

Western University  
**Scholarship@Western**

---

Education Publications

Education Faculty

---

2015

## Beginning in the middle: Networks, processes and socio-material relations in educational administration

Melody Viczko  
Western University, [mviczko@uwo.ca](mailto:mviczko@uwo.ca)

Follow this and additional works at: <https://ir.lib.uwo.ca/edupub>



Part of the [Education Commons](#)

---

### Citation of this paper:

Viczko, M. (2015). Beginning in the middle: Networks, processes and socio-material relations in educational administration. In D. Burgess & P. Newton (Eds.), *The theoretical foundations of educational administration* (pp. 241-254). New York: Routledge.

## Chapter 14

### Beginning in the Middle

#### Networks, Processes, and Socio-Material Relations in Educational Administration

Melody Viczko

Where should we start? As always, it is best to start in the middle of things . . .

Latour (2005, p. 27)

In this chapter, I aim to assemble an account of *actor-network theory* (ANT) in educational research in order to theorise areas in which educational administration might be informed by this approach. While I offer some historical introductions to ANT, considering its origins and ontological and epistemological suppositions, my purpose is not to cover the breadth of studies undertaken by ANT scholars. Rather, I do as Latour suggests by beginning in the middle, by proposing what we might learn as educational administration scholars from fairly recent accounts informed by ANT and areas that show promise for our future research. In the following account, I begin with an introduction to ANT and quickly delve into examples of ANT-informed research in order to illustrate the significance of such research to recent thinking in the field of educational administration. Then, I offer some ideas for areas in which educational administration scholars have much to contribute in the field of ANT studies.

---

### What Is Actor-Network Theory?

---

The term actor-network was first developed by Michel Callon in Paris between 1978 and 1982 (Law, 2009), though John Law pointed out that the approach itself is broad and could be considered itself a network, spread over time and place, so that its particular origin seems arbitrary. Other seminal scholars of ANT include Bruno Latour (1999a, 2005) in sociology, John Law (1999, 2003, 2009) in sociology of organisations, and Annemarie Mol (1999, 2010) in public health and policy. Recently, Tara Fenwick and Richard Edwards (2010) signalled the relevance of ANT to the study of education, conducting rather large and significant reviews of what they deemed ANT and ANT-ish studies. Their contribution is significant and seminal as it ploughs a trench in the field of educational research for the legitimacy of socio-material, and particularly ANT-informed, research by demonstrating the breadth to which its socio-material concepts may be applied to educational problems.

Law (2009) characterised actor-network theory as a “disparate family of material-semiotic tools, sensibilities, and methods of analysis” (p. 141), and both he and Latour (1999a, 1999b) specifically stipulated that ANT is not a theory. Law offered that ANT’s propensity towards analyses that describe, rather than explain, suggest it is not a theory. Rather, he elaborated, “it tells stories about ‘how’ relations assemble or don’t. . . . [I]t is better understood as a toolkit for telling interesting stories about, and interfering in, those relations” (p. 142). He continued that ANT offers particular saliency as a sensibility drawn to the messy practices of materiality and relationality, describing the *how* of practices and relations. In the next section, I elaborate on two key aspects of ANT relevant for the purposes of this text: the relational ontology assumed in ANT and the importance of interactions and processes in the study of the actor-network.

---

## Assembling the Actor-Network

---

Actor-network theory is based on an ontology of relations, a material-semiotic approach that treats “everything in the social and natural worlds as a continuously generated effect of the webs of relations within which they are located” (Law, 2009, p. 141). Given the assumption that reality emerges in the enactment of relations, Law contended ANT scholars are inherently concerned with the mechanics of power:

How some kinds of interactions more or less succeed in stabilising and reproducing themselves: how it is that they overcome resistance and seem to become ‘macrosocial’; how it is they seem to generate the effects of such power, fame, size scope or organisation which we are all familiar . . . how, in other words, size, power or organisation are generated.

(p. 2)

As Law and Urry (2003), stipulated, “the move here is to say that real is a relational effect” (p. 5). The authors elaborated ANT’s controversial position of the real by stating, “the ‘real’ is indeed *real*, it is *also* made and that it is made within relations” (p. 5). In doing so, these scholars, along with others such as Latour (2005) and Mol (1999), argued that neither relativist nor realist positions reflect the ontological position of ANT. Rather, the world as interpreted by the social sciences is both real and the product of human actions (Law and Urry, 2003).

A relational ontology suggests that entities *become* through relations, through interactions between actors, as “ANT does not only propose a new way of questioning reality; it also introduces a new way of conceptualising the understanding of reality” (Cordella & Shaikh, 2006,

p. 14). Rejecting a realist position, Fenwick (2010) addressed this issue, stating, “a network in ANT *does not connect things that already exist, but actually configures ontologies*” (p. 119).

An important distinction of the nature of reality in ANT is that “entities achieve their form as a consequence of the relations in which they are located. But this means that it also tells us that they are *performed* in, by, and through those relations” (Law, 1999, p. 4). Fenwick (2010) described how such performance is the central focus of ANT studies.

ANT-inspired studies trace the micro-interactions through which diverse elements or “actants” are performed into being: how they come together—and manage to hold together—in “networks” that can act. These networks produce force and other effects: knowledge, identities, rules, routines, behaviors, new technologies and instruments, regulatory regimes, reforms, illnesses, and so forth. No anterior distinctions such as “human being” or social “structure” are recognized—everything is performed into existence.

(p. 120)

Other scholars have taken up the task of clarifying the ontology offered in ANT. Annemarie Mol (1999) focused on the ontological politics of ANT and emphasised the possibilities of multiple ontologies. That is, there is not social *order*, but rather social *orders*. She stipulated that the multiple ontologies of ANT are distinct from the pluralist sensibilities of interpretation, in which multiplicity means plural understandings. Rather she insisted that ANT regards plural ontologies of ordering. ANT scholars are interested in the notion of multiplicity of performance. That is, things are multiple in their performances. This suggests

a reality that is *done* and *enacted* rather than observed. Rather than being seen by a diversity of watching eyes while itself remaining untouched in the centre, reality is manipulated by means of various tools in the course of a diversity of practices.

(Mol, 1999, p. 77)

Mol's (1999) writing is devoted to discussing ontological politics, the "way in which the 'real' is implicated in the 'political' and *vice versa*" (p. 74). Consequently, a key concept in ANT is the actor-network. The point of ANT studies "move[s] the focus of the analysis from the actor . . . towards a more complex and less defined phenomenon that is the interaction" (Cordella & Shaikh, 2006, p. 9). The assumption here is that the focus on interactions means that actors are not seen as existing outside of their relations; actors hold a material relationality (Law, 2009). The actor-network is the process by which actors assemble into networks and this becomes the focus of study rather than individual actors themselves. An actor is anything, claimed Latour (2005), that is the source of action: "any thing that does modify a state of affairs by making a difference is an actor—or, if has no figuration yet, an actant" (p. 71). The heterogeneity of actants, both human and non-human, is essential to ANT studies. In educational contexts, objects, such as texts, playground set-ups, policy documents, strategic plans, meeting minutes, office spaces, and classrooms sites all are viewed as actants. They have agency and are influential. Given the relational materiality of ANT, actants develop as networks, to associate or disassociate with other actants to form networked associations, "which in turn define them, name them, and provide them with substance, action, intention and subjectivity" (Crawford, 2005, p. 1). Hence the hyphenated term, *actor-network*.

Latour (1999b) warned against the use of the technical meaning of network "in the sense of a sewage, or train, or subway, or telephone 'network'" (p. 1). Rather, he advocated for

networks in terms of nodes with diverse dimensions and connections, adopting a network-like ontology, rather than a flat two-dimensional surface more commonly used in network conceptualisations. The consequence of such conceptualising of the actor-network requires scholars using ANT to avoid focusing on the individual as powerful actor, in isolation from the networked context in which it is located. Rather, the focus in ANT is to trace the ways in which the actors are connected, assembled, and defined in the actor-networks.

---

## **Connecting ANT in Educational Research to Educational Administration**

---

The point of this section is to begin a discussion about the ways in which ANT might better inform our understandings about educational administration as both a theoretical field and a practice. To do so, I identify three themes that I believe ANT can offer to educational administration. In each theme, I begin with examples of relatively recent studies that use ANT to inform the conceptual and methodological frameworks within which the research was conducted. Further, I offer a brief discussion about how such studies might open up, shift, or revamp how some concepts, issues, and dilemmas are taken up in educational administration. From there, I elaborate on some areas that I see as possible directions for future research.

---

## **Exploring Processes Rather Than Outcomes Through Socio-Material Networks**

---

In a study of innovation in a programme focused on training staff for IT usage in classrooms, Mulcahy and Perillo (2011) demonstrated how socio-material practices were instrumental in the leadership of the programme. In this research, they traced how the programme developed from an initial instrumentalist and strategic plan of seven modules. This plan was implemented through formalised learning that targeted teachers' skills towards a more open-process based set of interactions between the initial formalised plan and the teachers and material objects in the learning environment. Drawing on ANT, Mulcahy and Perillo justified an approach to the research that resisted asking why things happen but instead focused attention on "how they arrange themselves. How the materials of the world (social, technical, documentary, natural, human, animal) get themselves done in particular locations for a moment in all of their heterogeneity" (Law, 2008, as cited in Mulcahy & Perillo, 2011, p. 128). In their research, great consideration was given to the material objects in the room: paint colour on walls, furniture comfort, accessible equipment, among others. In looking at the interactions between the social and the material, Mulcahy and Perillo concluded,

Innovation and change at Viewbank Grammar is not treated merely as the realization of pre-existent possibilities (staff training program); it is improvisatory and performative—it does not exist outside its "doing". Practices of managing and leading change are multiple and emergent, distributed among materials, managers and staff.

(p. 137)

Using ANT to highlight process rather than explanation, the scholars concluded that management and leadership emerge in the collective work of people, processes, and materials.



Paying attention to such socio-material relations in leadership studies requires focusing on the “workings” rather than the outcomes of leadership, disrupting the mantra of the required traits of successful, individual leaders that permeate educational administration literature. Mulcahy and Perillo (2011) called for leadership studies to account for “what is assembled or associated when multiple and different ties (structural, cultural, material and so forth) are taken into account” (p. 123). Consequently, the authors argued for two commitments: (a) a characterisation of educational management that addresses both the sociality and the materiality of practices, given their interactions and co-productions; and (b) a shift beyond the duality created between leader and led, suggesting leadership as performative practice between people and objects. That is, the relationality of ANT demonstrates how both people and artefacts (of their creation) co-produce practices in organisations.

In a study of school reform, Nespore (2004) adopted a network approach drawing on ANT to illustrate what becomes connected in order to enact powerful forms of education change. Using a case study of two attempts at state-wide educational reform in Virginia, Nespore examined how educational change efforts can be viewed through the lens of network, arguing for an approach that “treats actors as dialectically constituted by social relations and treats network relations as the contingently stabilized connections produced by the movement of people and things” (p. 368). Instances of reform can be better understood by examining connections between different actors in each context: strategically located individuals; objects, such as influential expert writings connected to mobilised entities advocating for similar forms of reform; media; foundation reports that categorised particular models of reform as traditional (read *good*) and transformational (read *poor*); written curricula; and samples of children’s work shared at home that became evidence of the quality of a school system as a whole. As Nespore explained:

The point is that we need to understand “school change” as at least partly about the ways school practices are made mobile, and what and how they connect as they move. What are the structures of connections or linkages? What materials are they made of? How do things change as they move? How do connections change with this movement?

(p. 368)

That is, we begin to see the network that is school reform and context, rather than isolating each concept as separate items for interrogation.

Fenwick (2011) examined large-scale reform through a study of the Alberta Initiative for School Improvement (AIS I) to examine the local mobilisations of mandated reform. Using an ANT reading of school reform as the effect of assemblages interacting with each other, Fenwick explored how a heterogeneous network of connections emerges in various interactions with school change through AIS I programmes and policy initiatives. In her account, Fenwick theorised that AIS I was enacted as an extensive and robust network connecting classroom equipment, environments, and electronic technology to teachers, administrators, and university professors. Such networks allowed for the seemingly disconnected actions of people and objects throughout the network. Yet, in tracing how AIS I became mobile throughout many educational jurisdictions, Fenwick illustrated how provincial priorities mandated through AIS I become operationalised in their connections to the local activities of teachers, students, parents, and the various objects used in daily teaching and learning activities. As such, the AIS I framework provided authority for schools in determining their own improvement initiatives while still being tightly connected to the provincial goal of student achievement. Fenwick showed how schools,

universities, professional associations, and government bodies generated dynamics that allow them to interact with each other, thereby enacting policy at local and provincial levels.

## **Processes in Educational Administration and Leadership**

Studies aimed at addressing efforts at school reform in the field of educational administration often focus on the notion of leadership. For this reason, studies and literature in educational administration have more recently focused on particular characteristic varieties of leadership: transformational (Hallinger, 2003), inclusive (Ryan, 2006), and distributed (Spillane, 2006), to name a few. From an ANT perspective, each of these models is steeped in traditions of structural-functionalist assumptions of the individual; that decision making is located in the agency of one individual to act his / her influence on a collective of other individuals; and that purposive, action-oriented thinking, planning, and acting from one actor can be fostered, developed, and unleashed to solve educational problems. Even the more constructivist models have been critiqued for their reliance on individuality—and perhaps even *collective individuality*—whereby the power of leadership can be shared by many individuals (Mulcahy & Perillo, 2011).

While ANT also exhibits a focus on agency, its theories are suggestive that such agency is located in the actions of an assemblage of actors, both human and non-human. That is, agency does not rest in one individual alone, rather agency emerges as people interact with the material world in which they are embedded. So, from this perspective, ANT offers a shift in how we think about agency in two ways. First, the focus of agency moves away from humans alone and

considers objects (things, the non-human, etc.) as sources of equal agency. Latour (2005) called this principle *symmetry* and rightly expressed,

ANT is not the empty claim that objects do things “instead” of human actors: it simply says that no science of the social can even begin if the question of who and what participates in the action is not first of all thoroughly explored, even though it might mean letting elements in which, for a lack of a better term, we would call *non-humans*.

(p. 72)

Second, ANT offers a new way of viewing organisations, moving away from a structural functionalist view of organisations, towards studying practices and processes of organising (Alcadipani & Hassard, 2010). Lawrence and Suddaby (2006) offered that ANT provides exciting opportunities for scholars concerned with institutional theories because of the focus that takes precedence in its studies. Citing Law (1992), Lawrence and Suddaby highlighted the connections between ANT and the study of organizations by illustrating the focus of ANT on process. Here, Law explained the core of the ANT approach:

How actors and organizations mobilize, juxtapose and hold together the bits and pieces of which they are composed: how they are sometimes able to prevent those bits and pieces from following their own inclinations and making off and how they manage, as a result, to conceal for a time the process of translation itself and so turn a network from a heterogeneous set of bits and pieces each with its own inclinations, into something that passes as an actualized actor.

(Law, 1992, p. 386)

Lawrence and Suddaby suggested ANT as a fresh perspective to institutional theory through its focus on the struggles and contestations that generate and reproduce institutions. In this case, the stability of institutions should be considered as *relational effects* (Law, 1992), moving the focus away from outcome of institutions, such as norm production, and instead focusing on the interactions that produce particular outcomes, such as particular policies and relational positioning of actors.

Such prospects from ANT offer opportunities for focusing on process-oriented rather than individual-centered theories in educational administration. For example, possible research may address how we understand leadership as an effect of the processes by which educational practices are carried out daily. In this way, research questions shift from an orientation towards the kinds of leadership styles that are desired to research questions that explore in what conditions leadership effects are enacted and produced, that is, as relational effects of the human and non-human actors involved in education.

---

## Enacting the Teacher

---

Mulcahy (2011) examined teaching standards that dominate professionalised discourses in Australia and other Western education systems to consider the notion of the *accomplished teacher*. Contrasting two idiomatic conceptualisations of standards as either representational or performative, Mulcahy set out to illustrate how the accomplished teacher is produced. Mulcahy (2011) challenged the value of teacher standards when viewed as static, representational tools focused on particular outcomes representing what “teachers know, believe and do” (p. 96). Such representations, she critiqued, serve to disconnect teachers from the material and social relations

in which they are engaged and also the actions by which teaching is performed. Rather, drawing upon ANT theories of relational and multiple ontologies, Mulcahy used empirical research collected in three settings to argue that when standards are viewed through the lens of performativity, the multiplicity and complexity of ways in which the accomplished teacher is enacted comes into focus. Referencing the data collected in observing teachers in the practice of teaching, she illustrated the prolific socio-material ways in which standards emerge. Mulcahy demonstrated the ways that practice, identity, and standards are co-assembled as they contemporaneously emerge and grow. Her study radically served to shift ways in which commonly held assumptions about teacher identity, practices, and standards are conceptualised in network fashion.

## **Exactly What Are We Studying? Ontological Challenges to Educational Administration**

While Mulcahy's (2011) study focused specifically on intersections of practice, objects, standards, and people that produce idyllic identities, such as the *accomplished*, and presumably, variations of the *unaccomplished* teacher, ANT offers the opportunity for educational administration scholars to relinquish other pre-determined categories and assumptions in order to question what it is we assume about schools as organisations, education as an institution, and students as learners.

Lee and Hassard (1999) argued an ontological relativist position of ANT in "permitting the world to organize differently" (p. 391). These scholars argued that ANT is ontologically relativist "in that it typically embarks on research without a clear picture of what sort of entities it will discover through interaction" (p. 394). ANT informed studies search for how

organisations, institutions, and entities emerge, treating the objects of research as active, “organizational participants, working and reworking not just their various descriptions of organizational form, but organizational form itself” (p. 399). Lee and Hassard criticised studies whereby existence is taken for granted, where goals, environment, and strategy are treated a priori as the foundations of organisation (Chia, 19996). These scholars contended that such treatment limits the questions that can be asked in research to those related to effectiveness of goal strategies, alignment between goal and strategy, and impact of environment on goal pursuit. However, ANT research orients to questions that probe “how do goals ‘mobilize’ and become ‘mobilized’” (Lee & Hassard, 1999, p. 402). Such questions highlight “ANT’s unwillingness to decide the shape of the world on behalf of the domains it examines” (p. 402). Such consideration allows for examining “how contemporary flexibility, responsiveness and liveliness, whatever they may consist of, are achieved” (p. 402). Indeed, ANT asks us to consider what, which, and how boundaries are being created. In terms of educational administration, we may ask, how are our schools, as organisations, created?

---

## **Knowledge as Effect of Assembling Practices**

---

Gorur (2011) examined the knowledge produced through the OECD’s Programme for International Student Assessment (PISA) to critique claims of the certainty of scientific evidence upon which the PISA results are premised. She drew upon Latour’s (1999c) position of truths as “being neither facts nor naïve beliefs but results of collective experimentation” (Gorur, 2011, p. 90) to highlight the conditional nature of knowledge. In this article, Gorur reported on interviews with a senior official and a data analyst from PISA to show how the assessment results come to

be used as a form of knowledge that renders a certainty about the state of national education systems, and by its comparative nature, postulate directions for policy initiatives in international educational contexts that may otherwise seem disconnected. Here, Gorur highlighted Latour's (1999c) work in which he suggested provisional, messy, and controversial production of facts by looking ethnographically at how scientific knowledge is constructed in laboratories through the work of human scientists as they interact with other scientists and their tools in the production of claims of truth. Gorur took a similar approach to studying the "PISA laboratory [to] observe how PISA scientists classify and order the outside world into definable categories" (p. 78) and collect samples of data to produce *PISA facts*. Gorur questioned the nature of these facts by examining the practices of data collection, mathematical modeling and mobilisation that work to produce them.

One aspect of Gorur's approach that is relevant to the field of educational administration is the way in which the PISA facts become mobilised to influence and direct policy initiatives in far-flung places remote from the sites in which the data were collected. That is, how is it that data collected in Finland can be universalised with other internationally collected data into league tables to effect educational policy initiatives in other national contexts, such as Japan, Canada or Chile? By tracing the processes through which PISA officials and data work to encapsulate the students and the learning into "detached, separated, preserved, classified, and tagged" (Latour, 1999c, p. 39) inscriptions so that PISA scientists can "reassemble, reunite and redistribute them" (Gorur, 2011, p. 88), Gorur illustrated the socio-material nature of such knowledge production. "Frameworks acted as gatekeepers. Mathematical models pronounced judgments. Inscriptions prescribed and controlled. Booklets represented student knowledge" (p.



90). In doing so, data as knowledge become completely detached from the students and their learning contexts.

The teachers, the test items and the students have bowed out, no longer relevant in their particular forms. The bustle of the classroom and the fuss of real people and things have been translated into a neat-two dimensional, ordered world of logits. And because logits are standard for a given pool of test items (Wright & Stone, 1979), data from PISA tests can be compared across time and place. The various bits of data can be worked on, manipulated and combined in new and different ways to create new patterns and understandings.

(Gorur, 2011, p. 86)

Other scholars have considered knowledge in professional learning contexts. In a study of teacher professional learning in one Canadian school, Riveros and Viczko (2012) questioned the nature of the relationship between knowledge and practice in teacher professional learning. Using interviews collected from teachers in a case study of one school, Riveros and Viczko examined how the ways in which teachers spoke of their professional learning reflected a spatial separation in their understandings between the contexts of practice and the context of learning. Drawing on ANT to suggest that persons, objects, knowledge, and locations are relational effects (Latour, 2005), they saw such conceptual distinctions between scenarios of learning and scenarios of practice as problematic for teacher learning. Much of the professional learning literature and policy documents position professional learning as occurring in communities whereby teachers can reflect on their practices; however, such arrangements of professional learning resulted in teachers' understanding of learning as occurring outside of their teaching practice.

In this view, the classroom seems to be perceived as a scenario for professional practice that is *influenced* by the knowledge originated in the context of collaborative groups. One teacher was explicit in this regard when she indicated that [professional learning] was meaningful to her “because I came back and I could use it the next day. It wasn’t something that I had to figure out, ‘Where am I going to put this?’”.

(Riveros and Viczko, 2012, p. 47)

Given the proliferation of collaborative professional learning models, Riveros and Viczko (2012) viewed teacher learning as a process that spans time and space between the scenarios of collective discussion and individual teaching practice. That is, knowledge needed for improving teaching and learning in classrooms must be conceived as emerging through a variety of teacher practices, including acts of teaching and acts of participating in professional learning activities. They suggested that ANT provides a lens through which to further interrogate how viewing knowledge as emerging through practices as they are enacted might better inform our understandings of teachers’ knowledge, how it is connected to classroom practices, and the ways in which professional learning models influence such enactments.

---

## **Following ANT in Educational Administration**

---

There are two further areas on which I draw attention for ANT in the study of educational administration. First, while the concept of scale has been taken up by scholars in educational research, the study of global educational policy initiatives is an area of promise for ANT (Fenwick & Edwards, 2010). As we have seen earlier in this chapter (Gorur, 2011), the ways in which globalised institutions travel through localised spaces can be traced in order to understand

how particular forms of knowledge are constructed as powerful in a globalising policy field (Rizvi & Lingard, 2010). Latour (1999a) articulated the significance in ANT studies of rejecting essentialist a priori orderings of the world; there is neither a local nor a global scale, only a relational one. Consequently, he rejected such dualisms of global / local or micro / macro since “big does not mean ‘really’ big or ‘overarching’, but connected, blind, local, mediated, related” (p. 18). Law (2009) agreed, considering level as a relational effect. In what ways might this inform educational administration?

Scalar distinctions such as global and local are problematic for ANT and, therefore, abandoning such a priori divisions disrupts theories of ideational diffusion and institutional isomorphism (Lawrence & Suddaby, 2006) often used to explore policy transfer and convergence. Gorur (2011) considered PISA as a global player in educational policy spaces, yet the strength in her study was in showing how it has become so through local practices. Adopting an approach informed by actor-network theory requires breaking with understandings of a powerful *global* and a powerless, un-agential *local*. Rather, there is a need to study how educational policies are taken up across networks of relations, across political and social boundaries, to examine what actors become assembled in particular policy contexts and what emerges as powerful in such assemblages.

Recently, the work of Ball, Maguire, Braun, and Hoskins (2011) sought to address the notion of enactment to the study of secondary school policies. Departing at the premise that “policies do not normally tell you what to do, they create circumstances in which the range of options available in deciding what to do are narrowed or changed, or particular goals or outcomes are set” (Ball, 1994, p. 19), the authors challenged functionalist assumptions of linear policy processes by arguing that putting policies into practice requires creative, complex, and

contentious acts of enactment. In their broad study of four secondary schools in England, they aimed to show how policies are enacted as assemblages of various national and local initiatives in secondary schools. Such research is greatly needed in developing our understanding of how policies work in schools. While Ball et al. (2011) recognised the contributions of actor-network theory to educational research, the conceptual leverage of scale offered by ANT was not taken up in their work and an exploration of how policies are enacted beyond local policy spaces might produce deeper understandings of the global-local dialectic in policy studies.

Second, power is core to ANT studies, highlighted in the focus on “analyzing the exercises of power by which cultural, social and economic capital is produced and reproduced” (Edwards, 2002, p. 355). In this way, ANT is useful at probing the way that politics work to constrain and enable certain enactments (Fenwick, 2010). The field of educational administration theory and practice is embedded in a dynamic of power relations, between struggles for power and influence in decision making, curriculum design, policy implementation and jurisdictional governance, to name a few. By considering power dynamics as emerging through the interactions of a network of heterogeneous actors, there is much to be explored in the ontological politics (Mol, 1999) of governance, policymaking, and decision making in educational administration processes and practices in school contexts.

---

## Conclusion

---

My goal in this chapter was to examine some areas for scholars situated in educational administration to take up and engage with actor-network theory as a conceptual tool for exploring networks, processes, socio-material relations and knowledge production. ANT is not

without its adversaries—those who criticise its perspectives as too realist or too relativist, or too ambiguous to offer a critical look at social science studies (Latour, 2005). However, such critiques offer opportunity for scholars to engage in the ontological politics (Mol, 1999) pertaining to questions of “what is the field of educational administration and how is it conceptualised by contemporary scholars?” As Hernes (2008) suggested, an entity “*becomes* what it is through its various encounters with other technologies, communities and actors” (p. xix). While the answers to such questions seem endless, Latour offers advice for beginning the journey by immersing oneself in the context of the problems we want to study—that is, in the middle of things.

## References

- Alcadipani, R., & Hassard, J. (2010). Actor-Network Theory, organizations and critique: Towards a politics of organizing. *Organization*, 17(4), 419–435.  
doi:10.1177/1350508410364441
- Ball, S. (1994). *Education reform: A critical and post-structural approach*. Buckingham, UK: Open University Press.
- Ball, S., Maguire, M., Braun, A., & Hoskins, K. (2011). Policy subjects and policy actors in schools: Some necessary but insufficient analyses. *Discourse: Studies in the Cultural Politics of Education*, 32(4), 611–634. doi:10.1080/01596306.2011.601564
- Chia, R. (1996). The problem of reflexivity in organizational research: Towards a postmodern science of organization. *Organization*, 3(1), 31–59.
- Cordella, A., & Shaikh, M. (2006). *From epistemology to ontology: Challenging the constructed “truth” of ANT*. Retrieved from <http://is2.lse.ac.uk/wp/pdf/WP143.PDF>

- Crawford, C. (2005). Actor network theory. In G. Ritzer (Ed.), *Dictionary of social theory* (pp. 1–3). London: Sage.
- Edwards, R. (2002). Mobilizing lifelong learning: Governmentality in educational practices. *Journal of Education Policy*, 17(3), 353–365.
- Fenwick, T. (2010). un(Doing) standards in education with actor-network theory. *Journal of Education Policy*, 25(2), 117–133. doi:10.1080/02680930903314277
- Fenwick, T. (2011). Reading educational reform with actor network theory: Fluid spaces, otherings and ambivalences. *Educational Philosophy and Theory*, 43(S1), 113–144. doi:10.1111/j.1469–5812.2009.00609.x
- Fenwick, T., & Edwards, R. (2010). *Actor-network theory in education*. London: Routledge.
- Gorur, R. (2011). ANT on the PISA trail: Following the statistical pursuit of certainty. *Educational Philosophy and Theory*, 43(S1), 76–93. doi:10.1111/j.1469–5812.2009.00612x
- Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3), 329–351.
- Hernes, T. (2008). *Understanding organization as process: Theory for a tangled world*. New York: Routledge.
- Latour, B. (1999a). On recalling ANT. In J. Law & J. Hassard (Eds.), *Actor network theory and after* (pp. 15–25). Oxford, UK: Blackwell.
- Latour, B. (1999b). *The trouble with actor-network theory*. Retrieved from <http://www.cours.fse.ulaval.ca/edc-65804/latour-clarifications.pdf>
- Latour, B. (1999c). *Pandora's hope: Essays on the reality of science studies*. Cambridge, MA: Harvard University Press.

- Latour, B. (2005). *Reassembling the social: An introduction to actor-network theory*. Oxford, UK: University of Oxford Press.
- Law, J. (1992). Notes on the theory of the actor network: Ordering, strategy and heterogeneity. *Systems Practice*, 5(4), 379–393.
- Law, J. (1999). After ANT: Complexity, naming and topology. In J. Law & J. Hassard (Eds.), *Actor network theory and after* (pp. 1–14). Oxford, UK: Blackwell.
- Law, J. (2003). *Notes on the theory of the actor network: Ordering, strategy and heterogeneity*. Retrieved from <http://www.lancs.ac.uk/fass/sociology/papers/law-notes-on-ant.pdf>
- Law, J. (2008). Actor-Network Theory and material semiotics. In B. S. Turner (Ed.), *The New Blackwell Companion to Social Theory* (pp. 141-158). Oxford: Blackwell.
- Law, J. (2009). Actor network theory and material semiotics. In B. S. Turner (Ed.), *The new Blackwell companion to social theory* (3rd ed.; pp. 141–158). Chichester, UK: Blackwell.
- Law, J., & Urry, J. (2003). *Enacting the social*. Retrieved from <http://www.lancs.ac.uk/fass/sociology/papers/law-urrry-enacting-the-social.pdf>
- Lawrence, T., & Suddaby, R. (2006). Institutions and institutional work. In S. Clegg, C. Hardy, W. R. Nord & T. Lawrence (Eds.), *Handbook of organization studies* (pp. 215–254). London: Sage.
- Lee, N., & Hassard, J. (1999). Organization unbound: Actor-network theory, research strategy and institutional flexibility. *Organization*, 6(3), 391–404.
- Mol, A. (1999). Ontological politics. In J. Law & J. Hassard (Eds.), *Actor network theory and after* (pp. 74–89). Oxford, UK: Blackwell.

- Mol, A. (2010). Care and its values: Food food in the nursing home. In A. Mol, I. Moser, & J. Pols (Eds.), *Care in practice: On tinkering in clinics, homes and farms* (pp. 215-234). Bielefeld, Germany: Transcript.
- Mulcahy, D. (2011). Assembling the 'Accomplished' teacher: The performativity and politics of professional teaching standards. *Educational Philosophy and Theory*, 43(S1), 94–113.  
doi:10.1111/j.1469–5812.2009.00617.x
- Mulcahy, D., & Perillo, S. (2011). Thinking management and leadership within colleges and schools somewhat differently: A practice-based, Actor-Network Theory perspective. *Educational Management Administration & Leadership*, 39(1), 122–145.  
doi:10.1177/1741143210383895
- Nespor, J. (2004). Education scale-making. *Pedagogy, Culture and Society*, 12(3), 309–326.
- Riveros, A., & Viczko, M. (2012). Professional knowledge “from the field”: Resituating professional learning in the contexts of practice. *McGill Journal of Education*, 47(1), 37–52.
- Rizvi, F., & Lingard, B. (2010) *Globalizing education policy*. New York: Routledge.
- Ryan, J. (2006). Inclusive leadership and social justice for schools. *Leadership and Policy in Schools*, 5, 3–17.
- Spillane, J. (2006). *Distributed leadership*. San Francisco: Jossey Bass.
- Wright, B. D., & Stone, M. H. (1979) *Best test design*. Chicago: Mesa.