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Over the past 20 years, routine dynamics research has matured and provided a solid foundation for understanding organizational routines as 'patterns *of* action' that generate a broad range of outcomes, including stability and change (Feldman et al., 2016). Going forward, routine dynamics research has been helping us to see how seemingly mundane actions generate a variety of meso- and macro-organizational phenomena, including capabilities (Salvato, 2009), innovation (Sele & Grand, 2016; Deken et al., 2016), coordination (Jarzabowski et al., 2012), interorganizational collaboration (Edmondson & Zuzul, 2016), routine design (Pentland & Feldman, 2008) and organizational schema (Rerup & Feldman, 2011). These studies have created a rigorous, close-knit coupling between empirical data and theoretical explanations that is built around a relational perspective on agency (Emirbayer & Mische, 1998). In spirit of this growing body of work, we argue that the routine dynamics lens can provide promising foundations for addressing recent calls from practice-based scholars to connect micro-level actions to meso and macro-level processes and outcomes (see, for example, Kouamé & Langley, 2017; Whittington, 2017; Salvato & Rerup, 2011).

ROUTINE DYNAMICS: RELATING MICRO-ACTIONS AND ORGANIZATIONAL OUTCOMES

Recent advances in routine dynamics, we believe, will be particularly useful for analyzing such processes across levels and time—space scales. First, work on interdependencies between routines (i.e., clusters, ecologies, interrelated routines, e.g., Deken et al., 2016; Kremser & Schreyögg, 2016; Sele & Grand, 2016; Kremser et al., 2019) will be useful to trace how outcomes take form across micro-actions over time. Second, recent work has shown the potential of deploying digital trace data to study action patterns that span across place and time (Pentland et al., 2019). Because work is increasingly mediated through digital technologies, such as algorithms and robots, the wealth of digital trace data provides opportunities to empirically study how micro-actions (on the scale of minutes or seconds) relate into meso- or macro-level outcomes (on the scale of months or years).

We also see increasing interest in applying routine dynamics to the practical problems faced by practitioners. Routines are often explicitly managed and designed to generate espoused organizational outcomes (e.g., Schmidt et al., 2019; Glaser, 2017). However, we know relatively little about how the generative and endogenous routine dynamics interact with such management and design processes (Beverungen, 2014; Wegener et al., 2019) and digital technologies (e.g., Berente et al., 2016; D'Adderio, 2001; Leonardi, 2011). Managers are increasingly pressured to overcome structural inertia and institutional persistence. Between organizational path dependencies (Sydow et al., 2009) on the one hand and so-called grand challenges for organizations and societies on the other, understanding processes of intentional routine change and (re)design with an eye on macro effects is an important concern that warrants further research.

This sub-theme aims to unite practice-based scholars, including those studying strategy, collaboration, innovation, technology, and institutions to debate how we can connect micro-actions to macro or

aggregate outcomes, while striving for both rigor and relevance in our research. We thus invite scholars to 'look further'—in the spirit of the 'inclusivity' 2021 EGOS theme—and reach across debates in adjacent fields of practice-based research in organization studies. We welcome submissions on the following topics, as well as topics that relate to routine dynamics more generally:

- Micro-actions and macro/meso outcomes. How do routine performances relate to meso-level outcomes? How do micro-actions accumulate into larger outcomes (e.g., through structuration processes, Sydow et al., 2012)? How and when do micro-action instantiate outcomes? What processes explain patterns of stability in outcomes (e.g., such as replication and stability of outcomes) versus realizing novel outcomes (e.g., innovation)?
- Actor's orientations and intentionality. Since routines are often performed with certain espoused/envisioned outcomes in mind, how does such teleology shape routine performances over time, e.g., when redesigning routines? How do processes of emerging intentionality (Dittrich & Seidl, 2018) interact with actors' planned/teleological orientations? What role do intermediate outcomes play in the process of generating macro-level (organization/institutional, see Smets et al., 2017) outcomes?
- Stability and path dependence. How do patterns in routine dynamics over time generate not only endogenous stabilities (Pentland et al., 2012) but also path dependencies? How do interdependencies between routines in some instances trigger path dependencies of collectivities of routines or even organizations or interorganizational arrangements (Sydow et al., 2009), while in others they enable taking new actions to realize novel outcomes (Deken et al., 2016)?
- **Deploying digital trace data.** What affordances do digital trace data provide routine dynamics scholars to zoom out and study larger scale activities within and across organizations and over time? How can qualitative and quantitative approaches be effectively combined in studying routine dynamics? How can simulation models enable addressing such questions? (see also Kouamé & Langley, 2017).
- Routine management, design, and digital technologies. How do design performances (Glaser, 2017) and routine performances interact? What role do experiments play in (re)designing routines (e.g., Bucher & Langley 2016)? How are routines in organizations shaped and/or transformed by digital technologies, such as algorithms, robots, and AI, and vice versa? What characterizes algorithmic routines and how do these affect contemporary organizing?

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