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ACTOR-NETWORK THEORY AND ROUTINE DYNAMICS

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In this chapter, I aim to untangle the intimate relationship between routine dynamics research and the thinking underpinning actor-network theory (ANT). In summarizing ANT one can only fail. This is even more true if we consider reality to exist without us and out there. However, if we acknowledge that reality is multiple and fluid due to its constant enactment through practices (Mol 2002), and we look at what we see from the inside (Latour 1999b), the task at hand gets at least slightly easier.

I start out by providing a brief historical account of ANT, introducing some of its influential authors, its key terminology and their theoretical and empirical work. This first section will be followed by an overview of how routine dynamics researchers have appropriated ANT—ironically, often as an undercover actor ‘in action’ that remains invisible at first sight. Martha Feldman (2000) was the first in Routine Dynamics to make references to ANT when she called for an emic instead of an etic view on routines that would shift the attention away from external factors and toward internal dynamics (i.e. performative and ostensive aspects). Following this first mobilization, scholars have borrowed different ANT concepts to understand particular aspects of routines dynamics. I introduce the most prominent ones—namely translation, actants, inscriptions, and multiplicity—summarizing their original meaning in ANT and how they have advanced our understanding of organizational routines as generative and emergent systems. I will conclude by reflecting on how ANT can continue to be of use for advancing routine dynamics and related research by discussing its strengths and weaknesses as a theoretical and methodological perspective.

ANT – A Brief History and Overview

ANT was originally developed to understand the emergence and dominance of technological and scientific ideas. Born in science and technology studies (STS), the approach grew out of the anthropological project ‘Laboratory Life: the Construction of Scientific Facts’ by Bruno Latour and Steve Woolgar (1979) wherein they described science as happening ‘in-the-making’ as well as of Michel Callon’s (1980) study of the unfolding of a public-private initiative to develop an electric vehicle in France. What unites these accounts is that what is being studied takes shape in and through actions (Latour 1987). In 1981, Latour and Callon used their empirical insights and engaged in the task of unmasking of what they call ‘macro-actors’. They did so by questioning the ‘givenness’ of such actors that had up until then dominated and, in their eyes, misguided social studies. Using Hobbes’ Leviathan they argued that macro-actors are made up of many and that their form, which is neither defined ‘a priori’
nor in a ‘definitive and lasting way’, is the consequence of relations and performances that brings them into being. In their view, social scientists should engage in tracing how actors become and dissolve and, hence, grow or shrink in size and scope through a process of translation instead of presuming actors of different extents based on pre-defined features.

Following these first insights, Callon and Latour each published an influential chapter in the book ‘Power, Action and Belief’ edited by John Law (1986) in which they elaborated on some of the main features of ANT and particularly on the notion of translation. In his chapter, Callon (1986) reports on a failed research project by which French scientists aimed at bringing back to France a method for breeding scallops they had learned about in Japan. He describes the effort of translation nurtured by the different actors, which he defines as the “mechanism by which the social and natural worlds progressively take form” (Callon 1986: 224), and how the scientists tried to engage the different actors (e.g. fishermen, scallops) by establishing themselves as an obligatory passage point. While the translation failed to succeed in the long-term, Callon used this particular example to introduce a sociology of translation and its four characteristic moments: (1) the moment of problematization wherein translators attempt to define an issue by pulling together an initial set of actors, (2) the moment of interessement wherein translators determine and fix the interests of key actors, so that they become willing to partake in an emerging project, (3) the moment of enrolment wherein representatives of the main groups are assigned roles and are pulled together to build an alliance, and (4) the moment of mobilization wherein the actor network is extended beyond the initial group. For Callon (1986: 196) this “analytical framework [is] particularly well adapted to the study of the role played by science and technology in structuring power relations”.

Focusing on these relations, Latour (1986) introduces in his chapter what he calls a sociology of associations. He argues that we need to distinguish between things—in his case power—that are a mere possibility (i.e. in potentia) and those that are eventually established (i.e. in situ). This distinction “allow[s] social scientists to understand power as a consequence and not as a cause of collective action” (269). Similar to Callon, he advocates for shifting from a model of diffusion to a model of translation. While diffusion builds on the idea that a ‘token’ (e.g. an order, claim, artifact) holds a particular force that triggers it to move on, translation assumes that for something to spread it needs people and their situated actions. In this view, power lies in the associations that are formed when actors interrelate. Taking the argument one step further, Latour calls for a second shift, namely the one from an ostensive definition of society to a performative one. For him the ostensive definition assumes properties and sees
stability as the norm while the performative definition assumes everything is made in practice and sees stability as the outlier (Latour 2005: 34). Taking the concept of society as an example, he states that “society is not what holds us together, it is what is held together. Social scientists have mistaken the effect for the cause, the passive for the active, what is glued for the glue” (Latour 1986: 276). For the social scientist this means to stop assuming the existence of social aggregates and to trace the processes that nurture the *assembling* and *disassembling* of associations or in other words connections.

In parallel to these more theoretical accounts, empirical studies of particular innovation projects have strongly influenced ANT-driven research. For example, Latour (1996a) investigated an experimental personal rapid transit system developed in France. Written as a detective story wherein two researchers try to answer the question of “who killed Aramis?”, Latour traced the different actors of project Aramis unraveling its up and downs and its ultimate failure. He literally hunted down what went wrong and why the desired convergence did not happen after all. By dropping a priori assumptions and explanations and focusing on the unfolding of the project he was able to open up the “mysterious script” that lies in the middle between the start of a project and its ultimate success or failure (Akrich et al. 2002: 188). To find out and make sense of the failed Aramis project, you have to read the book yourself. In another project, Latour (1990) historically traced the mutual emergence of the Kodak camera and the mass market for amateur photographers. Of course, we know today that the ‘macro-actor’ Kodak was only temporarily stable and disappeared in the wave of digital photography (Czarniawska 2017).

In a similar manner, John Law studied a British military aircraft project (Law 2002; Law and Callon 1988) and the 17th century Portuguese expansion (Law 1987). He introduced the term *heterogenous engineering* to describe a process “in which bits and pieces from the social, the technical, the conceptual and the textual are fitted together” (Law 1992: 381). These bits and pieces should be considered and approached as *rhizomatic networks* (Law 2002) whereby the *rhizome* stands in contrast to the tree metaphor that is a dominant model in Western thinking; while the latter favors a hierarchical interpretation (i.e. stemming from a single trunk), the former favors *multiple* explanations that emerge from different sources (Deleuze and Guattari 1987). In that sense, Law’s work is closely intertwined with the work of Annemarie Mol (2002) whose ethnography ‘The Body Multiple’ is a detailed account of atherosclerosis, a common disease she studied at a Dutch university hospital. Through a continuous juxtaposing of the empirical material with theory-driven reflections she showed that the disease is multiple
and only becomes a discrete entity when it is enacted in a singular way over time. Being multiple does, however, not imply that interpretation of the disease is fragmented; it is much more a way of showing how the disease is shaped through actions by many different actors (e.g. patients, doctors, procedures) instead of a unified set of actions.

When studying becoming and taking shape in action, Law refers to the theory of *performativity* which has its origins among a group of Oxford philosophers including Austin (1962) who introduced a new approach to language focused on performative utterances or ‘How to do Things with Words’. Whereas its initial focus was on making differences through discursive practices, performativity has since been “subjected to multiple translations by social scientists and philosophers such as Derrida, Butler, Callon, Barad or Lyotard” (Gond and Cabantous 2015: 508). Within ANT, the concept has been very influential in the work on the performativity of markets and their role in constituting economic realities (Callon 1998b; MacKenzie et al. 2007). Similar to Barad’s (2003) concept of post-humanist performativity, Callon’s (2007) work on socio-technical ‘agencement’ (Deleuze and Guattari 1987) or ‘assemblages’ (Suchman 2007) integrates materiality and refutes the idea that objects and humans can be separated in any meaningful way. His insights on ‘performation’ processes highlight the performativity of assemblages and, even more so, how assemblages are rendered performative in the first place (Yeow and Faraj 2014).

While the above studies (and many more) look at different processes, they all share some common features. First and foremost, they focus on how actors wax and wane in and through associations. Thereby, they reject distinctions made between human and non-human actors, between nature and culture, between mind and body, or between the micro and the macro. Advocating for a *symmetric approach*, these accounts adopt a position that is best paraphrased as anti-dualism. From an ANT perspective, the assumption that non-humans are passive is flawed as every actor plays a role in social dynamics, not a priori but in its relationality with other actors (Emirbayer 1997). Accordingly, an “actor in ANT is a semiotic definition – an actant – that is something that acts or to which activity is granted by another […] an actant can literally be anything provided it is granted to be the source of action” (Latour 1996b: 373).

In rejecting a priori assumptions, proponents of ANT seek to open up black boxes and show, for example, what led to successes and failures. According to Latour (1996a: 78) this is necessary because “if we say that a successful project existed from the beginning because it was well conceived and that a failed project went aground because it was badly conceived, we
are saying nothing. We are only repeating the words ‘success’ and ‘failure’”. A second important feature of ANT is that things take and lose form; nothing—be it a small or large actor—is ever fully accomplished but remains fluid. As described by de Laet and Mol (2000) in their account of the Zimbabwe Bush Pump, human as well as non-human actors hold a certain degree of fluidity in relation to their boundaries, which are not only vague but also moving as they are adapted and varied. The pump may provide water but also health, it may build communities but also an entire nation. However, what is needed for success and what success actually means is fluid in itself. The question we therefore have to ask is ‘what is happening?’ instead of ‘who is doing what?’.

Over the years, ANT has developed and become even more multiple than it used to be in its initial phase. It has spread into many different disciplines ranging from anthropology and philosophy to geography and management and organizations studies. Despite this spread, it has been exposed to constant questioning from within and from outside (see e.g. Latour 1999a; McLean and Hassard 2004; Star 1991; Whittle and Spicer 2008). Without exaggeration, one can claim that everything in ‘ANT’ has been disassembled: the actor, the network, the theory, and even the hyphen (Latour 1996b). While some scholars see this disassembling process as indication for a failure of ANT, I suggest we see it—in the very spirit of ANT—as an opportunity to see multiples and provide insightful explanations for complex phenomena. Indeed, looking at ANT through an ANT lens, we can discern the emergence of a macro-actor that is multiple and is shaped in and through its associations (Callon and Latour 1981).

**ANT in Routine Dynamics – an Undercover Actant in Action**

In the previous section, I briefly outlined the history of ANT highlighting some of its central authors and their work. This historical tracing allowed me to highlight the main concepts of ANT that are of importance in unraveling how routine dynamics scholars have appropriated this perspective and how its use has shaped routine dynamics research.

**First Appearances**

ANT first appeared in Feldman’s (2000: 611) foundational article in which she finds “that organizational routines have a great potential for change even though they are often perceived, even defined, as unchanging”. Acknowledging these possibilities and shifting the attention to what is actually happening is closely related to Latour’s (1986) distinction between things ‘in potentia’ and things ‘in situ’. She hints at a rejection of the idea that routines are pre-
defined; an assumption that drove early work on routines (Cyert and March 1963; Nelson and Winter 1982). Feldman specified that while the evolutionary view on routines was helpful in identifying routines, it was much less so in studying their participation in organizing. Feldman (2000: 613) states that in order to conceive of organizing as an ongoing accomplishment, “we need a notion of routines that match[es]”.

In the discussion part of the paper, Feldman explicitly connects her conceptualization of performative routines to Latour’s work arguing for the importance of shifting to an emic approach—situated descriptions produced by researchers who immersed themselves in the specific culture. Moving to a performative model thus means that routines are ‘flows’. Accordingly we can no longer separate the routines from those who enact them as routines are networks of actants (Feldman and Pentland 2005). For Feldman (2000), the concepts of ostensive and performative are as much a theoretical tool as they are a methodological one. By following actors and actions one has direct access to and an emic account of performances (Latour 1987). It is for this reason that Routine Dynamics has relied on and learned so much from observational data (refer to chapter by Dittrich).

The above argument is further developed in Feldman and Pentland’s joint 2003 article wherein they propose a reconceptualization of organizational routines that has moved the field from an evolutionary approach that assumes shifts from one state to the next to a dynamic approach that captures relational and iterative processes of emergence (Feldman et al. 2016; Parmigiani and Howard-Grenville 2011); a move that is equally important in ANT (Callon and Latour 1981). Feldman and Pentland (2003: 99) criticize how “the logic of evolutionary theory depends on the existence of some genealogical mechanism”; a reference that can be interpreted as an implicit statement about the need to move from the metaphor of the tree toward the metaphor of the rhizome. Instead of seeing routines and action patterns as vertical connections or causal relations with a clearly identifiable source, a rhizomatic approach does not assume beginnings or ends; rather, it is interested in the continuous establishment of connections and its generative power (Deleuze and Guattari 1987). As already stated by Pentland and Rueter (1994: 491), “an organizational routine is not a single pattern but, rather, a set of possible patterns”.

In line with this larger shift and advocating for a stronger focus on agency (i.e. actors and their actions or performances in practice), Feldman and Pentland (2003) claim that by seeing and focusing on the relationality of ostensive and performative aspects, we can access their endogenous dynamics and we can understand the role routines play for stability and
change. At this point it is important to mention that while their argument aligns with Latour’s call to focus on the performative over the ostensive in order to reveal explanations for what we see and observe, Feldman and Pentland (2003) present the two parts on equal footing. They do so by replacing the notion of ‘definition’ by the notion of ‘aspects’. This move turns out to be crucial as it points to the “connectivity of performance and pattern in constituting what we see as a routine” and thereby refutes the idea that the pattern is a stable entity that should be given priority over performance (Feldman 2016: 27). An explanation for this can be found in the strong embedding of the reconceptualization of routines in a practice-theoretical perspective (refer to chapter by Feldman); an approach that had already enriched adjunct fields such as the study of technologies (Orlikowski 1992), learning and knowing (Gherardi 2000), or strategy-as-practice research (Whittington 1996).

What Feldman and Pentland (2005) did was to move organizational routines center stage by portraying them as ‘macro-actors’ that needed explanation; or, in ANT jargon, actants that can no longer be taken for granted or seen as “crucially important but relatively undifferentiated arrows connecting organizational inputs with organizational outputs within the economy of the firm” in organizational processes (Feldman 2016: 25). In doing so, Routine Dynamics builds on one of the core arguments of ANT: stability is not the norm and we should not confound the routine as it has been designed with its performance (Pentland and Feldman 2008). As Feldman stated in several occasions: “While I searched for stability, I encountered change” – a puzzle that has been an inspiring force for many scholars over the past twenty years.

Opening up the black-box of routines has created a playing field that has advanced how we think about the role of routines for change and stability (Aroles and McLean 2016; Bucher and Langley 2016; Turner and Rindova 2012) and how we conceive of routine interdependencies (Kremser and Schreyögg 2016; Spee et al. 2016), their role for innovation and novelty (Deken et al. 2016; Sele and Grand 2016), or processes of emergence (Bertels et al. 2016; Cohendet and Simon 2016) to name just a few. Beyond the terms ostensive and performative and the idea that routines are processual, generative and emergent in a similar way as the laboratory routines described by Latour and Woolgar (1979), several ANT-concepts have been explicitly or implicitly mobilized by routine dynamics scholars. For the purpose of this chapter, I chose to discuss the appropriation of four concepts: (1) translation; (2) actants; (3) inscriptions; and (4) multiplicity. One has to bear in mind, however, that these concepts are highly interconnected and separating them may seem artificial.
Main Concepts

Translation – A Hidden Gem. Despite the fact that the concept of translation is at the heart of ANT, its use in routine dynamics research is often implicit. Translation can be understood as “displacement, drift, invention, mediation, the creation of a link that didn’t exist before, [and that] …modifies two [or more] elements or agents” (Latour 1994: 31). Accordingly, translation is the process through which connecting happens and connections are achieved (Callon 1986). It has “geometric and a semiotic meanings” as it entails “both the movement of an entity in space and time, as well as its translation from one context to another” (Gherardi and Nicolini 2005: 287).

In Routine Dynamics, the concept of translation was introduced through D'Adderio’s (2011, 2014) work on the wider phenomenon of routine replication and the dilemma that comes with the need of transferring routines within and across organizations. In these studies, she shows how organizational members face the issue of needing to replicate and innovate when enacting routines. Focusing on how people balance these pressures, she problematizes the notion of transfer and makes the important observation that translation needs to happen between formal rules, not to be mistaken for the routines, and the actual routines. In a recent study of the Grands Ballets Canadiens de Montréal, Blanche and Cohendet (2019) followed suit by showing the needs of translation in creatively reproducing an original choreography in a new context. Their case illustrates the importance of preserving the authentic character of the project’s intent and shows how dialogue and a common artistic understanding supported the remounting of a ballet. Connected to the need of being innovative, Sele and Grand (2016) conceptualized routine interactions from a translational perspective, showing how “translation is potentially achieved through the aggregation of generative connections” (723) as actants travel in ecologies of routines. In her recent call for renaming performative and ostensive aspects as ‘performing’ and ‘patterning’, Feldman (2016) linked the process of patterning with the concept of translation, which is constituted by what Czarniawska (2014: 89) calls “a collective act of creation”. The concept of translation builds on the idea that actions gain or lose power in their relations as connections are continuously (re)-created. Accordingly, it was influential in conceptualizing routines as dynamic and generative and to unravel the role routines play in organizational becoming (Feldman et al. 2016).

Actants – A Driving Force. Closely related to the notion of translation, ANT is strongly built on the idea that human and non-human actors—actants—are not only equally important but are also characterized by radical indeterminacy (Callon and Law 1982) and fluidity (De
Laet and Mol 2000). Actants take form through performance and in relation with other actants, which means that characteristics have to be seen as effects that need to be understood (Law and Hassard 1999).

Feldman and Pentland (2005) were the first to mention actants when they described routines as networks of actants. Later, D'Adderio (2008) paved the way for explicitly acknowledging the importance of materiality in routine dynamics research (refer to chapter by D'Adderio). As she pointedly stated, the “conscious effort to focus on the role of agency in shaping routines” (D'Adderio 2011: 198) meant that artifacts and questions of materiality were for some time relegated to the back seat of routine dynamics research. Accordingly, artifacts were mostly viewed as “fully deterministic” or “largely inconsequential” (D'Adderio 2011: 197). Mobilizing performativity theory, she shows how a symmetrical approach toward actors not only matches the dynamic and generative conceptualization of routines but makes them an inherent part of routines. Since, several scholars studying routine dynamics have taken this approach, focusing for example on the role artifacts play for the interdependence and connectivity of routines (Jarzabkowski et al. 2016; Spee et al. 2016), the development of routines (Cacciatori 2012) or the transformation of routines (Glaser 2017; Iannacci 2014). Sele and Grand (2016) moved back to the notion of actants and showed how their situated enactment makes them act as either intermediaries or mediators. Whereas intermediaries maintain connections, mediators modify connections (Latour 2005). In connecting one routine with other routines, actants can have a more or less generative effect that ultimately influences the potential for novelty and innovation to emerge (refer to chapter by Deken and Sele). Importantly, the impact of each actant is not pre-determined but emerges only as the network of routines is being performed.

Inscriptions – A Way of Patterning. A closely related ANT-term is the notion of inscriptions which goes back to Latour and Woolgar’s (1979) description of how laboratory work resulted in the inscribing of results into graphs, illustrations or maps which travel on, for example, become scientific propositions in journal articles or the basis of market applications. In case of a temporary stabilization or a certain endurance of scientific knowledge, we encounter what Latour has called “immutable mobiles” (Latour 1987); something movable and malleable but at the same time holding its shape. According to Callon (1991: 143) an inscription can be defined as “the result of the translation of one’s interest [and intentions] into material form”, which Akrich et al. (2002) refer to as embodied patterns.

In Routine Dynamics, we see a first linkage to the concept of inscriptions in the mutual constitutions of performative and ostensive aspects (Feldman and Pentland 2003) wherein the
actual enactment of routines (i.e. performing) leads to their continuous and emergent inscribing into patterns (i.e. patterning). More explicitly and discussing the role artifacts play in guiding the performance of routines, D'Adderio (2008) explains how Standard Operating Procedures get inscribed into software and how that process creates linkages between rules and the actual performance of routines. More in particular, inscription happens when “actors delegate knowledge and goals (i.e. innovation, replication) to artifacts during their design and usage stages” (D'Adderio 2014: 1343). This underlines the idea that non-human actors are not neutral and that intentions or objectives are distributed due to what is inscribed into them and how that is being enacted. Further, inscriptions are important in how transfer and replication happen in practice as they are influential for the degree of variation in the actual performance of routines (D'Adderio 2014). This aspect is further discussed by Aroles and McLean (2016) in their study of the increasing standardization of routines within a newspaper-printing factory. Relying on Deleuze’s (1994) concept of repetition through difference and Latour’s (2004) distinction between matters of fact and matters of concern, they show how scripts are more or less influential in the performance of the routine as well as in how it is being discussed and negotiated during meetings as well as evaluated in reports. For example, the script of reducing ink in the production process led to a continuous tension between conforming and deviating from what had been decided.

**Multiplicity – Seeing Heterogeneity in the Black Box.** It is this argument on variation that points to the idea of multiplicity prominently referred to in ANT. As outlined by Latour (2005: 116), “multiplicity is a property of things, not of humans interpreting things”. Accordingly, things and networks of things are ontologically multiple and require us to let go of the idea that we can take things for granted and just apply different viewpoints on the same thing (Mol 2002). Empirically, one needs to reveal the ‘multiple realities’ that shapes what is happening (Law and Singleton 2014).

This idea is strongly present in the notion that routines “entail multiple actions (performative aspect), multiple patterns (ostensive aspect), and multiple human and nonhuman actants” (Feldman et al. 2016: 507). Neither ostensive nor performative aspects are singular (Feldman et al. 2016). Going back to Mol (2002), routines and, hence, organizations are multiple and moved by multiple actants. This does not mean that routines are not ‘routine’ anymore, but that they can be more or less ‘routine’. This unexpectedness in the relations holds the potential for stability but simultaneously allows for change and novelty (Deken et al. 2016; Sele and Grand 2016). For example, Turner and Rindova (2012) show in their study of waste
collection routines that multiple ostensive aspects (or variations) are necessary for the routines to work in practice. D’Adderio (2014) as well as Salvato and Rerup (2018) focus on the constant need of balancing in pursuing multiple and in many cases conflicting goals. As argued by Pentland and Feldman (2005: 797), “multiple and divergent understandings [are] probably more the norm than the exception”. Moving the focus from studying single routines and their dynamics to networks (refer to chapter by Rosa, Kremser, Bugacov) and their dynamics “multiplies the multiplicities” (Feldman et al. 2016: 507). Studying routine replication in complex settings, D’Adderio and Pollock (2020) recently raised the important question “how routines and their underlying patterns might be recreated (precisely) within a background of difference and multiplicity”. Building on insights from Mol (2002) and Law (2004) they identify repairing as well as distributing practices to show how the necessary similarity and singularity is produced over time and across organizational locations.

**What Would We Have Missed?**

Having discussed how routine dynamics scholars have more or less explicitly mobilized conceptual and methodological tools provided by ANT, we still need to address the question of what it adds to the study of routines. First, ANT has provided routine dynamic scholars with a unique vocabulary and a methodological approach that enabled important shifts: (1) from an evolutionary to a dynamic view; (2) from an etic to an emic approach; and (3) from singularity to heterogeneity and multiplicity. In the words of Mol (2010: 265): “[ANT] has assembled a rich array of explorative and experimental ways of attuning to the world”. In that, ANT is as much method as theory or, as Gherardi and Nicolini (2005) called it, an “open-ended sociology”.

Second, embracing the underlying assumption of ANT that there is no pre-defined social world but just “patterned networks of heterogeneous materials” (Law 1992: 381) offers crucial insights for theorizing stability and change (Steen et al. 2006)—a main focus in routine dynamics research since its beginnings (Feldman and Pentland 2003). In particular, many advances were made by focusing on actors and actions and engage in what Abbott (2004: 120) calls “argument heuristics”, meaning that we learn and see new aspects of phenomena by problematizing the obvious and making reversals. As stated by Feldman and Pentland (2005: 107), ANT has been influential in turning “the traditional relationship between routines and stability on its head” and, hence, seeing variation as the norm and stability as what needs to be explained. Another examples of such a reversal is how routine dynamic scholars have re-thought the relationship between routines and innovation (Salvato 2009; Sele and Grand 2016).
Third, ANT builds on the idea that actions happen in connections and associations, not in an isolated manner (Latour 1986). While this relational ontology is not unique to ANT, combining it with a radically flat ontology is. ANT makes obsolete the micro-macro distinction as well as the inside-outside divide (Seidl and Whittington 2014) and has proven to be a unique approach to study ongoing achievements and explain the ‘in-the-making’ of phenomena (Callon 1980; Latour and Woolgar 1979). In Routine Dynamics, ANT enabled scholars to foreground generativity and the potential for transformation by focusing on the power of connecting within routines (Feldman and Pentland 2003), within inter-organizational networks of routines (Sele and Grand 2016) and within intra-organizational networks of routines (Mitzscherling 2019).

The Future of ANT in Routine Dynamics Research

All of this said, what is it that ANT has to offer for the study of routines and organizational phenomena in the future? Routine dynamics scholars focus on untangling routines and their role in organizing by studying them from within. They have taken to heart what Latour (1999b: 13) once proclaimed: “How is it possible to imagine an outside world? Has anyone seen such a bizarre oddity? No problem. We will make the world into a spectacle seen from inside.” And this is how ANT can and should be a continuous theoretical as well as methodological force in this field of research; not alone but in combination with other theoretical lenses. Each perspective or theory enables us to see certain aspects while leaving others out. ANT enables us to trace networks and to see movement. And while ANT never claimed to be a theory with a big T, ANT scholars have never been shy of speaking out to show the perspective’s power in unravelling complex phenomena including grand challenges.

For example, Latour recently and prominently entered the climate change debate and reminded us about the importance of unscrewing macro-actors ‘in action’. As many of us are having difficulties to understand and deal with what is happening around us, why actors act the way they do, Latour (2018) engaged in dissecting the situation in his new book ‘Down to Earth: Politics in the New Climate Regime’. He identifies the different actors and presents their ‘worlds’ and how they do or do not relate. Thereby, he is able to see that neither focusing on the local nor on the global discourse allows us to connect with today’s realities. One of the main problems that he identifies is that planet Earth is becoming an increasingly political actant; it shows muscles and we do not know how to deal with its dynamic and unruly doings. Accordingly, we as social scientists have to become part of its unraveling.
As another example, we can think of the global spreading of coronavirus which has suddenly and dramatically changed the world we live in and with it our daily routines and how we organize. Even mundane, taken for granted activities like going to work, shopping, organizing meetings, teaching classes, or serving customers have changed in response to the pandemic. The pandemic disrupted, altered, and enforced connections on an individual, group, organizational and societal level. In order to get a better understanding on the role organizations and their routines play in handling such a crisis, we need to focus on how routines are altered by the pandemic as well as how routines influence how we respond and are able (or unable) to mitigate in this case the spreading of the virus and its socio-economic impact. As shown above, ANT is a very suitable approach to reveal complexities and contingencies as they happen and, hence, helps researchers to capture phenomena such as a pandemic, climate change, financial markets, or algorithmic work (refer to chapter by Glaser et al.) that are becoming “increasingly fluid, intricate and accelerated” (Baron and Gomez 2016: 130).

For Routine Dynamics, two concepts seem particularly interesting for future studies. The first is what Mol and Law (1994) call fluid spaces. Unlike network spaces wherein proximity and distance are dependent on the relations between its elements, fluid spaces are spatial relations that are constantly changing with coming and going boundaries. The idea of fluidity is particularly useful to study organizational phenomena that are driven by informal ties instead of formal structures and those that are moving and changing at a fast pace (Latour 1996b). The notion of fluid spaces also addresses the fallacy of the network metaphor which directs us to what is inside and thereby reduces the researcher’s ability to see “otherness” in a meaningful way (Hetherington and Law 2000). The second concept that bears opportunities is what Callon (1998a) calls ‘hot’ and ‘cold’ situations. In his discussion of economic externalities, he shows that—no matter how hard we try to frame markets or other actors—there will always be overflow that cannot be contained. Establishing that such overflows are the norm, he distinguishes between cold situations wherein we are able to identify actors, interests, etc. and hot situations wherein we are confronted with uncertainty, controversies and many unknowns.

There are several reasons why fluid spaces and hot situations might be of help to Routine Dynamics. As we have moved from studying single routines to focusing on multiple routines and as organizations have become more permeable and fluid, focusing on spatial and temporal movements (Lefebvre 2004) will allow us to see what orders without order and what role routines play in such ordering. Further, we see an increasing interest in organization studies to
contribute to understanding social phenomena that matter and in particular grand challenges (George et al. 2016). Although such hot situations are tricky to grasp, Routine Dynamics’ and ANT’s joint interest in actors and actions enables one to start unraveling large and complex phenomena as we zoom in on the role that organizational routines have in manifold connections, how they are built, and what consequences they have.

All of this said, I urge the reader to bear in mind that, by definition, ANT unfolds its strength in doing, and only thereafter in conceptualizing what one sees and experiences. Or as Latour (1999a: 20) once said: “the ridiculous poverty of the ANT vocabulary—associations, translation, alliance, obligatory passage point, etc.—was a clear signal that none of these words could replace the rich vocabulary of the actor’s practices”.
REFERENCES


