problem should have a higher priority. I didn't say anything but I also disagreed with the guy on the phone ... he's a fool. [27]

Not all instances of process conflict were experienced due to constraints of the routine-as-truce. Some were due to physical structures (e.g. lack of an appropriate camera for smooth digital standups [33]) while others were due to competence structures (e.g. missing a tester in the team [22]). The majority, however, were directly or indirectly linked to the routine-as-truce.

Illustrating the linkage between process conflict and the routine-as-truce, Team 7's new member, Victor, wanted to change how his team tended to over-plan even minor tasks. Because the team's routine-as-truce was founded on the notion of the team working as a well-oiled machine, routine variations were not welcomed. Victor described how he discovered that he was not allowed to make suggestions for different ways of scrumming in his new team, even though the Scrum framework was normally based on principles of iteration and experimentation:

We have a method and [new people] don't get a say in it,

because it has already been devised by seven other people. ... Literally from the first time [I made a suggestion] the statement was: "We have already tried, so we will not do that again." I don't get that! The fact that something has already been tried makes it also work in a completely different composition and group dynamics and different [work topic]? [31]

With his suggestions continually met with retorts like "well, we're not going to do it ... we've tried it, period." Victor's succinct response was: "I will shut up now."

A routine-as-truce that followed the scrum framework closely could also be equally constraining. In Team 1, attendance by all developers during daily standups was a crucial element of the truce. While discussing a situation where unexpected incidents overwhelmed scrum project work, a respondent explained how he felt he still needed to attend daily standups:

Respondent: When [an incident] lands on your plate then you have to do a task, doing these daily standups is not very helpful because you're just expressing something that should have been done before.

Interviewer: In that sense, is there anything that the Scrum team can do to help you out?

Respondent: No, the only thing that you can do is say it takes more time since first you have to fix stuff that's not [on their list of tasks]. [24]

Further, the routine-as-truce could trap respondents into experiencing recurrent process conflict. In team 6, the routine-as-truce was formulated mainly to please the product owners. The scrum master explained how he was being asked to facilitate recurrent meetings called *pokering sessions* aimed at estimating task complexity. Although the team worked on standard tasks with little uncertainty and there was no reason to hold such sessions, they were still performed:

The problem is that the product owners desire it. ... They say we're only allowed to deliver standard solutions. So why should it be different from one [pokering] session to another? ... For me there's not a real reason to use it. [23]

In cases such as these, the constraints on social interaction of the routine-as-truce threatened routine participants' abilities to address their process conflict.

Patterning the Truce: Recoiling, Encroaching, and Transuding Jurisdictions

Because the routine-as-truce hindered participants' efforts to mitigate process conflict, participants sought to modify the truce's jurisdictional boundaries. They did so with three patterning strategies comprising subtle moves to avoid breaching truces and creating costly overt hostilities. Action-driven jurisdictional patterning strategies involved mundane moves that reduced adherence or increased deviance to the routine-as-truce to reduce process conflict (i.e. *recoiling* from jurisdictions and *encroaching* jurisdictions). Participants also used belief-driven strategies (i.e. *transuding* jurisdictions) to change the meaning of the jurisdictions delineated in the routine-as-truce. By patterning the truce's jurisdictions, participants addressed process conflicts by changing the constraints on the actions and understandings of the scrum routine.

Recoiling from jurisdictions. Under conditions of process conflict, individuals recoiled from the routine-as-truce, thereby creating some distance from – and adding some flexibility to – a constraining structure. Recoiling was achieved through strategies involving *withdrawing*, *shielding*, and engaging in *false compliance* of the routine-as-truce.

Withdrawing from the truce brought some respite to routine participants' experience

of process conflict. Withdrawing from the truce mitigated process conflict by either (1) enabling participants to address another priority; or (2) acting as a coping mechanism that decreased the effort to partake in the routine. Participants avoided violating the truce by barely meeting its demands. A respondent related one hiding tactic he witnessed:

Some people like to hide themselves in a corner where they cannot be found [to attend the daily standup]. ... It's not something that directly they are to blame for. What also happens is that our managers tend to bother some engineers with things that are in their [own] list of priority issues, which have to be solved immediately. [13]

To reduce the demands of participating in the scrum routine, one respondent described mentally withdrawing from scrum events by speaking only when called upon by the scrum master and limiting his contributions to a bare minimum: "as long as I'm not up, I'm not up" [3].

Because these moves were unsanctioned, they involved risk – a respondent said skipping a daily standup was "provocative" [24]. Yet the mundane nature of such actions meant there were negligible repercussions of withdrawing from jurisdictional boundaries (e.g., being rallied into the daily standups [T1, T7]).

<u>Shielding</u> involved clarifying, adding, and reinforcing boundaries to prevent and hold out against the demands of the routine-as-truce. One scrum master expressed "this is not my job," and "I have other things to do" to relieve himself from facilitating certain meetings [36]. Another noted during a daily standup that an issue was "out of my hands" [1]. Among developers, some used their functional background to deny requests from scrum masters: "I don't talk to customers, I am an engineer" [34]. Others would use technical language to create a barrier between them and the product owner [3]. Respondents not only engaged in jurisdictional

patterning to clarify their boundaries within the scrum routine, they also reinforced where they felt scrum began and ended. Tired of dealing with the administrative aspect of subcontractors as team members, a scrum master told his manager: "Okay, that's your problem. You decided to have the contract that way, but my role is scrum master. I'm not going to do that." [37]. Such moves were not made out of selfishness, but out of self-preservation. One respondent explained how she added a boundary between her and the demands of scrum by rearranging her work into a four-day week:

Respondent: I usually work from half past eight to half past six, something like that.

Interviewer: Is that why you don't work on Fridays?

Respondent: Yes, otherwise I will go completely crazy.

No, seriously. No bullshit, I really like my job, but if I go to work that Friday, I don't have a weekend. ... I did that for a few weeks last year; really impossible. [29]

Participants also recoiled from certain jurisdictional boundaries through <u>false</u> <u>compliance</u>. Pretending to uphold the truce while engaging in non-compliant behavior let participants address process conflict and avoid potential repercussions. Unbeknownst to his team members, Evert [27] developed a tacit agreement with a colleague from another scrum team to exchange sprint tasks that were more aligned to each individual's own area of expertise. This infringed on the team's truce of developing skills to be self-organizing and self-sufficient:

I'll do it in say five hours, he'll do it in five minutes Again, we [have] a lot to do in a very little time so it's quick when he does it, instead of me doing it. ... I don't make any difference. Honest answer, right? It's not the right answer, it's the honest answer.

Evert also admitted disregarding the team's task priority list in favor of incident-

work he considered more important, which he could do because of the efficiency gained by switching tasks. Task-swapping illustrates how false compliance can be accomplished by exploiting an established zone of behavioral discretion. On occasion, windows of behavioral discretion were temporary, such as slacking off when a scrum master was on holiday [37].

False compliance was effective even when violations were discovered. Respondents attributed their indiscretions to "forgetting" [1; 9; 13; 25; 30]. At times, false compliance was used to bide time. One participant described how, though he "normally I would have been raising hell" because the team "couldn't promise on when [their product] was going live" [20], he behaved calmly in front of external stakeholders during a review event. In Team 10, product owner Ruth spoke about respecting Anna's scrum master role and having her manage low-performing members: "I like having coffee with them and see how things are going." But another team member confided: "All I heard from Ruth is that one of the guys, he was really unhappy about his work performance and, now that guy is leaving. Yes, that power [Ruth] does have."

Encroaching jurisdictions. Rather than patterning jurisdictions by recoiling from the routine-as-truce, some tried to address their process conflict by shaping the jurisdictions that delineated what they were, and were not, allowed to do. Encroaching involved truce-deviant behaviors that infringed upon, and potentially claimed, others' jurisdictions. This type of patterning mitigated process conflict by enabling routine participants to (1) stop others from performing actions perceived as problematic; (2) perform actions that they otherwise could not. Our informants achieved it through strategies of annexing and patrolling.

Some informants described encroaching into jurisdictions of the routine-as-truce by *annexing* status or power from other structures. Specifically, this involved yoking

(see Abbott, 1995), or connecting, roles within and outside of the scrum routine. One respondent mentioned his prior experience scrumming in a prestigious company to say "Hey, guys this is wrong. You're not doing it the right way" [24]. Another explained how obtaining scrum certification could confer legitimacy to one's behaviors [30]. Participants who also occupied a managerial function within the company often used this annexing tactic. One acknowledged that he was pokering when he shouldn't by estimating workload for tasks even though he had no technical knowledge: "I poker along. [...] I can just say what I think it should cost but I don't understand what needs to be done, if you know what I mean" [9]. One scrum master who was also a manager expressed how he used employee performance data to guide his decision making, even though he understood this was outside of his scrum master jurisdiction:

To be quite honest, if someone is every quarter at the bottom, of course, I'm not going to prolong their contract. I have this really cool tool to use to determine if one is performing okay or not. In the context of [Team 8's project] I cannot do that. [33]

Numerous routine participants encroached in others' jurisdictions through *patrolling*, in which they monitored how consistent participants' behavior was with the routine-as-truce. When they observed minor breaches to the truce, they would reference the terms of the routine-as-truce to motivate corrective behaviors, which combined with the normative nature of their request, seemed to provide them with enough legitimacy to ask for, and obtain, behavioral responses from other routine participants. Patrolling involved precise correcting and "policing" [20; 22] behaviors, like pointing out that a color-coded magnet was not updated in a timely manner on the scrum board. Artifacts were also created as reminders: "I don't know if you've seen it, but I made a PowerPoint of the last retrospective actions. It's just hanging there as a reminder. There's no one saying, "*Hey, boys and girls, you should*

be [doing so and so]" [30]". Some also imposed sanctions – a significant out-of-bounds move that might then trigger the recipient to evaluate the legitimacy of the patroller's request. As this product owner recounts:

Commitment is really that you commit that you'll do it. So, then you don't go home at three o'clock and you say that you did not make it. No, you just continue for an hour or two and you make sure you make it. Alison took it like she didn't do her best. I had not said that... but I didn't think that was commitment. We kind of collided on that and we sat together one on one. She was annoyed that I had said that. [17]

Patrollers also added or re-delineated jurisdictional boundaries through "reconnaissance" activities where others paid less attention. They sometimes did so to claim relatively innocuous or undesired jurisdictional territory, such as small roles and responsibilities that nevertheless enabled them to address their process conflict. For example, one participant "cut in" [16] to a room carrying their scrum board to claim greater physical meeting space. Another [35] took on the task of synching digital and analog scrum boards. Over time, these small claims of "no man's land" could accumulate significantly. One spoke of slowly becoming a dictator [29]; another explained how a team member expanded his role to include the rights of a product owner:

He likes to play the architect, but he's also a process manager, and he is suggestive about this [scrum] process; he really takes it all. At the poker session he's now also like a product owner: "Well, we have to poker this really well because it will be a high priority. I can assure you."

[1]

Transuding jurisdictions. Routine participants also engaged in strategies that slowly changed the meaning attributed to boundaries of the routine-as-truce. To do

so, they filled or exploited small spaces – interstices – in the jurisdictional boundaries of the truce – a process we capture with the term *transuding*. Transuding jurisdictions could mitigate the experience of process conflict by (1) helping participants make sense of certain aspects of the routine-as-truce, including their own and others' boundaries of action; (2) enabling them to shape others' understanding of aspects of the routine-as-truce, thereby creating new paths of action. Specific tactics included *bridging* and *reframing*.

<u>Bridging</u> consists of a tactic where participants actively reconciled "gaps" in the routine-as-truce. Filling knowledge "gaps" by getting a better grasp of scrum consisted of one such move that helped participants address their process conflict. For one participant, supplemental training provided him with the sense of freedom to start adapting his way of work:

The training was very welcome because what I really learned is the difference between Agile and Scrum. [...] With every framework, every organization, it's different so you have the freedom to adapt the methodology to your organization. [11]

Others bridged differences in perspectives and interests across routine participants, for instance suggesting outings [8] and roadshows [33] to understand the requirements of clients. Such endeavors helped smooth irritations where jurisdictional boundaries met, such as between developers who might think the work is "rubbish" [28] and clients: "Those [outings] are the chances to get to know your customer ... That's where the magic happens." [25].

<u>Reframing</u> involved downplaying, emphasizing, or altering the understanding of an element of the routine-as-truce to facilitate further action. For example, the term Agile could be used as a shield "when it is handy for somebody ... you hear things like 'But you're an Agile team, so you solve it yourself" [24]. Participants also

motivated action by reminding others that scrum was about customer-centricity [25] or continuous improvement [10; 32]. Derek [35] recounts how he convinced his team to combine two project management approaches, Scrum and Kanban, by deemphasizing the complexity of such an endeavor:

There were colleagues who have kind of reservations about, "We're doing Kanban, we also have [Scrum software]. We need to do either one, not both." That's something of a mind switch thing they need to do. ... I was like, "If you really look up Kanban online you see it's kind of a basic thing." You have your board and that's it, actually. You have some cards which move and that's it. [35]

Participants also gave new meanings to elements of the routine-as-truce, which enabled new courses of action. One scrum master [23] avoided scrum terminology because it caused contention within the team and used substitute terms. "If I mention that we are scrumming, [the developers] will debate it, so I call it *Proco-ing*, as in Proco [the name of the company]."

As the examples above show, for jurisdictional patterning to have a result, other routine participants needed to integrate them as part of the routine-as-truce.

Collective Patterning linking Truces and Routines

Jurisdictional patterning did not occur in a vacuum. The strategies of recoiling, encroaching and transuding jurisdictions involved interactions with other participants who might respond with moves of their own. We thus discuss the collective component of truce change: collective truce patterning. The mundanity of participants' doings and sayings impeded us from inquiring about the likelihood of success of different moves and strategies, and pursuing the subjective interpretation of these moves with all routine participants. But by tracing problems from one team

member to the next, and triangulating with different data sources, we created strings linking individual participants' moves to collective patterning of the truces to routine performances. Three patterns of collective truce patterning emerged from the data: (1) repair dynamics; (2) trialing dynamics; (3) reinforcing dynamics.

Repair dynamics. Team members responded to initiatives of truce changes with repair dynamics. In several instances, other routine participants resisted jurisdictional patterning by bringing the truce to its initial state. At times, these repair dynamics were "unleashed" [40] in *bursts*. In the following example, a suggestion to hire a team coach to help the team "go from good to great" was met with a burst aimed at repairing the breach of the truce:

To my surprise, the developers, they weren't very keen that [the scrum master and I] brought up the point of team coaching. Two, maybe three [developers] took it like some kind of an attack, "Okay. Well, you're not satisfied. What's the problem?" We are very satisfied but I think we're now at a level that we have to be aware that we're not going down the mountain again. We have to improve. Improve the team. [10]

Bursts were not the only expression of repair dynamics. Certain efforts to pattern the truce were "phased out" [22] or "died a slow death" [30] such as Team 7's initiative of clarifying upcoming work, a process known as *refining*, via a speed dating formula:

For example, we do like a one-to-one refinement. We've experimented a few [other models]. We've done "speed dating" [but] the thing is you have to have the whole team together. With eight people it is quite an investment and it died a slow death." [30]

Trialing. Several of our respondents indicated that when presented with suggestions

for collectively changing the "rules of the game" of scrumming, routine participants were eager to try it out. Some respondents mentioned consulting sessions [34] and daily standups [28] as spaces where suggestions emerged. In many of our teams, participants could make such suggestions during the *sprint retrospective* or the *retro*. This event was dedicated to giving routine participants an opportunity to self-inspect and generate a plan to enact and experiment with improvements during the next sprint. It was also an arena where participants could discuss process-related "pain points" [21]. During sprints, participants who expressed process-related issues were often redirected to this platform:

Sometimes the product owner says, "Okay so, I want to mention something about an order of the previous sprint, can I say something?" Well, not yet. You can participate at the [retrospective] evaluation of sprints. [1]

Similarly, a participant described how he would tackle a "bad" scrumming experience:

It is something that is discussed during the retro and depending on that ... we have a general feeling that there is a point that we have to tackle in the next sprint. [...] If I would want to make a change happen, then I would just indicate this during the retro. [18]

Trialing could be transformative. Routine participants worked to accommodate each other's perspectives and preferences, which could involve re-adapting jurisdictions. For instance, in Team 5, Mark discussed improving how the team tested software for the following sprint. His suggestion was rejected by the team, however, leaving him with a new testing process and set of responsibilities that he "was not used to" but that others "want very much" [21].

Yet experimentations were not always welcome because of the team's truce. In

Team 4, one member mentioned trying unsuccessfully to suggest changes because "I don't think the team is always honest to itself" [10]. Another scrum master mentioned needing to change back to how daily standup meetings were done because "apart from me and Edwin, it's like ten other people. If everyone raises their pitchforks you have to do something" [35].

Reinforcing dynamics. Reinforcing dynamics occurred when a routine participant's jurisdictional patterning was positively integrated into the truce and thereby the routine. For example, in Team 8, the collective use of a new artifact – the Kanban board – required routine participants to report task progress both in the online task management software and in person on a shared wall. Reinforcing dynamics could lead to different ways of scrumming across teams: whereas Team 6's scrum master begrudgingly facilitated pokering meetings even though the standardized work of the teams meant "there is no real reason to use it" [23], Team 1's scrum master created a new Excel sheet with a checklist of standardized items that enabled him to expedite pokering meetings and even conduct them remotely "by telephone and sometimes if there are high priority items I suggest they come over here" [1].

Reinforcing dynamics were not always immediate. In Team 2, Ronald gradually recoiled from his role of scrum master to attend to other functions. During meetings, he sat at the back of the room with his laptop, rarely spoke, arrived late, and left early — unusual behavior for a scrum master. He delegated some of his responsibilities to the team by transuding jurisdictions of the truce, transitioning from scrum master to:

What I do? Many, many things [laughs]. Because I'm responsible for Change Management and Release Management, I'm responsible for [having] the website evolve with the times. [...] Overall, I'm a manager, so I make things happen. I just tell people what to do, and how

they're supposed to do it, and I check it. This is more my role. [4]

This information was not clear to the entire team. While some members recognized his scrum master role, disparate interpretations emerged. Discussing Team 2's responsibilities, Inga [9] shared: "Typically, it should be Ronald in his role of scrum master, but we try to [do it as a] group." When asked to draw a roster of members of Team 2, Allison [6] noted her team colleagues and the product owner. She included the scrum master as an afterthought: "[small pause] ... Ronald also because he's the scrum master but he's usually more in the background."

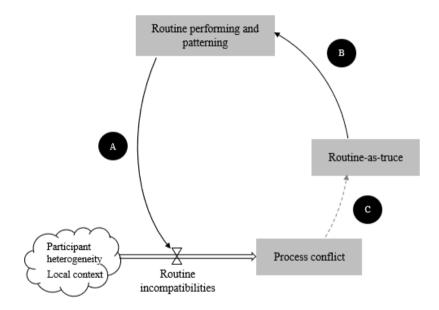
For our informants, truce dynamics did not end with collective patterning that repaired, trialed, and reinforced initial jurisdictional patterning dynamics. Ripple effects occurred as reinforcing dynamics caused process conflict for other participants [29]; or trialing dynamics multiplied to the point that truces become "messy" and "sloppy" [11]. Though Figure 3.2 lays the groundwork for our evidence of ongoing truce change, a systems perspective better surfaces the recursive nature of routine accomplishments, process conflict, and continuous truce dynamics.

3.5 AN EMERGENT PROCESS THEORY OF CONTINUOUS TRUCE CHANGE

To address process conflict, participants pattern the routine-as-truce all the while accomplishing routines. The linear depiction of our findings in Figure 3.2 enabled us to unpack each stage linking participants' process conflict to truce dynamics (causes of process conflict; dimensions of process conflict; jurisdictional patterning; collective truce patterning). Yet, linear theorizing obscures the recursive nature of truce dynamics and the interactions between truces and routines (Cloutier &

Langley, 2020; Feldman, 2017). To show how jurisdictional patterning is situated in relation to other routine actions, we leveraged diagrammatic techniques from system dynamics. These are especially suitable to articulate process theories, notably for research on conflict (see Cronin & Bezrukova, 2019). They enabled us to theorize the doings and sayings in Figure 3.2 as arrows, and to illustrate our emergent theory on continuous truce change.

Figure 3.3 Initial Conditions of Process Conflict in Routines



Note: Consistent with stock and flow model annotation, we use cloud-like shapes to represent sources (sinks) that can fill (empty) a stock from activities that are exogenous to the model. Double-lined arrows capture the inflow and outflow that alter levels of a stock, and the rate of flow is controlled by valves represented by the hourglass shape. Links between elements in the model are captured by single-lined arrows. For example, routine incompatibilities caused by participation heterogeneity increase the level of participants' process conflict. This is illustrated by theorizing process conflict as a "stock" that can have its level increased due to the flow of routine incompatibilities (double-lined arrow) caused by participant heterogeneity (cloud). Then, the single-lined arrow linked to the valve illustrates how process conflict can be exacerbated or alleviated through routine patterning and performing.

Figure 3.4 Jurisdictional Patterning of the Routine-as-Truce in Response to Process Conflict

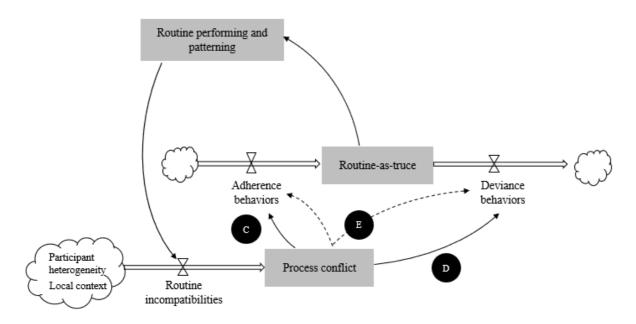


Figure 3.5 Collective Truce Patterning in the Routine-as-Truce

Figure 3.5.1 Repair Dynamics of the Routine-as-Truce

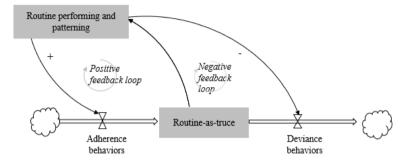


Figure 3.5.2 Reinforcing Dynamics of the Routine-as-Truce

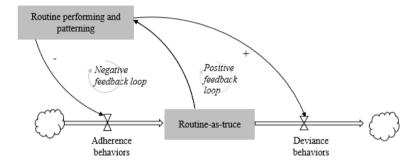


Figure 3.5.3 Trialing Dynamics of the Routine-as-Truce

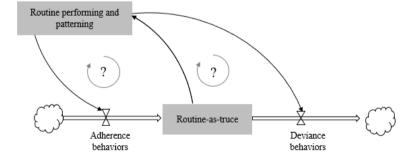


Figure 3.6 Full Emergent Process Model of Truce Work Transpiring from Process Conflict

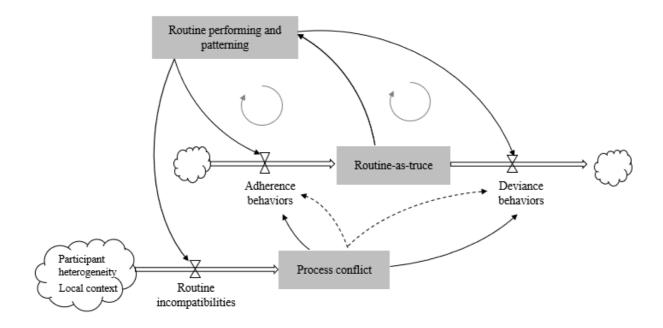


Figure 3.3 shows the initial set of relationships that drove routine participants to address their process conflict. First, as denoted by the cloud-like shape, participant heterogeneity and local context were sources of routine incompatibilities that could add to the process conflict experienced by a routine participant. Second, performing and patterning routines could increase routine incompatibilities, such as those between participants and the routine, regarding routine accomplishments, or between the routine and its broader organizational context – which added to the sense of process conflict. This process is analogous to turning on a water tap in a bathtub, as captured by arrow A in our model. Third, to alleviate their experience of process conflict, routine participants sometimes considered changing routine performances (attempting to turn off the analogical water tap). An outsider might think that some instances of process conflict could be resolved with simple adjustments in routine actions, such as attending daily standups remotely to address work-life balance; and having discretion over prioritizing work in and out of the scrum routine. Our data show, however, that such direct routine changes were considered difficult to enact when they challenged the terms of the routine-as-truce. Pure deviance causes truces to collapse and disrupts routine performances (Zbaracki & Bergen, 2010). Because of the cost to both organizations and to the individuals themselves, such actions are normally avoided (Nelson & Winter, 1982). This structuring effect of the routine-as-truce is visualized by arrow B.

Faced with a truce that constrains conflict-mitigating moves, our participants devised another solution: act on the routine-as-truce to change the underlying "rules of the game" that enable and constrain routine actions. This is represented by the grey arrow C, which "closes the loop" between process conflict, routine-as-truce, and routine patterning and performing.

Figure 3.4 shows how this process takes place. We illustrate the routine-as-truce as an ongoing accomplishment: truce-adhering behaviors add to the "stock" of a

routine's governance capacity, whereas truce-deviant behaviors "drain" from it. A stable truce is thereby characterized as an equilibrium between the truce-adhering "source" and truce-deviant "sink". To alleviate their process conflict, individual routine participants played with the valves to this source and sink. They engaged in *jurisdictional patterning* of the routine-as-truce: they recoiled from jurisdictions and decreased truce-adherent behaviors; they engaged in truce-deviant behaviors by encroaching jurisdictions; they transuded jurisdictions, slowly changing the meaning of aspects of the truce. This is captured by the arrows C, D and the dotted arrows. E, respectively.

Because truces are enacted through social interaction, participants' moves were observed and interpreted by other participants as routines were carried out. They subsequently reinterpreted and reshaped jurisdictional boundary adjustments through collective truce patterning. This is captured by the emergence of feedback loops in Figure 3.5.

Three patterns of collective truce patterning took place. First, participants ensured routines were carried out in a way that respects the "rules of the game" by increasing truce-adherent behaviors or by decreasing truce-deviating behaviors. Such *repair dynamics* brought truces back to their initial "level" (Figure 3.5.1). Second, *reinforcing dynamics* integrated changes in the routine-as-truce into routine performances. As a result, routines are performed and patterned in a way that reflects new jurisdictional boundaries of the truce. Analogously, perceived decreases in the "level" of the routine-as-truce would *not* be restored by turning on "taps" that bring the routines' governance capacity to its initial "level". Instead, a new equilibrium is achieved by the emergence of a negative and a positive feedback loop for adherence and deviance behaviors, respectively (Figure 3.5.2). Third, trialing involved piloting changes in the routine-as-truce, and sometimes resulted in outcomes that differed from the initial patterning efforts of the routine participant.

Figure 3.5.3 visualizes *trialing dynamics* as interrogation points regarding the direction of the feedback loops. Figure 3.6 illustrates our full emergent process model of continuous truce dynamics stemming from participants' process conflict. We show how jurisdictional patterning triggers collective truce patterning, thus clarifying how conflict and governance dynamics are enacted in ongoing routine performances.

3.6 DISCUSSION

Our study asked: how are conflict and governance dynamics enacted in ongoing routine performances? This question reflects a broader issue in routine dynamics research, namely how to account for conflict and governance dynamics in studies of routine stability and change. To do so, we must revisit the conceptualization of the routine-as-truce. Rather than an outcome, stable truces are ongoing accomplishments (Salvato & Rerup, 2018). This enables us to theorize the mechanisms underpinning truce stability and change, and their link to routine accomplishments.

To surface these dynamics, we studied process conflict in scrum teams. Participants' process conflict triggered patterning efforts. Yet rather than targeting new ways to perform the routine by routine patterning, participants aimed to change the rules of routine accomplishments by truce patterning. Against the structure of truces, routine participants evoked mundane actions that recoiled, encroached, and transuded the jurisdictional boundaries of the routine-as-truce. Our research shows how truce patterning involves work at the borders and interstices of jurisdictions, a process we call *jurisdictional patterning*. These strategies emerged as participants engaged in routine interactions, involving collective truce patterning that repaired, trialed, and reinforced truce dynamics. These insights offer several theoretical contributions to

routine dynamics.

Embracing the Double Nature of Routines

Our first contribution establishes governance dynamics as a source of endogenous change in organizational routines. Past scholarship has noted the benefits of a more explicit connection between the two constitutive aspects of routines. It has argued that: "a crucial step when trying to bridge the evidence from cognitive psychology with organizational routines involves an explicit account of the double nature of routines, both as problem-solving action patterns and as mechanisms of governance and control." (Cohen et al., 1996: 690).

Yet without a rationale for studying both aspects simultaneously, research on routine dynamics has usually treated these two problems separately. Studying endogenous change that stems from the problem-solving aspect of routines (Feldman, 2016; Feldman et al. 2016) has been favored over questions of governance and control. In turn, the latter have been studied mainly in the context of system collapses, thereby shedding little light on the nature of ongoing truce dynamics and their interplay with routine dynamics (see Table 3.1).

In contrast, our findings link routines and truces as hierarchically organized systems (Simon, 1962) wherein perturbations at the truce level influence routine enactments. This finding is theoretically important because it underlines that routine dynamics scholars should know whether endogenous changes to routines comes from variations in different ways of playing a game (routine patterning and performing), or in changes to the rules of the game themselves (truce patterning and performing). Since rule changes can be mundane and nuanced, it is easy to regard truces as static. Since jurisdictional patterning can also involve task-oriented work, it is also easy to mistake routine patterning for truce patterning (Cacciatori, 2012).

Failure to distinguish between truce dynamics and routine dynamics can obscure important insights. For instance, the notion of truces was not included in Rerup and Feldman's (2011) analysis of a hiring routine, yet there is evidence of conflicting perspectives and multiple emergent schemata in their study. Integrating the notion of truce patterning would have helped better specify how trial-and-error learning processes changed the repertoire of actions in this routine. Similarly, Salvato and Rerup (2018) found that a flexible truce enabled participants to achieve conflicting organizational goals in a product development routine. While they show that regulatory actions (splicing, activating, and repressing) contribute to truce flexibility, their research does not explain how truces can be dynamic without breaking down. The notion of truce performing would have helped clarify how regulatory actions direct participants towards appropriate truce and routine performances. The notion of truce patterning might have directed deeper research into how regulatory actions were integrated in this routine. Together, these studies show how truce dynamics add a level of meaning to the study of routine actions. Two levels of patterning and performing – of the routine at the surface level and of the truce at a deeper level – can help research on organizational routines better explain stability and change.

From Task-Based to Motivation-Based Drivers of Routine Action

Our second contribution highlights personal motivations as drivers of routine action. The literature on routine dynamics has usually adopted a task-oriented view of routine action and has abstracted away from the personal interests and motivations that can be the "plot and narrative" behind action (Powell et al., 2012: 434 in Hwang & Colyvas, 2019). It has contributed to a view of conflict and disagreements in routines that is bracketed away from the flow of daily life, a tendency Barley likened to "experiential *time outs*" (1991: 165). Studies of conflict and conflicting interests

as ongoing aspects of routine action have thus had difficulty seeing these dynamics outside their overt, destructive manifestations (Cohen et al., 1996; Lazaric, 2000; Salvato & Rerup, 2018; Zbaracki & Bergen, 2010). Yet, "subtle manifestations, specific to a particular organizational context, frequently exist" (Nelson & Winter, 1982: 111).

Our key to tracing ongoing conflict was to espouse a broader view of actions, both as a way to accomplish routine tasks and as a reflection of individual motivations. By adopting the notion of *moves* (Cronin & Bezrukova; 2019; Pentland, 1991), we found that the same action could simultaneously accomplish routine tasks and address process conflict: asking a colleague to do your work gets the job done and rids you of a time-consuming task. Across participants, the same tactic could encompass different actions: *withdrawal* tactics could be accomplished by physically hiding or attending a meeting. The same action could also mean different things for different actors: meeting outside work could underlie *patrolling* or *bridging* intentions. Thus, the meanings attached to routine actions are plural both within and across individuals. When studying conflict in routines, it becomes harder to separate specific actions from the specific meanings attached by specific individuals.

Our study shows how different drivers of routine action can be seen and unpacked as dynamic complements. Instead of choosing among different views of routine action, the same action can be the subject of different analytical perspectives. Jurisdictional patterning is anchored in a conflict-based, motivational view of routine action. It complements the task-oriented, purely informational view of routine action, which benefits from abstracting actors away. To understand how organizations operate and solve specific problems, it makes sense to background individual differences and focus instead on the types of actions that enable mistakes and delays to be fixed (Dittrich et al., 2016), advance projects (Goh & Pentland,

2019), or enable intentional routine change (Bucher & Langley, 2016). Conversely, the motivational view of routine action suggests that routine actors are more than vessels for engaging in task-based actions. Jurisdictional patterning showcases how routine action is emotional, moral, political, and conflictual.

In making explicit how an action can be analyzed and understood in different ways, we provide the theoretical groundwork for integrating a plural view of action in routines research. An expanded view of routine action enables scholars to adopt a perspective of actions that is constitutive of the dimension of the world under study (Feldman, 2016). Jurisdictional patterning begins to untie us from our focus on task-based actions as a source of endogenous routine dynamics. It invites attention to actions that reflect and enact different organizational structures within which a routine is embedded, such as hierarchy and friendship networks, that overlap and might generate competing social expectations (Howard-Grenville, 2005). As such, it enables further examination of how actors navigate and simultaneously enact multiple organizational structures that contribute to routine stability and change.

Establishing the Distributed Ability to Pattern the Routineas-Truce

Our third contribution foregrounds individual participants as authors of truce work –efforts by actors to direct routine performances towards their intended governance outcomes (cf. Deken et al., 2016). The potential for individuals to engage in truce work has implications for fundamental debates about conflict and conflicting interests in organizations.

The answer to "who gets to change truces" is evolving. Most past research has assumed that only actors who have the explicit power or mandate to carry out change do so. Leaders, managers, and stakeholder groups lend their voice to "decision and denouement" (Zbaracki & Bergen, 2010: 965), and focus on breaking and remaking

truces (Kaplan, 2015). In this framing, routine participants who do not "agree to disagree and move on in order to get the work done" (Feldman & Pentland 2003: 98) face few attractive options.

Recent research has suggested, however, that participants can change truces without breaking them. Routine participants can accomplish conflicting organizational goals by creating junctures where they flexibly enact truces (Salvato & Rerup, 2018) and flexibly interpret them to devise and hide workarounds in routines (Bertels et al., 2016). Examining flexible truces helps clarify that truce dynamics might have more and less desirable outcomes for organizations. Yet these examples trace truce dynamics from a consensus-driven perspective where individual efforts are for naught. As March (1962: 670) notes, this view is unrealistic: "with few exceptions, modern observers of actual firm behavior report persistent and significant contradiction between firm behavior and the classical assumptions [of joint preferences]." Our research provides an alternative narrative in which individuals shape truces constantly. Look closely, and jurisdictional patterning occurs through mundane encroaching, recoiling and transuding actions.

Without the concept of jurisdictional patterning, we have only the consensus-based view of routine governance. Our theory invites a deeper understanding of when and why endogenous routine dynamics take place. For one, jurisdictional patterning brings new focus on conflicting interests as a trigger of change in routines. Although our study addresses process conflict only as a source of jurisdictional patterning, our recognition that routine participants are motivated by "unreconciled conflict in preferences" (March, 1991: 103) highlights how "conflict as well as consensus can be an important part of the process of routine change" (Feldman, 2000: 613). Moreover, jurisdictional patterning expands individual participants' agency from patterning routines to patterning truces: actions shaping the rules, rewards and punishment mechanisms of routines. A deeper investigation of the processes that

link truce dynamics to routine dynamics therefore seems pressing. In our context, participants' jurisdictional patterning played out in many ways, resulting in collective dynamics that repaired, reinforced, and trialed new boundaries of the truce. In showing that all three outcomes can occur, our work echoes scholarship on negotiated order (Barley, 1991; Fine, 1984; Strauss, 2017), which sees social order as resulting from ongoing negotiation – routine accomplishments as a result of ongoing governance dynamics. These outcomes displayed a variety of characteristics: we noted truce dynamics that emerged progressively over numerous routine iterations; were expressed in bursts; were regularly patterned through retrospectives. Future work should explore what factors influence how quickly rules of the game are changed across different routines.

Limitations and Future Research on Continuous Truce Dynamics

We designed our study and chose our sample to answer our research question, and to subsequently build theory on conflict and governance dynamics in routines. Still, our work has limitations. First, the subtlety and subjective moves we analyzed limited our ability to trace collective truce patterning over time. We mitigated this concern by relying on observations and participation in scrum training and on retrospective accounts of participants' experiences to build a fine-grained understanding of what participants' moves meant. We also cross-compared accounts from different routine participants and archival data to surface a between-person view of jurisdictional patterning strategies and understand the possibilities for reinforcing, trialing, and repair dynamics. Future research might leverage ethnographic methods to provide more granular accounts of factors that influence the linkages between truce and routine dynamics. For instance, our respondents were often co-located and tracked their work using shared task management software and thus had more restricted zones of discretion (Nelson & Winter, 1982).

Future scholarship could examine how truce work occurs when routine participants have greater discretion over how tightly truce and routine dynamics are coupled (cf. Bernstein, 2012).

Second, we purposefully chose an extreme case that enabled us to surface truce work resulting from process conflict. It remains unclear how process conflict is expressed in different settings, leading to different forms of jurisdictional patterning. Further empirical work should build a richer typology of truce work in different settings, such as when routine participants' agency is expressed via the affordances of technology (D'Adderio, 2011; Leonardi, 2011). There are also potential alternative triggers of truce work, such as power and status dynamics (Kahn & Rouse, 2020) and emotions (Grodal, Nelson, & Siino, 2015). Further, organizational factors (e.g., leadership; Kaplan, 2015), can influence a routines' governance capacity. Future research can unpack the dynamics that affect this capacity, so that we might learn more about how truce work occurs and how it affects those who accomplish work in routines.

Practical Applications: Managing Scrum Teams

Our results inform practice in two ways. First, our findings depart from Tuckman's (1965) four-stage *forming, storming, norming,* and *performing* team development model, which is widely used in practitioner circles (e.g. Watkins, 2016). In our context, scrum teams were constantly norming *and* performing. Even the most mature teams continuously negotiated norms (the routine-as-truce) during routine performances. Scrum's elaborate rules and guidelines worked less like an "iron cage" (Barker, 1993) and more like fishing nets: porous, flexible, and shapeable. These dynamics created differences in how teams scrummed. Managers seeking standardized routines might consider how the routine-as-truce evolves within their teams.

Second, our research identifies dimensions of routine-related process conflict that trigger jurisdictional patterning. At the organizational level, participants related difficulties with requests by managers who knew less about the rules and cadence of scrum. At the routine level, some participants thought their projects did not fit the demands of scrum; others objected to how the routine was performed. At the participant level, scrum novices and experts questioned person-routine fit. Whether a person is a good "match" for scrum also changed. As scrum's popularity grows (Cappelli & Tavis, 2018; Rigby, Elk, & Berez, 2020; Rigby, Sutherland, & Noble, 2018), managers might consider these dimensions of fit as they adopt scrum into their workplace.

3.7 CONCLUSION

Organizational routines are performed by people. Because it is often difficult for people with conflicting motivations, perspectives, and interests to coordinate, working in routines requires participants to make a truce on the "rules of the game" that govern how routines are carried out. Yet, rules can be changed. When faced with process conflict, participants can engage in jurisdictional patterning that triggers changes in truces and routines alike. Our emergent model of ongoing truce dynamics provides a new basis for exploring how participants manage conflict during routine accomplishments. We hope it will stimulate a more integrated appreciation of governance and conflict in routines.

APPENDIX 1.

Questions from the interview protocol⁴

- 1. I would like to know a bit about your work and your background
 - a. What is your role in the scrum team?
 - b. What does your team work on? [Fill in team composition]
- **2.** Can you tell me a bit about the history of the implementation of scrum in your team?
 - a. Prior to this, had you heard about Agile and Scrum?
 - b. How long has your team been scrumming (number of sprints)?
 - c. How did scrumming change the way you and your team work?
- **3.** What does a typical sprint look like in your team? [Fill in individual calendar]
- **4.** If we time travel a bit, has the team always scrummed in this manner? Has your team tried different ways of scrumming?
- **5.** And how well are the sprints going? How can you tell?
- **6.** Do the sprints unfold as planned? How so?
- **7.** Can you recall a particularly challenging project? How did it affect the way your team scrummed?
- **8.** If you think of the current/past sprint, how would you say the team is scrumming?

- a. If bad: How so? Did your team do something as a response? Did you perhaps do something by yourself?
- b. If good: How so? Do you, or your team, reflect on ways to improve your scrumming?
- **9.** I would also like to know a bit about how well you, as a team member, are scrumming. How would you say you are doing?
 - a. If bad: How so? Have you done something to deal with this? Why, or why not?
 - b. If good: How so? Do you have aspects of the way you scrum that you would like to improve? Could you give some examples?
- **10.** You mentioned your role as a [developer, scrum master, PO, BO] in your previous answer. Could you provide some more detail regarding how you perceive your role in the scrum process?
- **11.** Do you think the Agile principles are important to your team?
- **12.** Do you think any of your fellow team members will feel differently about your evaluation of how your team is scrumming?
- **13.** Do you think the current way of working scrumming works for your

⁴ Interviews were semi-structured. Respondents were also presented with a calendar to draw out their scrum routine and asked to draw their scrum team composition. When respondents described routine events (daily standup, review, retrospectives), additional questions were asked to clarify its progression from the respondent's perspective. Moreover, respondents' answers sometimes led to the interviewer asking impromptu questions in order to follow interesting and emerging lines of inquiry.

- team, or would you need some adaptations (or a completely different way of working)? In what way?
- **14.** What would you recommend to teams starting to scrum? How is it best to learn the scrum process as a team? What
- are the most difficult aspects to really get used to?
- **15.** Are there any other issues you thought during our interview that you would like to add? Any closing remarks?

4. SELF-MANAGED FORMS OF ORGANIZING AND ROUTINE DYNAMICS

A version of this chapter is forthcoming in the Cambridge Handbook of Routine Dynamics. Eds.: Martha S. Feldman, Brian T. Pentland, Luciana D'Adderio, Katharina Dittrich, Claus Rerup, David Seidl.

Co-author: Waldemar Kremser

SUMMARY

How to organize work is a topic at the core of routine dynamics, and studying novel forms of organizing constitutes a prime occasion for theory development. Though self-managed forms of organizing (SMOs) have held perennial interest by scholars and practitioners alike, contemporary SMOs are larger, and more rule driven than their earlier counterparts. Our chapter offers a primer on contemporary SMOs and identifies key issues that a routine dynamics perspective can lend towards seeing, tracing and understanding contemporary SMOs.

4.1 INTRODUCTION

This chapter discusses how a routine dynamics approach can contribute to our understanding of self-managed forms of organizing (SMOs). SMOs rely on self-management to coordinate action, and are characterized by the extent to which they *decentralize authority* and foster *continuous coordinating* (Lee & Edmondson, 2017; Pearce & Ravlin, 1987; Puranam, Alexy, & Reitzig, 2014). Examples are the long-known self-regulating work groups (Cohen & Ledford, 1994; Pearce & Ravlin, 1987), and more contemporary approaches like Scrum (Schwaber & Beedle, 2002), Holacracy (Robertson, 2015), the Scaled Agile Framework (SAFe; Leffingwell, 2018), Sociocracy (Buck, 2017), and Teal Organizations (Laloux, 2014).

Existing studies on this topic already indicate that taking a routine dynamics perspective seems to be specifically useful for helping us understand key challenges in contemporary SMOs (Dönmez, Grote, & Brusoni, 2016; K. T. Goh & Pentland, 2019; K. Goh & Rerup, 2018; Kremser & Blagoev, 2020; Lindkvist, Bengtsson, Svensson, & Wahlstedt, 2017; Mahringer, 2019). It has proven helpful, amongst others, to zoom-in on how actors balance competing pressures that are typical for many SMOs (e.g. for stability and change, or creativity and familiarity) during situated performances of interdependent routines. A routine dynamics perspective has also shown promise when it comes to tracing situated actions to organizational outcomes, like agility and innovation — both with the methodological (e.g. pathbased analysis of routines) and conceptual tools (e.g. patterning) it has to offer.

Against this backdrop, the purpose of this chapter is to provide a resource for scholars wishing to leverage the routine dynamics perspective to study contemporary SMOs. It is structured into three sections. First, we begin with a primer on self-managed forms of organizing. Next, we discuss four key issues in

contemporary research on SMOs – accomplishing agility and innovation, engaging in continuous coordinating, transforming into a SMO, and fostering a sense of purpose and satisfaction in individuals – to develop a research program for routine dynamics scholarship. We conclude by summarizing how routine dynamics offers novel ways of seeing, tracing and understanding the distributed, complex and dynamic activities that constitute contemporary SMOs.

4.2 A PRIMER ON SELF-MANAGED FORMS OF ORGANIZING

SMOs are not new. Starting in the 1950s, members of the famous Tavistock Institute undertook a series of studies in the British coal-mining industry that led to the first systematic studies on self-management (Bucklow, 1966; Trist & Bamforth, 1951). These studies illustrate what we consider to be the two constitutive features of SMOs: *decentralized authority* and *continuous coordinating*. Groups of up to 40 coal miners shared the authority for planning all production operations of their shift, and "management provided supporting services rather than direct supervision" (Bucklow, 1966, p. 72). At the same time and for the same reasons, coal miners engaged in continuous coordinating efforts. Miners could see what others were doing, and could consequently react by providing assistance, relief, and control in a flexible and continuous fashion. "Seeing what is going on around them, they can decide what they should be doing next, or be seen by others to be defaulting" (Emery, 1980, p. 25).

Empirical studies demonstrated positive effects of such SMOs on both individual outcomes, like the reduction of job alienation and an increase in job satisfaction, and collective outcomes, like group performance and innovativeness (Pearce & Ravlin, 1987). Ensuing scholarship also shed light on the limitations of giving

groups the freedom and discretion to organize and structure their work (Langfred, 2000, 2004). For example, self-managed groups might develop restrictive norms that can be overbearing for individual autonomy (Barker, 1993), and might gradually restructure themselves in a way that minimizes collaboration (Langfred, 2000).

With the coming of the software industry — where organizations often work on highly complex tasks in a distributed way — the late 1990s and early 2000s saw further developments of SMOs. Two aspects of contemporary SMOs seem to stand out. First, we increasingly see successful examples of SMO implementations at a larger scale (Rigby et al., 2018). Organizations like Zappos (Bernstein et al., 2016), ING (Jacobs, Schlatmann, & Mahadevan, 2017), Morning Star (Gino & Staats, 2014), Valve (Puranam & Håkonsson, 2015), and Buurtzorg (Gray, Sarnak, & Burgers, 2015) have successfully implemented self-managed forms of organizing at the scale of hundreds of employees in dozens of teams. Second, contemporary SMOs tend to rely on specific sets of formal rules to guide organizing processes and practices that align with self-organizing principles. In what follows, we briefly describe two examples of such rule sets: Scrum for team-level SMOs, and SAFe for organizational-level SMOs.

Scrum

Scrum is an example of a contemporary SMO on the team level (see Figure 4.1). This framework relies heavily on formalization and standardization of critical parts of its organizing process in order to facilitate the self-managed adaptation of its roles, routines and artifacts (Schwaber & Sutherland, 2017). At its base, the completion of a Scrum project is organized as an iterative process. Each iteration is called a Sprint, a set timebox generally lasting one month or less, during which team members work together to produce an outcome of usable quality, called an

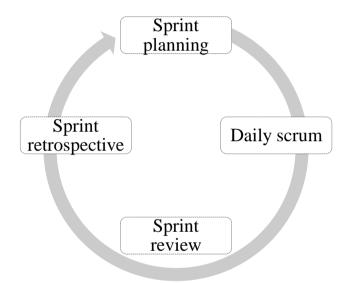
Increment. Each member of a Scrum team adopts one of three roles: the Product Owner, who is responsible for overall project content and quality, the Scrum Master, who supports process quality, or the Development Team Member, who holds the authority to (re-)organize work during each Sprint. Next, Scrum commonly involves four different meetings which can also be conceptualized as organizing or metaroutines (Dönmez et al., 2016; Mahringer, 2019): (1) The Sprint Planning meeting to establish the main tasks and goals for that Sprint, (2) Daily Scrum meetings, where activities of team members are synchronized and the next 24 hours are being planned, (3) the Sprint Review meeting where at the end of each Sprint progress on the product is evaluated and the team's task list is updated, and (4) the Sprint Retrospective, where the Scrum team evaluates itself and each member make suggestions on how to optimize the organizing process. In addition to Increments, the Scrum team leverages two important artifacts: the Product Backlog, a list of overall product features that the team ought to deliver, and the Sprint Backlog, a subset of tasks derived from the Product Backlog to be accomplished during a Sprint. Together, these artifacts establish an important connection between the organizing and production activities, or routines, of the Scrum team.

The Scalable Agile Framework (SAFe)

The Scalable Agile Framework (SAFe) – is an example of a contemporary framework for self-management suitable for larger organizations (Leffingwell, 70% of US 2018). Used by over Fortune 100 enterprises (Scaledagileframework.com), SAFe describes how groups of Scrum teams and supporting functions might be organized in a self-managed way. At its baseline, work within organizations is structured along operational or development value streams. For example, a bank might define "offering customer banking loans" as an operational value stream. Within these value streams, numerous longer-lived Scrum teams collaborate by forming a so-called Agile Release Train to deliver products,

services or systems to its customers. As an indication, if a Scrum team consists of 5-9 members, an Agile Release Train can regroup 5-12 Agile teams, or 50-125 members. The Agile Release Train can be conceptualized as a "team of teams".

Figure 4.1 A typical Sprint iteration according to the Scrum framework



Work at the scale of an Agile Release Train poses additional coordination challenges. In order to organize work both within and among different value streams, SAFe specifies a set of roles, routines and artifacts that are structured to align with and scale those of Scrum. For example, because an Agile Release Train involves coordinated work among several Scrum Teams, a Release Train Engineer operates as a sort of "Chief Scrum Master". Just like Scrum teams work in iterations called Sprints (typically 2 weeks long), multiple Scrum teams within an Agile Release Train also work together in iterations called Program Increments (typically 10 weeks long) to deliver pieces of work. And, just like a Scrum team holds different meetings to plan, show and review their work and work processes, multiple Scrum

teams of an Agile Release Trains regularly meet for the same purposes. Some meetings involve representatives from each team (e.g. Scrum of Scrums), whereas others involve all members of the Agile Release Train (e.g. Program Increment Planning). Because these meetings involve more members and larger-scale objectives, they occur less often than Scrum team meetings. For instance, while the meetings of the Scrum team occur on a daily or bi-weekly basis, meetings at the Agile Release Train level occur on a bi-weekly or quarterly basis.

4.3 KEY ISSUES IN SELF-MANAGED FORMS OF ORGANIZING

In this section, we delineate a research program for routine dynamics scholarship on key topics surrounding contemporary SMOs. Using Lee and Edmondson's (2017) meta-analysis of SMOs as a starting point, we reviewed and selected four research areas that hold potential for future routine dynamics scholarship. These are: accomplishing agility and innovation, engaging in continuous coordinating, transforming into a SMO, and fostering a sense of purpose and satisfaction in individuals. For each topic, we explain the research problem, survey existing studies where a routine dynamics perspective has produced first results (see Table 4.1) and highlight pathways for future research.

 Table 4.1 Overview of routine dynamics research on SMOs

Source	Level of analysis	SMO issue
Dönmez, Grote, & Brusoni, 2016	Team	Accomplishing agility and innovation; engaging in continuous coordinating
Goh & Pentland, 2019	Team	Accomplishing agility and innovation

Goh & Rerup, 2018 (conference proceeding)	Team	Accomplishing agility and innovation
Kremser & Blagoev, 2020	Team	Engaging in continuous coordinating
Lindkvist, Bengtsson, Svensson, & Wahlstedt, 2017	Organization	Transforming into a SMO
Mahringer, 2019 (dissertation)	Team	Accomplishing agility and innovation; engaging in continuous coordinating; fostering a sense of purpose and satisfaction in individuals

Accomplishing Agility and Innovation

Perhaps the most important reason for the increasing interest in SMOs is that they promise to increase the agility of the respective work group, project, or organization. This is because the combination of continuous coordinating and decentralized authority is believed to enable faster and more accurate local adaptations of work units (Felin & Powell, 2016). Moreover, SMOs are considered to help unleash creativity and innovation, as decentralizing authority could make self-managed work units more effective in harnessing ideas from individuals and faster in testing them out in practice (Lee & Edmondson, 2017).

While there is some research on these issues for autonomous workgroups (Cohen & Ledford, 1994; Pearce & Ravlin, 1987) and agile project management methods (Dybå & Dingsøyr, 2008; Lee & Xia, 2010), we know less about larger SMOs and their organizational-level effects. In this area, empirical research is comprised mostly of anecdotal evidence on a few prominent cases like Valve (Felin & Powell, 2016; Foss & Dobrajska, 2015), Zappos (Bernstein et al., 2016), or Morning Star (Gino & Staats, 2014; Hamel, 2011). In addition, research has yet to address *how* outcomes like agility, innovation, and creativity are accomplished in practice and at

scale.

RD research: Balancing Competing Pressures to Accomplish Agility and *Innovation.* We have identified four empirical studies that explicitly take a routine dynamics perspective in understanding how outcomes of SMOs are accomplished (see Table 4.1). Dönmez et al. (2016) study Agile software development teams. They find that actors adopt different practices to balance the competing pressure for stability and flexibility. For example, actors engage in different forms of routine "protection" and make use of temporal triggers in coordinating routines. Zooming in, Goh and Rerup (2018) analyze the role of time and space in balancing the competing pressures for flexibility and efficiency. They find that the temporal regularity of Scrum meetings plays a crucial part in this effort, because it creates a space to reconfigure routine actions. Zooming out, Goh and Pentland (2019) analyze how actions pattern change significantly over the course of a Scrum project, and in so doing elaborate on an important motor of ongoing change in routines: patterning. The fundamental openness of many goals in project-level SMOs constitutes a potential driver of such "patterning work" (Danner-Schröder, 2016). Mahringer (2019) shows that actors explore project goals over time, thereby discovering emerging lacks and needs that, in turn, motivates actors to form new paths and dissolve of old ones.

Future Research: Understanding larger SMOs by tracing actions to outcomes.

Our review shows that scholars have so far focused on the team- or project-level of analysis. We see ample room for research that looks at *larger* SMOs' efforts to accomplish organizational outcomes. Routine dynamics research can help us bridge the micro- and macro-levels of analysis through tracing actions to outcomes. A specifically promising way is to analyze the digital traces that are often created through the performance of IT-enabled self-managed routines. For example, Scrum teams typically rely on software (e.g., JIRA, Axosoft) to monitor routine

performances and to create Scrum artifacts, like the product backlog. The methodological innovations that are currently emerging around path-based analysis of routines (K. T. Goh & Pentland, 2019; Hærem, Pentland, & Miller, 2015; Pentland, Liu, Kremser, & Haerem, 2020) offer an interesting way to trace such actions to outcomes. A path-based analysis of routines keeps the focus on specific performances, while also lending itself to both qualitative (e.g. why and how does the performance of specific paths in the Scrum of Scrums routine accomplish agility?) and quantitative (e.g. do more paths in the Sprint Planning routine lead to more or less innovation?) research on the agility and innovation of larger SMOs.

Engaging in Continuous Coordinating

SMOs can be distinguished from traditional forms of organizing, also with regards to how coordination takes place (Martela, 2019). Traditionally, coordination is chiefly accomplished through governance structures (re-)defined at the top of the hierarchy and implemented during *episodic* interventions, resulting in "infrequent, discontinuous, and intentional" (Weick & Quinn, 1999, p. 365) changes in organizational structure. By contrast, SMOs usually require all members of the workgroup, project or organization to engage in *continuous* forms of coordinating. This involves small ongoing adjustments to the organization structure that might cumulate to create substantial change (see Brown & Eisenhardt, 1997; Weick & Quinn, 1999). And, because the nature of contemporary work often involves the accomplishment of complex and distributed tasks, ad-hoc forms of coordinating no longer suffice. Many SMOs have turned instead to "detailed" and "elaborate" governance frameworks (M. Y. Lee & Edmondson, 2017) – as illustrated previously with Scrum and SAFe.

More and more SMOs face the additional challenge of sustaining decentralized and continuous coordination as they scale their business. *Scaling* involves the process

of synchronizing internal coordination with an organization's increased scale and scope of activities (DeSantola & Gulati, 2017). In this respect, there is little empirical research that addresses how the formal governance frameworks of contemporary SMOs are enacted in practice, which variations we find, why, and with what effect. Specifically, scholars have commented on the need to understand how governance frameworks can help multiple self-managing workgroups to coordinate their efforts without having to rely on centralized authority (e.g. Ingvaldsen & Rolfsen, 2012; Rigby et al., 2018).

RD research: Coordinating through Routine Performances. We have identified three empirical studies that explicitly take a routine dynamics perspective in exploring continuous coordinating in SMOs (see Table 4.1). First, Mahringer's (2019) study illustrates how organizing routines – such as those involved in the Scrum framework – continuously orchestrate the unfolding of other processes, such as innovation processes. Second, Dönmez et al. (2016) find that multiple self-managed routines can be coordinated through routine links, rather than centralized authority, via two specific mechanisms: triggering signals and information flows. Third, Kremser and Blagoev (2020) look at how role performances intersect with routine performances to explain how actors temporally coordinate multiple routines in the context of an agile consulting project without having to rely on a formal schedule.

Future Research: Governance Dynamics and Growing Pains. We have only scratched the surface on the ways routine participants coordinate and govern within and among multiple, self-managed routines. Our review highlights that routine dynamics scholars have so far used rather short observation intervals of several weeks or months and put an analytical focus on actors' ongoing and situated efforts to accomplish coordination among multiple, interdependent routines. We know much less about the governance dynamics that characterize SMOs. This could

involve empirical research that uses longer observation intervals — multiple iterations rather than a few — and puts the analytical focus on the co-evolution of multiple, interdependent routines and networks or systems of formal governance rules. As such, the reliance on a complex set of formal governance rules in contemporary SMOs provides a great opportunity to study how routines and rules co-evolve in settings where rules are created by routine participants rather than by their superiors (see also Danner-Schröder & Geiger, 2016; M. Y. Lee, Mazmanian, & Perlow, 2020). By corollary, SMOs also provide an opportunity to better understand how conflicts and truces (Salvato & Rerup, 2018; Zbaracki & Bergen, 2010) develop when authority is distributed.

The *scaling* of continuous coordination efforts represents another challenge that lends itself to be studied from a routine dynamics perspective. As SMOs grow, the addition and integration of a large number of different, yet interdependent routines increases the complexity of self-management. In this regard, extant work on the morphology of single routines and clusters of interdependent routines (K. T. Goh & Pentland, 2019; Kremser, Pentland, & Brunswicker, 2019; Kremser & Schreyögg, 2016; Pentland & Feldman, 2007) can help systematically reconstruct the SMO in a way that retains the perspective of the performing actors, all the while securing conceptual clarity and an analytical focus on the practical challenges of scaling. In addition, concepts like interfaces (Kremser & Schreyögg, 2016) and boundaries (Kremser et al., 2019) direct our analytical attention to issues that arise *among* routines, which will become specifically prevalent at scale, when SMOs need to integrate a large number of different, yet interdependent routines.

Transforming into a Self-Managed Organization

Incumbent firms in industries ranging from healthcare (Bondarouk, Bos-Nehles, Renkema, Meijerink, & Leede, 2018) to banking (Jacobs et al., 2017) are currently

experimenting with the implementation of SMO governance frameworks. No matter in which industry, transforming from a traditional hierarchical organization into an SMO involves organizing challenges that are different from those confronted by SMOs as they grow (see above). What makes SMO transformations a special case is that great leadership at the top – usually an important success factor in all major change processes (Stouten, Rousseau, & Cremer, 2018) – is essentially antithetical to this type of change. Or, as Gary Hamel put it: "First, Let's Fire all the Managers!" (Hamel, 2011, p. 48). This departure from centrally orchestrated organizational change creates characteristic challenges such as the effects of SMO transformations for middle managers who are typically the first losers of such change processes (Dikert et al., 2016). The factors and dynamics that help or hinder transforming into SMOs remain largely underexplored (see also Emery, 1980).

RD research: Integrating Contradictory Learning Processes in Contemporary SMOs. For routine dynamics scholars, extant studies on the integration of new routines into established organizations provides a strong baseline for studying organizational transformation (e.g. Bertels, Howard-Grenville, & Pek, 2016; Deken, Carlile, Berends, & Lauche, 2016; Edmondson, Bohmer, & Pisano, 2001; Kremser & Schreyögg, 2016). When it comes to SMO transformations, we have identified only one routine dynamics study (see Table 4.1). Lindkvist et al. (2017) report on the case of Ericsson's Software Development Centre that changed from a traditionally designed organization engaged in large development projects with sometimes over 100 project members, into an agile organization with over 60, much smaller agile teams. Applying a routine dynamics perspective, the authors point us to the specific challenge of balancing bottom-up and top-down change efforts. Their analysis highlights the importance of two different trial-and-error-learning processes: (1) an "offline", pull-directed learning process, taking place away from situated performances of operational routines, and (2) an "online", push-directed

learning process more integrated within situated performances. By integrating these two learning processes, Ericsson was able to effectively manage its complex transformation process.

Future Research: Multiplicities and Cluster-Level Dynamics in SMO Transformations. We propose two touchpoints for future routine dynamics research on SMO transformations. First, the concepts of multiplicity (Feldman, Pentland, D'Adderio, & Lazaric, 2016) and endogenous change (Feldman & Pentland, 2003) provide a starting point to unpack the process of SMO transformation. Since actors are less able to leverage the integrating power of centralized authority, SMO transformations are likely to be confronted with a multiplicity of different understandings regarding the nature of this transformation in terms of routines. Multiplicity therefore complicates the efforts to effectively influence the "direction of endogenous change" (Feldman & Pentland, 2003, p. 115) of new and established routines, and might lead to unintended outcomes. For example, earlier cases have shown that transformations to SMOs might yield less, not more, control for each individual actor (Barker, 1993). Second, transforming into a self-managed organization inevitably involves facing differences between old and new routines. For example, there are conflicting logics between the organizing routines in a Scrum project and more traditional HR or finance routines. We therefore suggest bringing to the fore cluster-level dynamics (Kremser & Schreyögg, 2016), as they specifically concern the integration of new routines into established clusters of routines.

Fostering a Sense of Purpose and Satisfaction in Individuals

The impact of SMOs on individuals represents a key topic for scholars and practitioners for at least two reasons. First, the distribution of decision-making authority makes the commitment, motivation and well-being of each individual

employee a top priority for SMOs. When each individual has the authority to change the organization's structure, it might become critical that employees share a high commitment to a common purpose (Adler & Heckscher, 2018). Second, a new generation with different work preferences and a different understanding of what a "good life" constitutes enters the job market. To gain a competitive edge in the war for talent, firms increasingly adapt to the needs of millennials. This involves providing employees with workplaces that help them find meaning in their work (Hauw & Vos, 2010), and accommodating an increasingly diverse set of needs regarding the balance between work and private life (Rawlins, Indvik, & Johnson, 2011).

Thus, a core puzzle in research on contemporary SMOs is to understand the effect of radical, organization-wide self-management approaches on key individual-level outcomes like commitment, sharedness of purpose, job satisfaction, well-being and work-life balance. The few studies examining how Agile methods effects individuals (Dybå & Dingsøyr, 2008; Syed-Abdullah, Holcombe, & Gheorge, 2006) have yielded mixed results. As individuals are called to learn, perform and navigate the elaborate SMO frameworks outlined above, routine dynamics constitutes a promising perspective to research the situated experiences of individuals in these contexts.

RD research: Emotional Balancing of Competing Pressures. We have identified a single study regarding the situated experiences of individuals in SMOs. Mahringer (2019) shows the importance of emotions in helping routine participants engaged in Scrum software development projects. In his ethnographic study, Mahringer (2019) highlights how routine participants regularly exhibited negative emotional reactions, like anger and confusion, during the performance of Scrum routines. When actors could balance these with positive reactions, this mechanism of emotional balancing smoothed team tensions, enabling the performance of multiple,

interdependent routines. By noting that emotional components may not be separate from cognitive engagement, but rather underlie them (Grodal, Nelson, & Siino, 2015), this research advances extant work pointing to emotions as a bridge between routine performances and individual outcomes, like stress and job satisfaction.

Future Research: The Role of Individuals in Self-Managed Routines. There is ample space for future work on the interplay between self-managed routines and individual outcomes. Individuals throughout SMOs are bestowed the power to design, organize, innovate and strategize – actions that are usually consigned to managers. Individual motivation, personality differences and role relations amongst routine participants can therefore have a greater impact on routine outcomes. Conversely, self-managed routines can affect individual participants in varying ways. Addressing questions regarding the commitment and motivation of specific participants in such contexts thereby calls for a more holistic view of actors, one that surfaces the importance of "specific actors who perform a routine, and their relationships with other specific participants" (Salvato & Rerup, 2018, 33).

If emotions constitute a first entry point to understanding individual-level dynamics in routines, the notion of roles might constitute a second conceptual point of entry to understand the dynamics of situated performances of self-managing routines and individual outcomes. Kremser and Blagoev (2020) introduce the notion of role-routine ecologies to provide a new way of seeing through the eyes of individual actors. Their study highlights how organizational members juggle work and non-work roles in the accomplishment of interconnected routines (see also Eberhard, Frost, & Rerup, 2019; Rosales, 2020).

4.4 SEEING, TRACING, AND UNDERSTANDING SMOS

In conclusion, we believe a routine dynamics perspective lends itself to exploring the workings of SMOs for three reasons: seeing, tracing and understanding. First, a routine dynamics perspective helps us in seeing important dynamics and patterns that are characteristic to SMOs. For instance, seeing contemporary SMOs as clusters of interdependent routines (Kremser & Schreyögg, 2016), as routine ecologies (Sele & Grand, 2016), or as role-routine ecologies (Kremser & Blagoev, 2020) can be helpful in describing different aspects of how work is organized under conditions of decentralized authority and continuous coordination. A routine dynamics perspective can also help us to better see different degrees of self-management in different 'locations' of the same organization. As Dönmez et al. (2016) point out, each routine can be said to be self-managing to the extent to which it is (re-)designed by the routine participants themselves. Future research can develop this line of thought in order to clarify the spectrum within which organizations are implementing self-management principles, and explore how variances in degrees of self-management affects the dynamics of larger patterns or organizational outcomes.

Second, a routine dynamics perspective can help us in *tracing* actions to larger patterns or outcomes. Routine dynamics scholars make process visible by zooming in to the inner workings of routines – such as actions and connections between actions – and link them to the broader context by zooming out to clusters, ecologies, organizations, and industries within which they are embedded (Feldman et al., 2016). As practitioners often view SMOs as means to increase project-level or organizational-level agility, and to improve individual level-outcomes like commitment and job satisfaction (M. Y. Lee & Edmondson, 2017), research is

required to clarify how and whether these goals are achieved. Putting action in the foreground allows routine dynamics scholars to understand how individual and organizational outcomes are accomplished in practice (Goh & Pentland, 2019).

Finally, with its epistemological roots in practice theory, a routine dynamics perspective helps us *understand* how actors deal with tensions and competing pressures over time. Such dynamics are rife in SMOs. For example, actors are requested to be both creative and rule-abiding, and organizations are expected to regularly deliver innovations. These contradictory concepts can be unpacked by focusing on how routines are enacted. Seemingly opposite forces, such as stability and change (D'Adderio, 2014) or creativity and familiarity (Sonenshein, 2016) have already been untangled by routine dynamics scholars. A routine dynamics view therefore serves scholars wishing to understand such puzzles and paradoxes within SMOs through a focus on effortful and emergent accomplishments.

5. DISCUSSION

This dissertation looks at work in contemporary organizations. As businesses respond to realities of today's VUCA (volatile, uncertain, complex and ambiguous) environment, they adopt new mechanisms of coordination and control. In turn, challenges arise from the implementation of such novel structures. To understand how these challenges might develop organization theory, I focus on the dynamics that emerge from two mechanisms of coordination and control that are shaped differently in contemporary organizations than in traditional bureaucracies: power hierarchies and organizational routines. Chapter 1 presents this dissertation's motivation by charting a brief history of organizational studies, specifically scholarly efforts to bridge the gap between organizational theory and the realities of contemporary organizations. Chapter 1 also introduces the terminology articulated above – mechanisms of coordination and control, power hierarchies, organizational routines, etc. Then, chapters 2, 3 and 4 explore the dynamics that underlie new ways of organizing power hierarchies, the routine-as-truce and routines in flat organizations, respectively. Below, I summarize the initial research problems, generated insights, and future research directions of each of these chapters.

To begin, Chapter 2 presents theory about how people at different ranks are affected by dynamic hierarchies. The overarching structure of power hierarchies are normally static within organizations, with internal dynamics involving people climbing or losing rank. However modern organizations shape hierarchies by flattening or stretching them. This affects the power employees and managers hold across hierarchical ranks. Because gaining and losing power affects people differently, we were curious about the social identity mechanisms that could take place during such reorganizations. Our propositions elaborate when and how groups can form shared mental models of steeper or flatter hierarchies than organizations originally prescribe. These offer insights for research on power and hierarchies alike (Table 5.1).

Next, Chapter 3 explores how governance takes shape in self-managed routines. In traditional organizations, the rules underlying how routines are carried out – for example how stable or dynamic they can be – are considered fixed. We wondered whether this static view of the routine-as-truce holds in Scrum routines, where routine participants can more easily shape the "rules of the game." We find dynamic truces triggered by individuals experiencing process conflict. This changes how we conceptualize the relationship between truce dynamics and routine dynamics, and holds implications for how we understand routine stability and change (Table 5.2).

Finally, chapter 4 bridges the topics brought forward in chapters 2 and 3 by describing how studying organizations with flat hierarchies, or self-managed organizations (SMOs), can be interesting from a routine dynamics perspective. Aligned with the overarching motivation of this dissertation, this chapter also aims to encourage grounded studies of modern workplaces that address the trials and tribulations of 21st century organizing. To show the potential of contemporary SMOs as empirical contexts for routine dynamics scholars, we first provide a primer on self-managed forms of organizing. Then, as shown in Table 5.3, we summarize insights derived from early routine dynamics studies and specify avenues for future research on contemporary SMOs.

7.7

 Table 5.1 Overview of Chapter 2 research insights – Unpacking dynamic hierarchies

	Research problem	Propositions	Contributions	Future research
1	Power is a core component of individuals' work identities. When organizations mandate hierarchical transitions (flattening and stretching), social identity dynamics are likely to emerge – yet these aspects remain undertheorized.	Hierarchical transitions promote the experience of intrapersonal identity asymmetry. This triggers identity renegotiation strategies.	The social identity dynamics that emerge due to hierarchical transitions occur intrapersonally, but also hold consequences at the interpersonal and group levels.	Future research can continue to explore the link between power and hierarchy and their interplay with social identity. Further studies can specify conditions that heighten or attenuate intrapersonal identity asymmetry.
2	Current scholarship looks at power gains and losses separately, and how differing impact on those gaining and losing power. Less is known about how power gain and loss affect interactions between those gaining and losing power.	During hierarchical transitions, individuals experiencing power loss are more likely to challenge than embrace their new power-related work identities. During hierarchical transitions, dyads with equal power are more likely to renegotiate power relations by adopting amplifying strategies, whereas the powerless acquiesce to the relation amplified by the powerful in dyads with unequal power.	The direction of power change, as well as formal power, affects how individuals renegotiate power relations following hierarchical transitions.	Future studies can unpack how role ambiguity and role uncertainty influence the processes of identity renegotiation.

	Research problem	Propositions	Contributions	Future research
3	Hierarchies are organizational structures and shared mental models. What are the consequences when hierarchical transitions generate divergences between the two?	The more hierarchical transitions involve power loss and unequal power relations, the more a shared mental model emerges around those who lose power, favoring hierarchies that are less steep (flat) than organizations prescribed. During hierarchical transitions, when team members hold compatible identity renegotiation strategies, a shared mental model of the hierarchies emerges where team members are in a state of intrapersonal and interpersonal congruence. Conversely, when an amplifying party's mental model dominates at the team level, the acquiescing party may be locked into a state of interpersonal	Approaching hierarchical dynamics with an identity lens has enabled us to illustrate that certain team members may be "locked" into dissatisfying positions and relations as new hierarchies stabilize.	This perspective opens new avenues regarding how team members' self-categorization defines their relationships with other team members, and why power struggles and conflicts occur and persist in teams.

Table 5.2 Overview of Chapter 3 research insights – Unveiling continuous truce dynamics

	Research problem	Empirical findings	Contributions	Future research
1	Routines are a means of accomplishing tasks <i>and</i> of governing intraorganizational conflict. However, the connection between these two constitutive aspects of routines is underexplored, and scholars tend to study both aspects separately – holding one dimension constant when exploring the other.	Endogenous change can stem from routine-level dynamics but also deeper, truce-level dynamics. Routine dynamics play out along certain rules. Truce patterning alters these "rules of the game": the rules, rewards and punishment mechanisms of routines.	Embracing the double nature of routines. Failure to distinguish between routine-level and truce-level dynamics can obscure research insights and cause scholars to misattribute reasons for routine stability and change.	Future work should explore what factors influence how quickly rules of the game are changed across different routines. More granular accounts are needed of factors that influence the linkages between truce and routine dynamics, such as when routine participants benefit from have greater zones of discretion.
2	Current scholarship focuses on task performance and goal accomplishment as the chief cause of endogenous change in routines. Less known is how and why personal interests and motivations trigger routine actions.	Intention behind routine actions is not always task-related. By analyzing actors' moves, we found that a same action can simultaneously accomplish a routine task and address process conflict.	From task-based to motivation-based drivers of routine action. Studying moves provides the theoretical groundwork for an expanded view of routine action that can be emotional, moral, political and conflictual.	Further research can study how actors navigate and simultaneously enact multiple organizational structures (hierarchy and friendship network) that drive routine stability and change.

	Research problem	Propositions	Contributions	Future research
3	Current scholarship focuses on changes in routine governance triggered by external stakeholders or approached from a consensus-based, giving individual participants little agency to change truces.	Individuals can engage in jurisdictional patterning to change who is allowed to do what during routine accomplishments. This form of boundary work involves patterning the jurisdictions of the truce. This can take three forms: recoiling, encroaching and transuding jurisdictions.	Establishing the distributed ability to pattern the routine-as-truce. Single routine participants can trigger changes in the routine-as-truce via jurisdictional patterning. These in turn affect routine dynamics.	Besides jurisdictional patterning, what are other mechanisms by which individuals change truces?

7.

Table 5.3 Overview of Chapter 4 research insights – Exploring SMOs via a routine dynamics perspective

	SMO-related Challenges	First insights from research adopting a routine dynamics lens	Avenues for future routine dynamics research
1	Accomplishing organizational agility and innovation. Though SMOs claim to improve organizational agility and innovation, whether and how these outcomes are achieved remains an understudied matter.	Balancing competing pressures to accomplish agility and innovation. Agility requires actors to balance the competing pressure for stability and flexibility. In SMOs, routine actors adopt numerous practices (temporal, special, patterning) to meet this pressure.	Understanding larger SMOs by tracing actions to outcomes. Leveraging digital trace data can enable scholars to look beyond the team and project levels of analysis, so that we might understand how agility is performed at scale.
2	Engaging in continuous coordinating. Traditionally, coordination is accomplished atop hierarchies via episodic interventions. In principle, SMOs rely on ongoing adjustments by members across the organization. How does continuous coordination take place at scale?	Coordinating through routine performances. Continuous coordination in routines takes place via routines that orchestrate others (organizing routines), routine links and roles.	Governance dynamics and growing pains. Coordination involves not only executing rules, but adapting them over time. How do routines and rules co-evolve when the latter are managed by routine participants rather than by their superiors? What are the implication for conflict management in self-governed routines?

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	SMO-related Challenges	First insights from research adopting a routine dynamics lens	Avenues for future routine dynamics research
3	Transforming into a self-managed organization. While the role of top management is at the nexus of many organizational transformations, reliance on leadership at the top is antithetical to SMOs. This observation hints at many underexplored facets of SMO transformations.	Integrating contradictory learning processes in contemporary SMOs. SMO transformations involve replacing old routines, and trial-and-learning processes that play out differently at management and employee levels.	Multiplicities and cluster-level dynamics in SMO transformations. Future research might consider how, in a decentralized organization, being confronted with a multiplicity of understandings can impact transformation outcomes. This might be studied both at the individual- and the cluster-level.
4	Fostering a sense of purpose and satisfaction in individuals. SMOs distribute decision-making authority to individual employees whose work preference increasingly value meaning and work-life balance. Can SMOs provide purpose for individuals all the while contributing to its broader organizational purpose?	Emotional balancing of competing pressures. Though past literature has focused on cognitive components in routine performances, emotional components underlie certain routine accomplishment mechanisms as well.	The role of individuals in self-managed routines. As employees are empowered to design, organize and strategize routines, research can benefit from looking beyond the cognitive dimension of routine actors. Viewing individuals in a more holistic manner (ex: motivations, relationships with others) or foregrounding their roles offers promise to exploring the link between routine accomplishments and individual-level outcomes.

128 Discussion

5.1 CONCLUDING REMARKS

There is still plenty to study. As organizations restructure how work is accomplished, we have only scratched the surface of how new ways of working impact employees and their work. Employees might respond and adapt their behaviors in ways that diverge from mandated change. Simple models are appealing (Burnes, 2019; Lewin, 1947) but empirical studies have shown time and again that organizational change is not straightforward. Some initiatives are absorbed quickly into organizations, whereas others break deep structure and elicit extraordinary responses (Dooley & Van de Ven, 1999; Gersick, 1991). Other times, change initiatives seem successful at the surface level, but a closer look reveals that employees devise workarounds and other strategies that might have the opposite effect than originally intended (Bernstein, 2012; Bertels et al., 2016). Change can also pass by unnoticed by researchers until we adjust our ways of seeing and theorizing (e.g. Brown & Eisenhardt, 1997; Feldman & Pentland, 2003; Orlikowski & Scott; 2008).

Besides organizational routines and power hierarchies, many other structures are changing in modern organizations: competence structures, reward structures, physical structures, etc. The current trend towards customer centricity brings one example to mind. Customer-centric companies engage end-users to design and offer better products and services. One consequence of this move is that employees' performances are now rated by managers but also the clients they serve, and technologies make this feedback increasingly accessible and instantaneous. How do such continuous forms of sanctions and rewards affect employee well-being and task performance? A second example surrounds roles. In traditional organizations, roles are strongly associated with hierarchical ranks and tend to be clearly defined and relatively static. In contrast, role boundaries are more fluid in flat organizations

where employees get to negotiate and redefine their responsibilities at work (Robertson, 2015). While this might make employees more satisfied with their jobs, the continuous change of roles and responsibilities also raises questions regarding how to structure job remuneration and performance assessments.

The truth is, not only should we catch up, we need to accelerate our pace. The gap between management practice and organization studies is widening as our current environment has become increasingly subject to disruptions (Bidoux et al. 2021; Brammer, Branicki & Linnenluecke, 2020). More seasoned scholars are charting how our field can seize such opportunities (Alvesson & Sandberg, 2013; 2014; Bartunek, 2020; Polzer et al., 2009; Schwarz & Stensaker, 2014). I therefore refrain from my own speculations.

For now, suffice it to say there is an exciting road ahead.

SUMMARY

Achieving coordination and cooperation are universal challenges to organizing. In modern organizations, the problems are the same, but solutions have changed. Hierarchies and routines operate differently as means of coordination and control in contemporary forms of organizing than in bureaucracies. This dissertation explores how power hierarchies and organizational routines are changing, arguing for a grounded approach to understand their implications on people and work. By theorizing the effects of flattening and stretching hierarchies from a social identity perspective, the first study offers a multilevel framework for understanding and addressing the intra and interpersonal dynamics that arise from such mandated organizational change. In examining the accomplishment of self-governing routines, the second study contributes to our understanding of the ongoing nature of conflict and control in organizational routines. From reviewing empirical findings and theoretical intuitions on the unique dynamics at play in self-managed organizations, the third study explains concrete ways scholars can leverage selfmanaged organizations as a novel empirical setting to advance routine dynamics theorizing. As a result, this dissertation provides three accounts of contemporary work for individuals and organizations seeking to understand why new forms of organizing matter, and contributes to bridging the extant divide between the practice and study of organizing.

SAMENVATTING

Organisaties hebben altijd coördinatie en samenwerking als uitdagingen gekend. Moderne organisaties zijn daarin niet anders, maar de oplossingen zijn wel veranderd. In hedendaagse organisatievormen fungeren hiërarchieën en routines anders als coördinatie- en controlemiddelen dan in bureaucratisch werkende organisaties. In dit proefschrift wordt onderzocht hoe machtshiërarchieën en organisatorische routines veranderen en wordt gepleit voor een gefundeerde benadering om de implicaties hiervan op mens en werk te begrijpen. In de eerste studie wordt vanuit een sociale identiteitsperspectief getheoretiseerd over de effecten van het afvlakken en verbreden van hiërarchieën. Dit leidt tot een meerlagig kader voor het begrijpen en beïnvloeden van de intra- en interpersoonlijke dynamische processen die voortkomen uit dergelijke opgelegde organisatorische veranderingen. De tweede studie onderzoekt hoe zelfregulerende routines tot stand komen en draagt zo bij tot ons begrip van de wijze waarop conflict en controle altijd een rol spelen in organisatorische routines. Op basis van een overzicht van empirische bevindingen en theoretische intuïties over de unieke dynamiek in zelfsturende organisaties, wordt in de derde studie concreet uiteengezet hoe wetenschappers zelfsturende organisaties kunnen gebruiken als een nieuwe empirische setting voor verdere theorievorming over routinedynamiek. Alles bij elkaar genomen, biedt dit proefschrift inzicht in drie verschillende soorten recent werk die relevant zijn voor mensen en organisaties die willen begrijpen waarom nieuwe organisatievormen belangrijk zijn. Daarmee draagt het bij aan de overbrugging van de nog bestaande kloof tussen de praktijk en de studie van organiseren.

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Jun received her master's degree in Agricultural Economics at McGill University, and her M.B.A. from Université Laval, Canada. After working in environmental policy and applied research, Jun pursued doctoral studies at the Rotterdam School of Management. In 2016, she became a PhD candidate in Innovation Management under the supervision of Prof. Daan Stam and Prof. Joep Cornelissen. In 2019, she was a visiting scholar at INSEAD, France. Jun's research is motivated by her interest in investigating the novel ways by which people organize, innovate and collaborate — in organizations both traditional (farms, government organizations) and new (digital businesses, startup accelerators). Currently Jun is an assistant professor of Strategy and Entrepreneurship at NEOMA Business School, France.

AUTHOR'S PORTFOLIO

RESEARCH

Kremser, K. and J. Xiao (forthcoming). Self-managed forms of organizing and routine dynamics. In **Cambridge Handbook of Routine Dynamics**. Eds.: Feldman, M.S., Pentland, B.T., D'Adderio, L., Dittrich, K., Rerup, C. & D. Seidl.

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Xiao, J. and M. Tarakci. Unpacking Dynamic Hierarchies: A Multilevel Model of Identity Processes During Power Hierarchy Transitions in Teams. *Academy of Management Proceedings*, Vol. 2017, no. 1

Conference presentations

Bavato, D. and J. Xiao. It's the Journey, Not the Destination: Exploring Investors' Perceptions of Coachability in Early-Stage Entrepreneurship. *AMD Shark Tank*, 2019 AOM Annual Meeting. Boston, 2019.

158 Portfolio

Xiao, J. and M. Tarakci. Unpacking Dynamic Hierarchies: A Multilevel Model of Identity Processes During Power Hierarchy Transitions in Teams. *14th Annual INGRoup Conference*, Lisbon, Portugal, 2019.

Xiao, J. and D. Bavato. Overbrokering and Underbrokering Early-Stage Investment Opportunities: Accelerator Teams as Professional Brokers. *AOM Doctoral Consortium*, ODC & OMT divisions, Boston, 2019

Xiao, J. Bending the Truce: A Qualitative Study of Individual Responses to Process Conflict in Teams. *Deutschen Gesellschaft für Psychologie (DGPs)*, Frankfurt, Germany, 2018.

Xiao, J. Bending the Truce: A Qualitative Study of Individual Responses to Process Conflict in Teams. *European Group on Organization Studies (EGOS)*, Tallinn, Estonia, 2018.

Xiao, J. Bending the Truce: A Qualitative Study of Individual Responses to Process Conflict in Teams. 10th international process symposium (PROS), Halkidiki, Greece, 2018.

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