

Ontological pluralism, modes of existence, and actor-network theory: upgrading Latour with Latour

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Abstract

Bruno Latour, one of the architects of actor-network theory, has now enfolded this approach within a larger project: *An Inquiry into Modes of Existence*. Framed as an empirical inquiry into the ontological and epistemological conditions of modernity, Latour argues for a radical shift in how 'objectified knowledge' is established within the world. In this article I draw on AIME in order to respond to criticisms of actor-network theory that derive from broader sociological and philosophical standpoints. I argue that actor-network theory should now only be understood as an integral aspect of Latour's newer inquiry, and ought no longer to be considered in isolation but instead as being integrated within a critical as well as pragmatic reading of Latour's AIME project.

Key words

Actor-network theory; education; ethnography; modes of existence.

6866 words.

What's Wrong With Actor-Network Theory? Or, From ANT To [NET].

Actor-network theory (ANT) is a way of exploring how the social is accomplished in ways that can be traced across networks of all sorts of stuff: stories, people, paperwork, computer simulations, routines, texts and voices. It provides ways of thinking about how networks of people and things carry influence and influence each other, foregrounding the ways in which people and things are made to act across geographical, temporal, or institutional boundaries. Some actively resist defining ANT in any specific way, referring instead to the possibility of a multiplicity of versions and a concomitant undesirability to reify just one, rendering ANT as a collection of more-or-less disparate approaches, an assemblage of methods of exploration and of frameworks for analysis (Law, 2004). Important criticisms of ANT have focused on: the lack of an explanatory framework for causality; the construction of 'flat' ontologies; a focus on powerful or dominant networks; a tendency to gloss over manifestations of power; being apolitical; offering of a problematic view of non-human agency; failing to explicate asymmetrical social formations of gender and/or race; a lack of ethical foundation; an inability to register boundary differences between different formations of social action; an inability to explicate social structures; a continued subservience of non-human to human actors, and a failure to explain sufficiently the entanglements between people and things (Edwards and Fenwick, 2015; Hodder, 2014; Kale-Lostuvali, 2016; Law and Singleton, 2013; Mills, 2018; Sayes, 2017; Sturman, 2006; Waelbers and Dorstewitz, 2014).

These problems have generally been addressed in two ways. A first approach is to subscribe to a broader sociomaterialist perspective, a response to the theoretical and analytical difficulties generated by ANT that is located partly in the augmentation and gradual unravelling of ANT as a method for inquiry, and partly in the uptake of other perspectives and ideas from the wider field of Science and Technology Studies (STS), from where ANT first emerged. A second approach can be found in the recourse to other theoretical frameworks in order to address the kinds of shortcomings that I have listed above. Examples include Communities of Practice theory, Critical Realism, Foucauldian sociology, Institutional Ethnography, Marxism, and New Literacy Studies (Clarke, 2002; Elder-Vass, 2015; Fox 2000; Sayes, 2017; Tummons, 2010). But what if there is a third approach, one that seeks neither to continually rewrite or revise ANT, nor to 'plug the gaps' with other more-or-less compatible theories?

In this article, I draw on Latour's recent work (2013), *An Inquiry Into Modes of Existence* (AIME) in order to explore the ways in which Latour has generated a multi-faceted framework that, amongst other things, looks to resolve the criticisms of ANT that I have referred to. I want to take seriously the idea that AIME is:

[an] ontological toolkit ready at hand for continuously, in each new empirical as well as philosophical inquiry, reopening the question of what there is and what is important.

(Hämäläinen and Lehtonen, 2016: 33).

AIME constitutes an assemblage of several strands of Latour's life work: science and technology studies, critique of Modernism; geopolitics; semiotics; sociology; and philosophy (Delchambre and Marquis, 2013). It sets out to explicate the different ontological conditions that co-exist to describe contemporary ways of being (Ricci et al., 2015). AIME has begun to be critically employed within explorations of legal theory (McGee, 2014), politics and postpolitics (Tsouvalis, 2016), and (my own field) education (Decuyper and Simons, 2019; Tummons, 2020). The *Mode of Existence* is a

concept taken by Latour from the earlier works of Souriau (1943, 2009) and of Simondon (1958): Latour extends the concept, and defines modes of existence as being ontological features of the world, brought into view – not constructed – by empirical inquiry, derived from experience, and therefore capable of being added to (Schmidgen, 2016). He proposes fifteen such modes, labelled through the use of a series of notations: for example politics becomes [POL], technology becomes [TEC] and religion becomes [REL]. The modes are all are of equal importance for the inquiry, but fulfil different roles and work in different ways. Some of them pertain to the materialities of the world, others pertain to metaphysics, and others speak to epistemology. Latour divides them into five groups of three (although it is important to remember that they all work with and alongside each other): the first explains how beings come into and maintain their existence; the second encompasses tools, artefacts and objects; the third encompasses group responsibilities and organisations; the fourth encompasses the economy, and the fifth provides the empirical starting point for the inquiry as a whole (Latour, 2013: 488-489). Finally, all of the modes are defined through four qualities or elements: their *trajectory* (the *type* of network that establishes the beings, human and/or non-human, of the particular mode in question), their *felicity and infelicity conditions* (the ways in which statements of truth or falsehood are established within a mode), the *specifications* or functions (the essential requirements of each mode), and the *alteration* or otherness of the mode (the ways in which one mode is distinguished from another).¹

Subsumed within AIME, an actor-network becomes a [NET] (in the original French, [RES], from *acteur-réseau*), the starting point in tracing the heterogeneous elements of those courses of action that as researchers we are interested in. Latour's conceptualisations of networks and actors are unchanged, as is the theory of the 'actor network'. It is simply the case that, considered in isolation, ANT has reached its 'use by' date:

Any attempt at choosing a homogeneous concept to establish connections amongst all entities (association for ANT [...]) has a powerful but short-lived effect. Powerful because it allows *not* to make artificial distinctions (human and nonhuman for ANT [...]), but short lived because inevitably the differences that had been recorded slowly fade, turning out to be the *same way* for everything to be different. Ontological pluralism cannot be achieved through *only one mode of existence*, no matter how encompassing it appears to be.

(Latour, 2014: 265, emphasis added).

Beginning The Empirical Inquiry.

Whilst the methods that might underpin an actor-network inquiry lack explication, there is a consensus that ANT demands a focus on the empirical (Elder-Vass, 2015), an "insistence on painstaking ethnographic research" (Kipnis, 2015: 43) that is carried over into AIME, within which Latour frames his discussion as an inquiry being conducted by, variously, "our ethnographer", "our anthropologist" (arguably the discipline that Latour most frequently identifies with (Berliner et al., 2013)) and "our ethnologist". This inquiry, which we can summarise in terms of Latour's life work of unpacking the subject/object dualism of Modernity, might lead us to a consideration of technology [TEC] or law [LAW], or religion [REL], all familiar themes from his wider body of work (Latour, 1996, 2010, 2013). Transposing ANT, which allows for any point within a network to serve as the starting point for tracing the network as a whole, into AIME and now designated [NET], an actor-network maintains its place as the starting point for the empirical inquiry

(Latour, 2005). But as it is self-evidently the case that the ways in which the institutions of politics and the institutions of religion, for example, go about the work of maintaining and sustaining themselves in action or word or text are qualitatively different from each other, a way of differentiating *how* these networks [NET] are established and sustained is therefore required. Perhaps tacitly acknowledging the criticisms of the flat ontologies of ANT, Latour proposes a means by which we can distinguish between and explain the *types* of connections that allow politics [POL] and religion [REL], for example, to do or say the things that they wish. Within AIME, this is described as the pre-position mode: [PRE]. Whatever it is that we are interested in exploring must therefore be understood not only in [NET] mode, through which we trace the network of associations and connections of human and non-human actors as far as necessary (and in a manner that we are familiar with through the earlier work of ANT), but also in [PRE] mode, through which we can *qualify* the types of associations and connections that allow the [NET] to extend.

Therefore, it is through [PRE] that networks [NET] can be variegated, rendered “in full colour” (Conway, 2016: 49). To illustrate: I have already noted that one of the characteristics of any mode of existence is the way in which the *felicity and infelicity conditions* that pertain to that mode are established, and these will always be distinctive to the mode in question. Latour borrows the concepts of felicity and infelicity conditions from speech act theory (Austin, 1962). Thus, the ways in which religious institutions [REL] construct “objectivized knowledge” (Latour, 2013: 51) – are quite different from the ways in which political institutions [POL] do so. [PRE] sensitizes us, as ethnographers, to such differences between different modes, whilst [NET] reminds us that these modes are nonetheless established in an analogous manner, through the networks of actors (human and non-human) that we now explore not only with [NET] (formerly ANT) but also with [PRE]. In this way, Latour provides a way of thinking about the qualitative differences between actor-networks that the ‘older’ actor-network theory was incapable of doing. What Latour does not tell us is what might happen should these objectivized knowledge statements about the world conflict with each other. For example, all religious groups are of the [REL]igious mode of existence,² but different faith groups self-evidently construct very different understandings of their world views, notwithstanding the extent to which *how* they do so is common between all of them in terms of [REL]: because they are all [REL], they all establish felicity and infelicity conditions analogously. Latour thus allows for multiple ontologies, but does so whilst assuming benign co-existence both within and between them, leaving untroubled the unspoken assumption of actor-network theory that the strength of a network is related to size, to the number of allies enrolled within it (Harman, 2018).

Whenever two modes are brought to bear on each other such as in the way that [NET] and [PRE] are drawn together in the above example, a combination or *crossing* is established. [NET-PRE] is just one example.³ The interactions that result from crossings can help us establish ontological pluralism. If we are interested in exploring different kinds of technological beings we can use the technological mode [TEC] (within which the mechanical or electronic sophistication of the equipment being used is immaterial – it might be a hammer, or a CNC milling machine) and thereby look to investigate the technological aspects of any network through using the [TEC-NET] crossing (I shall discuss the [TEC] mode in more detail later). At other times, however, a crossing results in a *category mistake*, a notion borrowed from Ryle, who defined them as:

...made by people who are perfectly competent to apply concepts, at least in the situations with which they are familiar, but are still liable in their abstract thinking to allocate those concepts to logical types to which they do not belong.

(Ryle, 1949: 6)

For example (for what follows, See Latour, 2013: 69 ff.): south of Grenoble in France is Mont Aiguille. If we want to know more things about this place, should we go hiking, or look at maps, or something else? In fact, we can go for longer walks and experience Mont Aiguille, read and/or write richer descriptions of the topography, or undertake more frequent geographical surveys with increasingly sophisticated measurement tools. In this way the accumulation of maps, photographs, essays, diagrams, signs, and so forth that allow us to know about Mont Aiguille becomes stronger and richer. Throughout, the ontological bifurcation between the maps and the mountain needs to be remembered. To forget this would lead to a category mistake, a conflation of the mountain with what we know about the mountain. Or, through introducing two more modes, we might say that when we mistake real things or beings, which are referred to within AIME as *beings of reproduction* [REP], for the ways in which we write and talk about them, which are referred to within AIME as building up into chains of information and understanding or *reference* [REF], a category mistake of the [REP-REF] type is introduced.

The fifteen modes are presented in a *Pivot Table (un Tableau Croisé)*. In a spreadsheet, a pivot table allows the user to toggle different tables and columns, in order to filter data in different ways. Likewise, through filtering our inquiries through different modes or crossings, we can, as ethnographers, move through different ontological frames. But it is important to remember that this ontological pluralism is not analogous to a postmodernist project that permits multiple truths that are all positioned as being of equal merit. Nor is AIME a positivist project (Latour, 2013: 46); rather, we can make our accounts more robust and more faithful through continuing to engage in empirical research so that the chains of reference [REF] that we construct become richer and stronger, whether pertaining to religious institutions [REF-REL] or political institutions [REF-POL]. Cognizant of the ways that technological [TEC] movements or legal [LAW] reforms, for example, might require us to recalibrate our empirical designs and reject or refresh our research – ‘knowing things’ does not stand still – we nonetheless want to be able to construct objectivized knowledge. Such epistemological pluralism arguably reflects Latour’s critical stance towards normative philosophy, but the extent to which the different crossing are or are not equal, and the implications of this for the knowledge thereby generated, remain unclear (Blok and Jensen, 2011; Harman, 2014).

First Critique. Are There Any Boundaries?

Mindful of these concerns, and therefore adopting a critical though nonetheless respectful standpoint, I now turn to two examples that illustrate how AIME might be used to resolve those critiques of ANT of the kind I referred to earlier. The first that I wish to unpack relates to boundaries, specifically the lack of them, within the flat ontologies of ANT, elegantly summarised thus:

The problem with Latour's approach arises [...] from his sociology, which rejects ontological boundaries. [...] if there are boundaries between scientists and non-scientists, Latour's sociology cannot perceive them.

(Kale-Lostuvali, 2016: 289).

Kale-Lostuvali is not alone in raising this critique. My argument is categorically not that this and similar arguments are spurious or mistaken: rather, I wish to foreground the fact that such arguments rest on the use of ANT 'in isolation'. But if we subscribe to AIME, with ANT now reconfigured as [NET] as just one mode of existence amongst others, then we can find ways to resolve this critique from within Latour's cosmology.

For several years, I have been fortunate to be part of a research team that has been exploring distributed medical education in North America (for what follows, see MacLeod et al., 2016, 2019; Tummons et al., 2016, 2018). Specifically, we have been researching the ways in which this medical education curriculum is synchronously delivered across two sites: a *main campus* where the larger group of students and the majority of the academic staff are found, and a *satellite campus* where the smaller group of students is located, engaging with the curriculum through video- and audio-enabled links to the main campus. These campuses are geographically distant from one another, linked through a rich network of technologies, staff, students, and processes. Cameras, microphones and online materials bring the two student groups together during lectures. An array of technological processes, choreographed by dedicated technicians recruited from the audio-visual industry, establishes a socio-material network that enfolds the curriculum. Administrators, faculty and students from across the two sites share the paperwork, teaching resources, and pedagogical practices that make up the curriculum. From time to time, people as well as objects or processes travel between the sites, although this remains relatively uncommon.

As ethnographers, we have explored the ways in which this distributed medical education curriculum is enacted, contrasting the specified curriculum with what actually happens. Our extensive fieldwork and subsequent analysis has revealed the workarounds and improvisations that characterise the practices of the staff and students enrolled within the curriculum, in contrast to those dominant institutional discourses that represent the deployment and ongoing maintenance of technology-enhanced curricula as seamless and predictable from a pedagogical perspective. Our research has focussed very much on lecture rooms and seminar rooms, on the technologies of the classroom that have brought the two campuses together, and on the people who have worked with and around these technologies – on pedagogic practices that are typical of professional curricula within universities broadly as well as medical education specifically. One conclusion has been that the accomplishment of the curriculum rests on a network of technologies and people, on activities ranging from the practice of lecturing to the uploading of PowerPoint slides, from capturing questions asked in the lecture room to the adjustment of where people stand for the camera: practices that are simply not anticipated within a formal curriculum structure. The work of academic staff relies so profoundly on the work being done 'behind the scenes' by the technical staff that the work of the one *could not be made sense of* without considering the work of the other. The accomplishment and maintenance of the curriculum as an actor-network does not distinguish between, does not erect a boundary between, the academic staff and the technical staff, insofar as the network relies equally on the enrolment of both in order to sustain itself and be sustained.

In resolving the arguments made by Kale-Lostuvali (2016) and others in terms of ontological boundaries, it seems right to agree with them. From the perspective of ANT, we would not be able to distinguish such boundaries – but with AIME, we can. We need to follow scientists *and* technicians within a laboratory (Latour and Woolgar, 1979), and geographers *and* engineers within a transportation workshop (Latour, 1996) – just as we need to follow academic *and* technical staff within medical education. There is no physical or institutional barrier that might require us to limit our fieldwork: the practices, elements, people, or things (I shall return to a discussion of things in my second critique, below) that we follow are not bounded by any inherent essence that marks them out as being within different domains, divided by boundaries, from the point of view of the network(s) that we are tracing. The [NET-PRE] crossing, by contrast, permits us to think about the qualitatively different ways in which networks [NET] firstly establish and secondly maintain themselves (Latour, 2013: 62). I have already discussed the different ways in which felicity and infelicity conditions are established within networks as they pertain to different modes of existence. Latour also proposes that the ways in which [NET]s might be differentiated in terms of [PRE] will also derive from being able to distinguish the different movements that humans and non-humans follow across/through the [NET] – a process that will rest on the empirical work of his imaginary ethnographer. By speaking with her informants (human and non-human) she will be able to generate accounts of the [NET] that are “faithful to the field” (Latour, 2013: 65) and that allow the ways by which each [NET] persists to become apparent, thanks to [PRE]. In this way, Latour can reconcile his refusal to allow boundaries (irrespective of how they have been instantiated) to limit the reach of a [NET] with his affordance of differences between different domains of activity, as expressed through the different modes. Ontological difference is not a property of the establishment or recognition of boundaries between groups or classifications of people and/or things – to look for boundaries would be a category mistake, and should a boundary be presented to the ethnographer, her first step would be to look for the places in which it is in fact porous – but between different courses of action across different, variegated, networks [NET-PRE]. For the Latour of AIME, there are no boundaries as such – but differences between networks can now be established through [PRE], embodied in this example in how people within networks both act as well as talk.

Second Critique. Are All Things All The Same?

The principle of symmetry, the notion that there is no *a priori* distinction to be made between the human and non-human elements of any network, constitutes one of the paradigmatic elements of ANT (Fenwick and Edwards, 2010) and pertains to my second problem. I wish to address those critiques of ANT that foreground the inability of ANT to discriminate sufficiently between how different types of non-human actors might behave, neatly summarised thus:

...terms like ‘artifact’ and ‘non-human’ are inclusive by design, but as such deflect attention from questions of who makes (or can make) a certain kind of device, who controls use of the device, how access to it is organized, who supplies the power for it, what kinds of products it makes, how it moves, and how it is made visible to different observers.

(Nespor, 2011: 18).

The principle of relational symmetry that pervades ANT is often treated as orthodoxy, and yet it is clearly problematic. Things made by people are self-evidently different to things that are found in the world. ANT theorists have proposed different ways of thinking about non-human objects, for example in distinguishing between artifacts that are or are not text-based (Law, 1994). There is insufficient space here to consider all of these, so I propose to focus on one element of the problematic raised by Nespore (2011) as well as others: the deflection of attention from how things might be made visible to different observers.

As part of our ongoing research into medical education in North America, the attention of the research team has now begun to turn more explicitly to the ways in which different elements of clinical practice are learned, practiced, and acquired by the students (for what follows, see Cameron et al., 2019). Specifically, we have been researching the ways in which clinical skills are practiced in simulated settings. Much of our recent fieldwork has focussed on the Foley catheter workshops attended by medical students in their second year of study (that is, before they undertake their first clerkships in geriatric or emergency medicine, for example). During Foley catheter workshops, students, in pairs, take turns to practice sterile Foley catheter insertion into a medical manikin, following a demonstration and question-and-answer session led by the instructor, who goes on to observe and provide feedback to the paired groups as they work. Whilst the Foley catheter, as a piece of equipment, only has one function, the medical manikins are used at different points throughout the curriculum for other skill simulation workshops, moving from relatively simple procedures such as basic patient handling, to measuring blood pressure and listening to normal and abnormal lung or heart sounds.

In analysing the data we looked to understand the ways in which both students and instructors responded to the insertion of the Foley catheter into the manikin (the work done by the catheter only makes sense in relation to the manikin as well as to the student who is inserting it) in order to bridge the gap between the manikin as an object, and the humans on whom the students would in future perform the same catheter insertion. As is common in simulation-based pedagogies, students are encouraged, and helped, by the instructors to consider how the techniques that they are practicing would feel in an authentic, rather than simulated, environment. Some students talk to the manikins as if they were real people, asking them for consent to the procedure before lifting their medical gowns. Some of the students help their peers, and others rely on their printed checklists. Instructors comment on how the insertion of the catheter would feel different, more resistant, in a real body as opposed to a manikin. When moving the manikin's legs, some students remark on how stiffly jointed they are, compared to a real person. Instructors use expressions such as "in real life" and "you might need" in highlighting the gaps between the homogenous manikins and the heterogeneity of real humans. Using jokes to render the simulation less embarrassing, stories derived from clinical experience to contextualise clinical expertise and/or practice, and explanations of procedure to bridge the gaps between manikins and real bodies, the students and their instructors are enrolled within a curriculum that exemplifies an ANT account of education.

At first look, it would seem to be the case that the relational materialism of ANT is sufficient to explicate this medical education curriculum. Any actor-network, by definition, is an assemblage of the human and the non-human, and we might focus on those breakdowns within the network that reveal something of how it works, the obligatory passage points within the network that all actors have to pass through, or the ways in which written texts – immutable mobiles

– travel across the network, in order to discover more about how the network is brought together (Latour, 2005). But with AIME we can go further: more specifically, through the technological [TEC] mode, we can make the Foley catheter (to choose one point of focus) more visible, to people within and without the [NET], whilst acknowledging their statuses as objects that are only temporarily durable (Conway, 2016) in comparison to other non-human beings of reproduction [REP] that inhabit the [NET]. Why, then, do we need to differentiate between beings of technology and beings of reproduction? What are the ontological differences between them?

According to AIME, one troublesome aspect of technology is that it seeks to be forgotten, to become invisible, causing the ethnographer to lose sight of the processes, improvisations and routines – the *operational sequences* – through which objects are put into use (Latour, 2013: 221-3). It is all too easy to forget how objects get made to do things or to perform operations. Simply remembering that objects need people (the ANT answer) is not really sufficient. The danger is that we assume that once the technological object has been put into place and once users have had sufficient practice, we lose sight of the operational sequences that underpin it: the category mistake would be in assuming that objects *hold up by themselves* once they have been deployed. We risk losing sight of the correspondence between form and function in our exploration of what technologies are doing and how they are made to do it, failing to appreciate what lies behind the skilled dexterity of the accomplished user precisely because the faltering steps of the novice, so much easier to observe, have been lost sight of. We do not need to trace the history of the design and use of the Foley catheter from the earliest model (over ninety years ago) to a contemporary example, in order to sensitize ourselves to the notion that it is in how healthcare providers use them, how medical students go through the slow process of learning how to use one from the first moment that they open one to their final clinical rotation, to appreciate that *something technological* is taking place even though, when we watch our experienced clinician, all of the learning, those early mistakes and hesitations, have been lost sight of, and have become invisible, hidden behind habitual skill accrued through long practice. It is not solely in the object – the catheter – that the mode of technological existence, [TEC], is to be found, but in the movements that take place around it: the gestures, the posture of the clinician, the fine movement of the healthcare provider as they inflate the balloon that will hold the catheter in place (Latour, 2013: 221). We can maintain the principle of symmetry between human and non-human, but we can also explore behind and around it at the same time. In this way, the catheter becomes more visible, rendered in greater detail and depth. We inherit from ANT the relational symmetry that can be traced between the medical student and the catheter (although this same relational symmetry might also be put to work in exploring the relationship between the manikin and the hospital bed that it is resting in). The catheter, manikin and bed are all enrolled within the same network. They are all non-human artifacts. They are all made of assemblages of differing quantities of other stuff: metals, plastic, rubber, minerals. But they are self-evidently not ‘the same’ and it is through explicating the different ways in which they are put to work by people that their distinctive [TEC] qualities emerge. A network [NET] remains a socio-technological phenomenon, irrespective of the sophistication of the technology involved, but through the [TEC-NET] crossing our ethnographer can distinguish the technological from the ‘merely’ non-human.

AIME: An “expansion module” for ANT, or a concatenation of “malfunctions and adverse effects”?

AIME constitutes an attempt by Latour to draw together the various strands of his life's work, and it is in the ways in which these are brought together in the service of his (long standing) inquiry into the ontology of the Moderns, that a new and distinctive standpoint emerges. This is not to say that AIME constitutes a finished or definitive ontological statement: from the start: Latour states explicitly that the inquiry is ongoing, emergent, and open to modulation, a "laboratory" (2013: xx) that is open to new insights. Some of these insights have already begun to emerge. Alongside an initial uptake in the use of AIME as an analytical framework, additional modes of existence have been proposed (Conway, 2014; Tummons, 2020; Ward, 2017).⁴

What, then, can this as-yet-unfinished inquiry give to the ethnographer? In this article, I have discussed just two problems derived from a broader critique of ANT, and I have proposed ways by which these problems might be addressed through AIME. My intention is not to dismiss these as being anything other than legitimate and well founded; rather, it is more modest: to suggest that these, and perhaps, other critiques of ANT reflect, in whole or in part, the inadequacies of that theory (if, indeed, it *is* a theory) – a theory that has never been able to sustain a sufficiently coherent structure, that has been prone to conceptual slippage, and that has long been critiqued by some of its progenitors. From this standpoint, it seems not inappropriate to afford Latour, and his collaborators within AIME, the affordance to "complete" the inquiry begun by ANT so many years before (Latour, 2013: 353).

This is not to say that translating from ANT to AIME will be straightforward or unproblematic. For some commentators, the shift to AIME represents nothing more than both a recognition by Latour of the shortcomings of actor-network theory and an attempt to gather the different strands of his work into one investigation (Harman, 2016), characterised by a list of fifteen modes of existence that 'complete' actor-network theory but do not pretend in themselves to be definitive but simply pragmatic, allowing the inquiry to travel where Latour wishes it to travel – back to the unravelling of Modernism (Weber, 2016). However, for other commentators, these attempts by AIME to resolve the problems of ANT have served to resolve the insufficiencies of actor-network theory only through the generation of an entirely new series of conceptual and methodological difficulties: the modes of existence are characterised by a 'mind-boggling' heterogeneity (Hämäläinen and Lehtonen, 2016), take account of history but not geography (Edward, 2016), lack a sufficient concern for method or for the reflexivity of the anthropologist who is placed by Latour at the centre of the inquiry, and through their mobilization generate "malfunctions and adverse effects...fairly regularly" (Delchambre and Marquis, 2013: 571).

But theory does not need to stand still, and if ANT can stretch and grow, then so can AIME. Latour fights shy of an explicit critique of ANT, but within AIME we can discern traces of attempts to make good those aspects of ANT that remain unpolished. AIME is not 'superior' or 'better' than its predecessor, not least as it too contains a number of troublesome and problematic elements. But AIME nonetheless offers a "trove of thought and provocation" (Conway, 2016: 65), and in this spirit, we should perhaps take seriously the potential that Latour's "expansion module" opens up (Harman, 2016: 132). ANT is now [NET], and just one amongst fifteen (for now) modes of existence, and they *all* need to be accounted for if they are going to work to further our inquiry.

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Biographical Note.

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¹ This discussion is necessarily brief. Alongside Latour (2013), a more pithy discussion of the cosmology of the fifteen Modes of Existence can be found in Conway (2016). The *AIME* website allows the user to move between the different metalanguage terms employed by the project using hyperlink texts, in a manner that the linear text of a book or a journal article can never afford, and provides a more extensive discussion of the ways in which the Modes are defined as well as differentiated in terms of these four qualities [<http://modesofexistence.org/inquiry/#a=START+UP&s=0>].

² Frodon (2016: 373) explains that “the confusions between ‘religion’, in the sense of an established body of doctrine supported by rituals and, usually, a clergy, and ‘the religious’, in the sense of a structured relationship to invisible forces that are referred to as God, gods, ‘the spiritual’...” form the underlying principle of [REL]. He also argues that whilst Latour’s exposition of [REL] purports to be universal in scope, the inquiry as a whole privileges Christianity over other faiths (ibid.).

³ The *AIME* website allows the user to navigate all of the different crossings that are possible within/across the fifteen Modes of Existence, providing examples that are additional to those that appear in the book.

⁴ Of these three, Ward (2017) provides the most extensive discussion of an additional mode of existence – recognition [REC] – derived from the work of Axel Honneth, and explicated in terms of trajectory, felicity and infelicity conditions, specifications, and alteration. Ward (2017: 103) also provides an entry for [REC] for a re-imagined pivot table.