

Higher education, theory, and modes of existence: thinking about universities with Latour

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Abstract

In this article, I pick up established critical explorations of the role and use of theory in higher education research, focussing on the theoretical affordances of the work of Bruno Latour, one of the architects of actor-network theory. Actor-network theory is increasingly widely used within education research, although Latour has moved away from it and has now folded it within a larger project: *An Inquiry into Modes of Existence – AIME*. Framed as an empirical inquiry into the ontological and epistemological conditions of modernity, Latour argues for a radical shift in how ‘truth’ or ‘meaning’ is established within the world. In this article I draw on AIME to illustrate how Latour’s multi-realist ontology, augmenting and responding to criticisms of actor-network theory, can be used to explore higher education through ethnographic research, addressing the call for the generation of theoretically coherent accounts of higher education whilst at the same time addressing the necessity of encompassing a heterogeneous range of social actors in order to construct accounts of higher education practice.

Key words

Academia; actor-network theory; ethnography; modes of existence; universities.

Word count

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Universities, sociomaterial ethnographies, and Latour

What happens in universities? What are universities like? In what ways do universities, and the people who are enrolled within them, come together in order to accomplish what they do? Notwithstanding the proliferation of research into higher education and the extent to which it might therefore be considered as a field in its own right (Clegg, 2012), albeit one that has been described as relatively immature (Macfarlane, 2016), questions such as these necessitate an engagement with theory that has in the past been described as being an important element of this same field and yet also either absent or implicit at best. More recently it has been described in terms of a proliferation of theoretical and methodological approaches that nonetheless continue to be variable in terms of rigour of application and in their potential to generate explanatory frameworks as distinct from confirmatory statements (Tight, 2004, 2018; Trowler, 2012). Nor are these concerns restricted to the higher education field. Hammersley (2008) has argued that one of the failings of research more broadly during the last five decades and more lies in the failure of researchers to develop and then test theory in a systematic manner. Thomas (2007) has critiqued the ways in which some people write about and/or cite from or refer to theory that sees theory treated as a veneer of sometimes needlessly complex language, dropped into empirical study with insufficient thought as to its applicability or relevance. This has resulted in what Thomas has described as use of theory superseded by an excess of *theory talk*, erroneously used to claim “epistemological legitimacy and explanatory commentary” (2007: 85). Thus, we need to encourage creative and reflexive responses to theory, theory-building and cumulative inquiry, to answer a question posed by Trowler (2012: 281) several years ago but one that maintains a contemporary relevance: “what work am I asking theory to do in my research”? In this article, I approach this question in the following ways. Firstly, following a brief discussion of actor-network theory (ANT), one conceptual framework that has been used in higher education research, I explore the ways in which one of the architects of ANT, Bruno Latour, has himself absorbed it within a larger theoretical and empirical project, *An Inquiry into Modes of Existence* (AIME), and outline the elements of this project that pertain to the argument that is being constructed here. Then, I reflect on aspects of a three-year ethnography of higher education that provide empirical points of entry into an analysis informed by the theoretical affordances of the AIME project, whilst being mindful of possible pitfalls and critiques, in order to be able to offer conclusions regarding some possible theory-led directions for the field of higher education research.

First step: introducing actor-network theory

Actor-network theory is a way of exploring how social projects are 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, and foregrounds the ways in which people and things are made to do things across boundaries of geography or time or institutions. The ‘early’ (Fenwick and Edwards, 2010) or ‘classic’ (Gorur, 2011) actor-network model is epitomised by Latour and Woolgar (1979) and in higher education research is best seen in Nespor’s (1994) ethnography of university physics and management studies departments. Later approaches tend to be identified as ‘after’ actor-network theory, and other terms that are used to denote an actor-network informed approach include material semiotics and method. Research adopting this standpoint departs from the commitment of ‘early’ ANT to ethnographic fieldwork (Law, 1994) and instead applies an ANT

perspective to other methodological perspectives. Examples include research into higher education policy (Sarauw, 2016) and curriculum (Mulcahy, 2011). Some users of actor-network theory actively resist defining it in any specific way, referring instead to the possibility of a multiplicity of versions and a concomitant undesirability to adhere to just one (Fenwick and Edwards, 2010; Law, 2004): an approach such as this informs the standpoint occupied, for example, by Decuyper and Simons (2019) who eschew the theoretical essentialism of an actor-network standpoint in favour of a more generous sociomaterialist methodology in their exploration of academic practice. Indeed, this subscription to a broader sociomaterial perspective serves to address several criticisms of actor-network theory: for lacking an explanatory framework for causality; for constructing 'flat' ontologies; for glossing over manifestations of power; for privileging only certain ways of viewing the world; for offering a problematic view of non-human agency; even for being unethical (Law and Singleton, 2013; Sayes, 2017; Waelbers and Dorstewitz, 2014).

Different responses to the theoretical and analytical difficulties generated by ANT can be found partly in the augmentation, evolution and gradual unravelling of ANT as a method for inquiry, as well as the uptake of ideas from the wider field of Science and Technology Studies (STS), from where ANT first emerged, notwithstanding those arguments that position STS as being a field that in itself is in a state of flux (Decuyper, 2019). Bruno Latour, one of the architects of ANT, has also acknowledged its limitations:

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).

Modes of existence are the central elements of Latour's recent work (2013), described by Decuyper and Simons as looking to "disentangle the typical ways of being that characterize various forms of collective life" (2019: 229) and as 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), that might be used to explore all kinds of things, including higher education.

Second step: from actors and networks to modes of existence

Latour's (2013) anthropological and philosophical project, *An Inquiry into Modes of Existence* (AIME), into which actor-network theory has now been absorbed, constitutes an assemblage of several strands of Latour's work from across his career: science and technology studies (STS); critiques of Modernism; geopolitics; semiotics; and philosophy (Delchambre and Marquis, 2013). AIME sets out to construct a systematic description of the different ontological systems that co-exist to describe contemporary ways of being (Ricci et al., 2015). Modes of existence are the ontological features of the world. They are social, technical, semiotic and material conglomerations such as *politics*, or *technology* or *morality*, that constitute the multi-realist ontology that Latour has concerned himself with (Berliner et al., 2013). Latour has identified

fifteen such modes, labelled through the use of a series of notations: thus, politics is [POL], morality is [MOR] and technology is [TEC] – this last mode (for now) will be returned to later. Subsumed within AIME, an actor-network is now designated [NET] (in the original French, [RES], from *acteur-réseau*), just one amongst fifteen, although pivotal to AIME as the starting point for any investigation (Conway, 2016; Latour, 2013). Elements of AIME have begun to be employed through empirical as well as philosophical explorations of legal theory (McGee, 2014), and politics and postpolitics (Tsouvalis, 2016), as well as education (Decuyper and Simons, 2019; Tummons, 2019, 2020).

The modes are all are of equal importance, but occupy 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 any mode can work with or alongside any other when joined in a *crossing*, as I shall discuss below): the first explains how beings come into existence and then maintain themselves or are maintained by others; the second encompasses tools, objects, and other artefacts; the third encompasses organisational and/or group responsibilities; the fourth encompasses the economy, and the fifth provides the empirical starting point for the inquiry as a whole (Latour, 2013: 488-489). Finally, each mode is defined through four aspects: 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 specific mode, drawing on the speech act theory of Austin (1962)), 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).

An actor-network, now labelled [NET], remains ‘the same’ within AIME as it is within actor-network theory: that is to say, as constituted of both human and non-human actors, and characterised by the *principle of symmetry*, a paradigmatic element of actor-network theory which states that humans have no *a priori* difference in ontological status from non-humans (Fenwick and Edwards, 2010). ANT (mindful of its post-structural ancestry) was never intended to be an overarching explanatory sociological framework (Latour, 2005). Thus, within AIME, [NET] becomes only the starting point for the inquiry, a way to trace the heterogeneous elements of those courses of action that as researchers we are interested in. [NET] is one of the fifteen modes, all equally important but all doing different things, speaking to different ontologies. Consider the two university curricula, physics and management, explored by Nespors (1994). From an actor-network perspective, it is straightforward (as it were) to describe both in terms of human and non-human actors, of artefacts, routines, and various spatial as well as temporal arrangements. Nespors researches and writes as an ethnographer as well as using ANT (see, for example, Nespors, 2011). The physics and business departments/curricula are both made up of networks of human and non-human actors, all accomplishing the delivery of the curriculum in question. But they are self-evidently not ‘the same:’ the practices of a physics department are clearly different from those of a management department. And the ways in which they are different from each other – as actor-networks – are clearly of a different quality and order to the differences between the policy actor-networks of the Bologna Process (Sarauw, 2016) and the curriculum actor-networks of the teaching profession (Mulcahy, 2011).

We therefore need to find a way to undertake conversations about one actor-network, one [NET], in contrast to another. In order to illustrate this problem, Latour (2013: 58) gives the example of three texts: a novel, a legal testimony, and an academic thesis. It would be a mistake to read a thesis, believing throughout that it was in fact a novel: drawing on Whitehead (see, for example, Latour, 2011), Latour argues that for any situation or phenomenon to be explained, we need to consider how to make sense of the explanatory account that is to come. Is the text that we have in front of us a novel, or is it a thesis, or is it something else? Each will have its own distinctive ways of working, of talking, of establishing truthfulness, of how it is to be interpreted. Within AIME, this is described as the *pre-position mode*: [PRE]. Whatever it is that we are interested in exploring – a text, a curriculum, a university department – must therefore be understood firstly in [NET] mode, through which we can trace the network of associations and connections of human and non-human actors as far as necessary, and secondly in [PRE] mode, through which we can qualify the *types* of associations and connections that allow the [NET] to extend. Thus, we can use the [NET-PRE] *crossing* (the term used within AIME to describe how different modes can work together) when constructing our accounts. From the perspective of AIME, it is only, and necessarily, through [PRE] that the networks [NET] that we will go on to describe can be variegated, rendered “in full colour” (Conway, 2016: 49). However, a balancing act has to be established: Latour does not arrange the fifteen modes in a hierarchy of any sort, and yet the [NET-PRE] crossing “authorizes the entire inquiry” (Latour, 2013: 63), raising the interesting (though unanswered by Latour) question as to whether it is in the crossings rather than the modes that differing or even competing priorities might be ascertained.

Third step: resolving category mistakes and generating accounts

Thus far, I have introduced five of Latour’s fifteen Modes of Existence and focussed particularly on two of them – [NET] and [PRE] – and introduced the notion of the *crossing* between two modes as a way to generate further insights. A second way in which we can use the crossings between modes to extend our inquiries is through the identification, explication and avoidance of *category mistakes* a concept taken by Latour from Ryle (1949). Category mistakes are ontological mistakes. When something that consists of one property is presented as consisting of a different property, then a category mistake in relation to that thing has been made. It is by disambiguating the ways in which we make sense of the phenomenon being discussed, that such category mistakes can be resolved. When we confuse or conflate real things or beings, which are referred to within AIME as *beings of reproduction* [REP], for the ways in which we write or talk about them, which are referred to within AIME as arranged in chains of information and understanding or *reference* [REF], a category mistake of the [REP-REF] type occurs. [REP-REF] is therefore our second example of a crossing between two modes. To provide an example derived from higher education research, we can argue that the ways by which we attempt to establish validity in the assessment of reflective practice within a teacher education curriculum constitutes a category mistake as it unproblematically conflates the assessment of reflective practice within the teacher education curriculum with being a reflective practitioner within the teaching profession (Tummons, 2020). In this way, Latour takes up Ryle’s notion of the category mistake as a key feature of AIME, suggesting that significant numbers of category mistakes bear on the different modes of existence; but thanks to systematic empirical inquiry, we can resolve these and, by doing so, construct our accounts (Latour, 2013: 17-18).

At this point, it is worth noting that AIME is not a positivist project that seeks to uncover the ‘only true condition’ of the places, practices or people that the ethnographer wishes to do explore through research; nor is it a postmodernist project that permits, let alone welcomes, multiple truths that are posited as being of equal merit or veracity. Resting on its actor-network ancestry, any account of the social world will always be partial and prone to degrees of over-simplification and therefore it falls to the ethnographer and/or the reader to be mindful of this and to be modest in the claims that are made and cognizant of the effects of the over-simplifications that are used (Law 1994, 2004). Throughout the research process, it is imperative that the uncertainties that are bound up in the research are foregrounded. And yet at the same time, we can make our accounts of the world more reliable, more robust and more trustworthy, through continuing to engage in empirical research, drawing on increasingly sophisticated tools, new techniques, more finely-ground lenses and so on, so that the chains of reference [REF] that we construct around and across the world can become richer and stronger. It is from this standpoint that we need to understand Latour’s call for “objectivized knowledge” (Latour, 2013:51): objectivized and accurate, endeavouring to be truthful, but always mutable, open to new interpretation and investigation, never fixed or absolute.

Fourth step: retracing ethnographies of higher education

Universities have been described or categorized in different ways. There are other sites and spaces within which higher education is enacted; nor are universities hermetically sealed from the rest of the social world. But I am focusing on universities for pragmatic reasons (and in the empirical discussion that follows I will limit myself to just one, in order to keep this inquiry at a manageable scale). Examples of how universities have been discursively constructed include: as being “enacted through academic practice” (Decuyper and Simons, 2019: 228); as moving over time across and through a number of different models of operation (Barnett, 2011); and as sites that are made up of collaborating as well as conflicting agglomerations of cultures and practices (Becher and Trowler, 2001; Trowler, 2008). Accounts such as these (once again, necessarily only partially referred to here) draw on different theories in different ways. So, if we were to insist on yet another account of the university, this time informed by AIME, then what kind of research would be needed, what kinds of empirical work would we rest our conclusions on, and what kinds of understandings might emerge from all of this?

Let me provide an example: it is derived from ethnographic research, but this is simply a reflection of my own field and is not intended to exclude other approaches to empirical or conceptual research. Over the last few years I have been fortunate to be part of a team of researchers that has been exploring the provision of *distributed medical education* (DME) in North America (for what follows, see: MacLeod et al., 2015, 2016, 2019; Tummons et al., 2015, 2016, 2018). 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 bulk of the academic staff are physically to be found, and a *satellite campus* where the smaller group of students is to be physically found, engaging with the curriculum through video- and audio-enabled links to the main campus. These two campuses are geographically distant from one another, but linked through a network of technologies, staff, students, and processes. We have been exploring the ways in which this distributed medical education curriculum is enacted, revealing the workarounds, improvisations and exigencies that characterise the practices of the staff and students who are 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 unproblematic from a pedagogical perspective. This research has focussed 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 in many ways typical of professional curricula within higher education broadly as well as medical education specifically. One of our findings was that the accomplishment of the DME curriculum rested on a heterogeneous network of technologies and people, and on activities ranging from the practice of lecturing to the uploading of PowerPoint slides, from the capturing of questions asked in the lecture room to the adjustment of where people stand for the camera that relays their image to the other campus. The work of academic staff in particular relied so profoundly on the work being done ‘behind the scenes’ by the technical staff (although we observed many occasions when the curtain was lifted, such as when an adjustment to a specific ICT tool was required), that the work of the one *could not be made sense of* without considering the work of the other. The academic work relied entirely on the enrolment and engagement of non-academic staff in order to be set in motion.

How might we begin to reframe our account of this DME curriculum if we were to draw on AIME, to recast our account using our ontological toolkit? We would need to undertake a two-step process. First, we need to remember that our starting point remains the network of human and non-human actors that make up the medical education curriculum, now understood as [NET], the mode that serves to remind us, as ethnographers, that the medical education curriculum consists of a heterogeneous series of associations of human and non-human elements. Second, we need to qualify the *type* of connections that allow this [NET] to extend, and to do this we need to establish the pre-position [PRE]. In this way, we can state that our actors – human and non-human, are all ‘*in medical education*’ [PRE], a quality that has been revealed through the empirical inquiry thanks to the accounts of the research participants who have been speaking as they do about their work, observed as they get to grips with the classroom computers, who have generated documents that have been read and talked about with by the research team, and so forth. Simply put, they are the people who are enrolled within the [NET]: educators, course administrators, medical professionals, students, simulated patients, audio-visual technicians. This [NET] includes lots of non-human actors as well, of course, and many of these are different forms of technologies [TEC] ranging from laptop computers to medical simulation mannequins (within the [TEC] mode, the sophistication of the materials used is immaterial – what matters is the technological use that materials are put to). For the present, we do not need to be concerned with these [TEC] beings, just so long as we remember that they are here. It is the heterogeneous nature of the human actors that is of interest for the present.

The limiting of this account rests on nothing more robust than a practical concern for scale. There are no ontological, institutional, or geographical barriers that might require us to restrict fieldwork. To put it another way, this medical education [NET], just like any other [NET], does not have any *a priori* boundaries, notwithstanding the fact that different domains are indeed qualitatively different, which we know thanks to [PRE] (Latour, 2013: 38). The heterogeneous practices, elements, or habits that we might choose to follow are not bounded by any inherent essence that marks them out as being within different domains, from the point of view of the network(s) that we are interested in tracing. At certain points across the network, all of the human actors – clinicians, students, technicians – are enrolled within a particular network of

heterogeneous elements that are working to accomplish particular ends that pertain to the work being done in and through the curriculum as a whole: this is the pre-condition [PRE] of the network [NET] that we are interested in. There are no 'naturally occurring' boundaries to the [NET] – we continue to abide by Latour's earlier exhortations to 'follow the actors' (Latour, 2005) – apart from those that we might establish due to the practicalities of needing to get our research written, or the necessity of obtaining appropriate ethical permission to continue, or to stop our fieldwork and grade some essays instead.

What I want to foreground here pertains to the human actors who are enrolled within these networks (the non-human actors belong to a different part of the story: they are not forgotten, but there is no space for them at the moment, in this account). Specifically I want think about these actors, the 'medical education' actors found within our previously published work. Our research into the DME curriculum led us – required us – to follow not only academic and clinical staff but also technical and administrative staff in order to establish the [NET-PRE] of the medical education curriculum, which conspicuously requires more than 'just' academics in order to accomplish academic work and practice.

Some conclusions: academic work is never only done by academics

The first strand of my argument is that academic work is always and necessarily not only done by academics. It seems right to agree with the ethnographer who notes down that the work of people who are not 'academic people' (that is, they are not professors, PhD students, undergraduates, or teaching assistants, for example) is still necessary for the accomplishment of academic work. In doing so, we draw on research that has explored contemporary working (as distinct from specifically researching or teaching or administrative) practices in higher education which we can designate as coming together to constitute knowledge of the [REF] mode: simply put, we can say that we know things about how universities are constituted (materially, semiotically, geographically) and what the people within them do.

But if we accept that the 'academic' is necessarily accomplished in part by people who at first look are *not* academic (the technicians, the professional services staff, and so forth) then we must address the challenge posed by those accounts of higher education that posit the quality or essence or nature of 'the academic' in contrast to the quality of 'the neoliberal', 'the administrative' or 'the managerial' through drawing on a broader, critical, and oftentimes Foucauldian, discursive construction of the academy and of contemporary academic work/practice (Shore and Wright, 1999). Notwithstanding the ways in which we might position ourselves in relation to these, it is the extent to which we find an ontological bifurcation between 'the academic' and 'the neoliberal' or 'the academic' and 'the administrative' that I wish to problematize – and which the theoretical as well as empirical affordances of AIME allow us to explore.

I have already established that it is highly problematic to argue that the academic curriculum is accomplished only by academic members of staff when in fact it requires others such as audio-visual technicians. Yes, the university is enacted through the practice of the academic: but it is not only so enacted. It is also enacted through admissions officers, course administrators, quality assurance officers – roles that are sometimes performed by professional services/administrative staff, but also, invariably, by staff with academic contracts as part of their academic service (Whitchurch, 2006). University academics award grades to undergraduate

essays and serve as external examiners for doctoral candidates' viva voce examinations, processes that inevitably lead to quantifiable measures that contribute to an audit process or to a league table (Shattock, 2012). Students attend guest lectures given by journalists, industrialists, or conservationists (Decuypere and Simons, 2019) – all people whose work is entirely outside academia, but who nonetheless are contributing in some way to how 'the academic' is performed, particularly in the case of those professional or technical degree subjects that require external validation or endorsement (Becher and Trowler, 2001).

My argument here is that we *know*, as objectivized knowledge of the [REF] mode, that lots of different kinds of people are always and necessarily involved within the university sociomaterial assemblage that I am proposing ought to be understood firstly in terms of a [NET]. We also know that *any* [NET] that we might choose to trace defies circumscribing or limiting through boundaries that are anything other than arbitrary. It is not the specific work of different categories of human social actor that variegates a [NET]; rather, it is those qualities of the [NET] that, as ethnographers, we can establish in terms of pre-condition [PRE] that allows the character or nature of the [NET] to emerge and become a focus for our inquiry. Depending on the kinds of things that we might wish to explore through our inquiry, we might view a university or a faculty or a department as distinct domains [NET-PRE], all constituted differently in terms of the human and non-human actors who are enrolled in the ongoing processes of ordering that are required to maintain the network. And, as I have explored above, this might be a medical education department or a physics department. We might even focus more precisely yet on the academic work that is done within a department as distinct from the administrative or the managerial, so long as we remind ourselves that it is not the [NET] that throws up the barriers to our inquiry as we seek to follow the actors; rather, it is us, as ethnographers, who make decisions as to how far we wish to follow them based on our standpoint, our inclination, our capacity to do so. We can be more interested in the academic rather than the managerial, assuming that they can be neatly bifurcated – clear and discrete definitions of what academics do are far from straightforward to construct (Ashwin, 2009). But we must still remain sensitive to how 'the academic' is accomplished. Should we include or ignore those human actors who are not 'academic'? Ought the quality of 'academic' be ascribed primarily to people, effectively maintaining an anthropocentric interactionist standpoint, or should it always be ascribed to the non-human as well as human actor, thereby foregrounding the principle of symmetry (Tummons and Beach, 2019)?

Points of departure: what might we ask AIME to do?

There are different kinds of theory (Thomas, 2007; Tight, 2018): where does AIME fit in? Firstly, it is important to note something concerning the genealogy of AIME. The label 'mode of existence' is no more an original construction on the part of Latour than is his employment, within AIME, of the construction of the 'category mistake': these pertain to Souriau (2009) and to Simondon (1958), and to Ryle (1949), respectively. Latour wears these and other references proudly, both in the AIME book and, more extensively, within the explanatory notes that are contained within the AIME website. Arguably, it is in the ways in which these – and other – constructs are brought together in the service of his (longer standing) inquiry into the ontology of the Moderns, that a more distinctive, not to say unique, standpoint emerges. With some degree of multiplicity already signified within the nomenclature, should it pose a problem to us if it is taken up and used in different ways by different researchers and writers? There are many different versions of

ethnography, after all (Hammersley, 2018). Why should some constructs and frameworks be permitted to be permissive, whilst others are held within more strict conditions? From this standpoint, we can allow theory to develop and evolve whilst simultaneously allowing us to use it to generate explanatory frameworks. Thus, just as actor-network theory evolved over time, so we might argue that the AIME project contains, amongst other things, a sort of built-in obsolescence: Latour acknowledges that the fifteen modes that he describes might not be the only ones, and others have already begun to add to them: a mode of academic existence (not yet given a three-letter notation, however), a mode of education [EDU], and a mode of recognition [REC] derived from the philosophy of Axel Honneth (Decuyper and Simons, 2019; Tummons, 2019, 2020; Ward, 2017). And the establishment of others may well be necessary, not least in order to address the criticisms of AIME as being only *selectively* pluralist in the different ontologies that it recognises (Delchambre and Marquis, 2013). Nor is this the only criticism that will need at some point to be addressed. For Hämäläinen and Lehtonen (2016), the modes of existence are characterised by a ‘mind-boggling’ heterogeneity. For Edward (2016), they take account of history but not geography. And for Delchambre and Marquis (2013) they lack sufficient concern for method or for the reflexivity of the researcher. Berliner et al. (2013) likewise posit that the method and methodology that AIME might require remains obscured from view. Methodological ambiguities remain. Whilst Latour has long eschewed a clear statement of method or methodology (Latour, 2005), actor-network theory has been described as requiring an “insistence on painstaking ethnographic research” (Kipnis, 2015: 43). If ANT is ethnography, is AIME therefore multi-sited ethnography (Berliner et al., 2013)?

What can AIME do, therefore? From a typically pragmatic standpoint, Latour suggests that “we want to be able to say that one thing is rational and another irrational, this thing true and that other thing false” (Latour, 2013: 94). Drawing on his *ontological toolkit* (Hämäläinen and Lehtonen, 2016), I have, in this article, attempted to outline the ways by which the [NET-PRE] crossing can be used to situate an account of the university informed by AIME. In sum, the thesis that I am proposing is that universities draw on technologies in particular ways, speak of and establish truth statements about the world in particular ways, and certainly occupy a distinctive discursive, social and material position within a pluralist common world (Weber, 2016). If (higher) education is a mode of existence [EDU] (Tummons, 2019, 2020), then further empirical inquiry as well as theoretical immersion within and using the Latourian modes will be needed in order to be able to establish the ways in which this mode would work according to Latour’s own system of classification. Any theory, however, has to earn its keep, and it is too early to say what AIME might be able to do for the ethnographer of higher education, not least as the one element of AIME that is better known – actor-network theory – lacks the penetration or saturation within the field of higher education research enjoyed by other frameworks such as threshold concepts or communities of practice (Tight, 2014; Tummons, 2018). But if AIME can help us to generate accounts of higher education that allow us to reject the artificial divides between academics and non-academics as much as between humans and non-humans, then it will have begun to justify its inclusion on reading lists, in research seminars, and in academic articles such as this one.

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