
The Translation Zone: Between Actor-Network Theory and International Relations

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Andrew Barry

University of Oxford, UK

Abstract

This article examines the problem of how to translate actor-network theory into the field of international relations, and develops three arguments. Firstly, the article draws on Emily Apter's notion of the 'translation zone' both to rethink the concept of translation in actor-network theory and to highlight the relation between translation and politics. Secondly, the article interrogates the relation between actor-network theory and empirical research, emphasising the ways in which empirical case studies can have theoretically generative implications. Indeed, actor-network theory should not be understood as a body of theory that can be simply applied to a range of empirical examples. Finally, the article examines a number of problems that international relations poses for actor-network theory. I argue that actor-network theory needs to be adjusted and reconfigured in response to the challenge of international relations.

Keywords

Actor-network theory, materials, political expertise, situations, translation

In 1981, Michel Callon and Bruno Latour provided one of the earliest formulations of what later became known as actor-network theory in a paper entitled 'Mapping the Leviathan: How Actors Macrostructure Reality and How Sociologists Help Them Do So'. Their intervention in social theory was, in part, an implicit critique of the dominant school of French sociology of Pierre Bourdieu. At the same time, their analysis resonated with Foucault's explorations of technologies of power and rationalities of government in the late 1970s. But they did not explicitly use the term actor-network in their 1981 paper, and the parallels between their project and Foucault's were not addressed. At this time, Callon and Latour drew explicitly on the work of historian

Corresponding author:

Andrew Barry, School of Geography and the Environment, Oxford University, South Parks Road, Oxford, OX1 3QY, UK.

Email: andrew.barry@ouce.ox.ac.uk

and philosopher of science Michel Serres and, in particular, his concept of translation. In this article, I take a cue from this early paper to consider the challenge of translating actor-network theory into the field of international relations. My contention is that actor-network theory cannot be simply applied, as a theory, to international relations, however this is conceived. Rather, we must pose the problem of the relation between actor-network theory and international relations in another way. What demands does the field of international relations make on actor-network theory? How difficult, in other words, is it to translate actor-network theory into a form that makes it relevant to international relations? The article is in three parts. Firstly, I consider how the problem of translation has been addressed in actor-network theory. Secondly, I examine why the study of scientific practice, which lay at the heart of the early work of Callon and Latour, should be of particular relevance to international relations. Thirdly, I outline three ways in which the field of international relations may raise new questions for actor-network theory. Actor-network theory, as we shall see, is only translated, as actor-network theorists might expect, with difficulty.

To begin, the concept of translation has three senses within actor-network theory. Firstly, translation was understood as a form of exercise of power.¹ For Callon and Latour, translation always implied modification. In actor-network theory, the actor does not refer to an individual agent, but rather an entity whose existence depends upon their network of alliances within a shifting, heterogeneous and expansive relational field: 'actors can bond together in a block comprising millions of individuals, they can enter alliances with iron, with grains of sand, neurons, words, opinions, and affects', as Callon and Latour put it.² The identity of an actor necessarily mutates as it enters into, or is enrolled or mobilised into, a field of relations with other entities. It is the relations that matter, not the actors in themselves. Although Callon and Latour nowhere mention international relations in this early formulation, it is as if, in writing about alliances, mobilisations and enrolment, and words, affect and materials, they always had a particular vision of international relations in mind. Where Foucault had taken the confined spaces of the prison and the hospital as critical sites for the exercise of power, Callon and Latour envisioned more open spaces, which were defined not by territorial boundaries but by the shifting and contested spaces of scientific and technical practice.³

Secondly, the term translation implied both movement in space and the transformation of space. Callon and Latour's 'sociology of translation' was always a geographical

1. 'By translation', Callon and Latour noted, 'we understand all the negotiations, intrigues, calculations, acts of persuasion and violence, thanks to which an actor or force takes, or causes to be conferred on itself, authority to speak or act on behalf of another act or force' – Michel Callon and Bruno Latour, 'Unscrewing the Big Leviathan: How Actors Macrostructure Reality and How Sociologists Help Them Do So', in *Advances in Social Theory and Methodology*, eds Karin Knorr-Cetina and Aaron Cicourel (London: RKP, 1981), 279. In French, the verb 'traduire' (to translate) has a legal as well as a literary meaning.

2. *Ibid.*, 292.

3. Andrew Barry, 'Lines of Communication and Spaces of Rule', in *Foucault and Political Reason: Liberalism, Neo-Liberalism and Rationalities of Government*, eds Andrew Barry, Thomas Osborne and Nikolas Rose (London: UCL Press, 1996), 123–42.

approach, although it took some time for it to be recognised as such. In retrospect, the relation between actor-network theory and political geography should have been clearly evident in Latour's *Science in Action*, which ended with a remarkable analysis of the circulation of records necessary for the generation of maps about foreign lands.⁴ In this way, the use of what Latour called inscription devices, including compasses and sextants, enabled imperial centres both to visualise distant lands and, in this way, to 'act at a distance'. In effect, actor-network theory turned out to be an account of the relations between knowledge and empire. The problem addressed by actor-network theory, as Latour argued at the time, was how to rewrite Machiavelli's *Prince* for 'machines as well as machinations'.⁵ Feminist and post-colonial critics noted that in this early formulation, actor-network theorists tended to describe this relation from the point of view of the empire or the Prince, not his subjects. This optical distortion was later corrected. Subsequent research sought to make non-experts, including activists, affected populations and patients, central to the account of the relations between science and politics.⁶

But translation should not just be understood as a form of empire-building, which leads to the progressive enrolment of human and non-human allies into ever more durable relations, as the earliest formulations of actor-network theory might suggest. The actor-network theorist does more than trace the reliance of the Prince on an array of non-human instruments and inscription devices,⁷ conceiving of translation in the literary as well as the geographical or political sense of the term.⁸ As literary translators know, translation does not simply replace the original with a word-for-word equivalent; nor can translation be entirely faithful to the original. Indeed, translation gives new life to a text in other times and places for, as the literary theorist Emily Apter observes, translation is 'a technology of literary replication that engineers textual afterlife without recourse to a genetic origin'.⁹ Translation is a process of replication or imitation *and* differentiation at the same time. This observation lies at the heart of actor-network theory, and points to the resonances between actor-network theory and the sociology of Gabriel Tarde,¹⁰ whose work was later taken up by Gilles Deleuze amongst others. For Tarde, the social process of imitation always involves differentiation or variation, and the possibility of invention.¹¹

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4. Bruno Latour, *Science in Action* (Milton Keynes: Open University Press, 1987), 215–232.
 5. Bruno Latour, 'How to Write the *Prince* for Machines as well as for Machinations', in *Technology and Social Change*, ed. Brian Elliott (Edinburgh: Edinburgh University Press, 1988), 20–43.
 6. Andrew Barry, *Political Machines: Governing a Technological Society* (London: Athlone, 2001), ch. 8; Michel Callon, Pierre Lascoumes and Yannick Barthe, *Agir dans un monde incertain: Essai sur la démocratie technique* (Paris: Seuil, 2001).
 7. John Law, *Organizing Modernity* (Oxford: Basil Blackwell, 1994).
 8. Bruno Latour, 'Powers of Association', in *Power, Action, and Belief*, ed. John Law (London: RKP, 1986), 264–80.
 9. Emily Apter, *The Translation Zone* (Princeton, NJ: Princeton University Press, 2006), 225.
 10. Andrew Barry and Nigel Thrift, 'Gabriel Tarde: Imitation, Invention and Economy', *Economy and Society* 36, no. 4 (2007): 509–25.
 11. Gabriel Tarde, *Les Lois de l'imitation* (Paris: Les empêcheurs de penser en rond, 1999); Gilles Deleuze, *Difference and Repetition* (London: Athlone, 1994).

The recognition that translation is a literary as well as a political and geographical process helps make sense of one weakness in early formulations of actor-network theory. For actor-network theorists wrongly assumed that the hybrid actor-networked world is a world without clear boundaries, divisions or structural inequalities in resources. The world of actor-network theory appears to be a world in which all translations are in principle possible, and structural inequalities are flattened. It is a world of circulating references,¹² fluids and flows,¹³ in which rigid borders do not exist, or are unimportant and untheorised. However, as literary theorists of translation have argued, translation is both a regulated and a contested and politicised process. Apter coins the concept of ‘translation zone’ to direct us to the complex and politicised borders that both reproduce distinctions between languages and function as sites within which diasporic languages may exist and evolve. As she observes, even in a world of hybrid dialects and rapidly evolving languages, some terms are nonetheless untranslatable, or resist translation. The translation zone is a space where ‘transmission failure is marked’,¹⁴ not a space within which all translations are either easy or possible. The translation zone is a politicised zone, ‘not an amorphous condition associated with postnationalism, but rather a zone of critical engagement that connects the “l” and the “n” of transLation and transNation’.¹⁵ Rather than start her analysis of translation from the centre, and work outwards, Apter directs our attention to those contested spaces within which the practice of translation turns out to be challenging and problematic. Indeed, she explained the notion of the translation zone through the metaphor of international conflict:

The expression *translation zone* could well refer to the demarcation of a community of speakers who achieve an ideal threshold of communication (the utopia of Gottfried Wilhelm Leibniz, Wilhelm von Humboldt, and Jürgen Habermas). But when war is at issue, it makes more sense to define it as a translation no-fly zone, an area of border trouble where the lines dividing discrete languages are muddy and disputatious; where linguistic separatism is enforced by high surveillance missions; or where misfired, off-kilter semantic missiles are beached or disabled. Construed in terms of border patrols and military operations, the paradigm of a translation zone at war may be applied beyond the Balkans to the way in which monolingual nations police their internal linguistic borders and to revolts against the computer as a *machinic* labor force in the economy of global translation.¹⁶

All of these senses of translation – the political, the geographical and the literary – should be held in mind if we are to understand the existing and potential relations between actor-network theory and international relations. One of the things that actor-network theory

12. Bruno Latour, ‘Circulating Reference’, in his *Pandora’s Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999), 24–79.

13. Annemarie Mol and John Law, ‘Regions, Networks and Fluids: Anemia and Social Topology’, *Social Studies of Science* 24, no. 4 (1994): 641–71.

14. Apter, *Translation Zone*, 5; see also Emily Apter, *Against World Literature: On the Politics of Untranslatability* (London: Verso, 2013).

15. *Ibid.*, 5.

16. Emily Apter, ‘Balkan Babel: Translation Zones, Military Zones’, *Public Culture* 13, no. 1 (2001): 65–80.

brings to international relations is a particular concern with the place of the non-human in social and political life. In this way, it forms part of what has been called 'the material turn' in the social sciences.¹⁷ I return to consider the critical importance of this point later. However, whatever actor-network theory is taken to be, it certainly has to be translated in its encounter with the field of politics in general and international relations in particular. It is not a theory that can or should merely be applied, without distortion or modification.

The philosopher Annemarie Mol has made a related point. She reminds us that actor-network theory was never proposed as a theory that could be deployed across a range of different contexts.¹⁸ In retrospect, the use of the term theory was probably a mistake in so far as it suggested a clear hierarchy between theory, which is thought to generalise across a range of particular examples, and empirical case studies, which are necessarily specific. By contrast, actor-network theory is an approach that always has had to be adjusted, responding to empirical situations as they were encountered. The case or the field should never be considered as an example which merely illustrates or applies established theoretical principles; it should tell us something new that makes application difficult or problematic. In this respect, actor-network theory has clear affinities with some approaches to social anthropology, in so far as anthropologists have long been interested in the way in which ethnography can challenge Euro-American categories and, in this way, foster theoretical insight.¹⁹ All too often, social theorists have treated cases merely as examples that illustrate, confirm or refute very general claims about society, politics or the economy. In this way, theorists often tend to assume a clear hierarchy between theory and evidence, rather than attend to the ways that empirical research can itself be theoretically generative. In so far as international relations is also guilty of a tendency to over-theorise in advance of any empirical research, or to assume that theory takes the form of distinct paradigms that determine the way in which we have to conceive of international relations, actor-network theory offers a different way of thinking theoretically. Viewed from the perspective of actor-network theory, the field of international relations should not be understood as a field of examples, which either illustrate or test general theoretical claims; nor does actor-network theory represent a distinct paradigm. Rather, the events of international relations should, in principle, generate problems and questions, which may force actor-network theorists to shift direction, to pause and to think differently.²⁰

17. Tony Bennett and Patrick Joyce, eds, *Material Powers: Cultural Studies, History and the Material Turn* (London: Routledge, 2010); Bruce Braun and Sarah Whatmore, eds, *Political Matter: Technoscience, Democracy, and Public Life* (Minneapolis: Minnesota University Press, 2010); Diana Coole and Samantha Frost, eds, *New Materialisms: Ontology, Agency, and Politics* (Durham, NC: Duke University Press, 2010).

18. Annemarie Mol, 'Actor-Network Theory: Sensitive Terms and Enduring Tensions', *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 50, no. 1 (2011): 253–69.

19. Eduardo de Vivieros de Castro, *From the Enemy's Point of View: Humanity and Divinity in an Amazonian Society* (Chicago, IL: Chicago University Press, 1992).

20. Isabelle Stengers, 'The Cosmopolitical Proposal', in *Making Things Public: Atmospheres of Democracy*, eds Bruno Latour and Peter Weibel (Cambridge, MA: MIT Press, 2005), 994–1003.

As a form of empirical theory or philosophy,²¹ actor-network theory thrives on details and fragments of evidence, which are never likely to add up to a complete picture but will nonetheless reveal something that was perhaps unexpected or unanticipated. This does not mean that the empirical studies of actor-network theorists are merely descriptive, any more than the field research performed by the anthropologist or the geographer is merely descriptive. In practice, the researcher necessarily comes into the field equipped with a range of pieces of theoretical equipment, which may need to be tried out, modified or abandoned, but never simply applied. Part of the difficulty of formulating actor-network theory as a set of principles or concepts is that it should be adjusted in response to the experience of empirical research.

In what follows I use the term actor-network theory as shorthand for a series of approaches that have evolved over the past 30 years. Certainly, information theory, following the work of Serres, and semiotics, following the work of Greimas, provided early models for actor-network theory – hence the prominence of the terms actor and network. However, since the early 1980s many formulations of actor-network theory have emerged, the concept of the actor has been abandoned and the semiotic concepts, which informed Latour's early work in particular,²² have been radically reformulated. Later actor-network theory came to encounter, in particular, the process philosophy of A.N. Whitehead,²³ the thermodynamic politics, or 'cosmopolitics', of Isabelle Stengers,²⁴ theories of performativity,²⁵ Haraway's sense of the multiplicity of identity,²⁶ and Foucault's analyses of discipline²⁷ and governmentality.²⁸ More recently, the sociology of imitation developed by Gabriel Tarde in the late 19th and early 20th century has provided a model,²⁹ along with the metaphysics of modes of existence of Etienne Souriau.³⁰ Yet, above all, actor-network theory has been transformed through its encounters with a variety of empirical sites and historical materials. Through these encounters, actor-network

21. Annemarie Mol, *The Body Multiple: Ontology in Medical Practice* (Durham, NC: Duke University Press, 2002).

22. Bruno Latour, *Les Microbes: Guerre et paix suivi de irréductions* (Paris: A.-M. Métaillé, 1984).

23. Bruno Latour, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999).

24. Bruno Latour, *The Politics of Nature* (Cambridge, MA: Harvard University Press, 2004); Isabelle Stengers, *Cosmopolitics II* (Minneapolis: Minnesota University Press, 2011).

25. Michel Callon, 'What Does It Mean to Say that Economics Is Performative?', in *Do Economists Make Markets? On the Performativity of Economics*, eds Donald Mackenzie, Fabian Muniesa and Lia Siu (Princeton, NJ: Princeton University Press, 2007); Michel Callon, Yuval Millo and Fabian Muniesa, eds, *Market Devices* (Oxford: Blackwell, 2007).

26. Mol, *Body Multiple*.

27. John Law, 'On Power and Its Tactics: The View from the Sociology of Science', *Sociological Review* 34, no. 1 (1986): 1–38.

28. Andrew Barry, *Political Machines: Governing a Technological Society* (London: Athlone, 2001).

29. Bruno Latour, *Changer de société – refaire de la sociologie* (Paris: La Découverte, 2005); Barry and Thrift, 'Gabriel Tarde'.

30. Bruno Latour, *Enquête sur les modes d'existence* (Paris: La Découverte, 2012).

theory has multiplied and mutated, explicitly resisting efforts to turn it into a set of procedures and laws which can be applied to a variety of examples. Actor-network theoretical studies are undoubtedly weakest when the theoretical ambitions that drive them overdetermine their analysis of empirical evidence. In principle, actor-network theory promotes a theoretically informed empiricism,³¹ and a commitment to experimentation in empirical research.³²

In this article I allude to these various shifts and movements where necessary. However, for the most part I address the question of the relation between actor-network theory and international relations in general terms, while recognising the evident limitations of such an all-encompassing approach. On the one hand, actor-network theory has to be understood as a shifting body of work, which incorporates a range of resources drawn from across the fields of philosophy, anthropology, sociology and the history of science. But on the other hand, the field of international relations is itself heterogeneous and multiple, with indistinct, porous and contested limits.³³ Moreover, many of the arguments of actor-network theory resonate with debates within international relations in ways that I am not able to explore here.³⁴ Bearing these limitations in mind, the remainder of this article addresses two sets of questions in turn. Firstly, what tools drawn from actor-network theory might be of greatest utility for those concerned with the study of international relations, however broadly this field is understood? Secondly, what problems might the study of international relations pose actor-network theory? How difficult, in other words, is it to translate actor-network theory into the field of international relations? And how might the empirical study of international relations generate problems that actor-network theorists have not yet considered?

Materials, Technologies, Politics

During the 1980s and 1990s actor-network theory developed largely in the emerging field of science and technology studies and, in particular, the sub-field of the sociology of scientific knowledge. At this time, it was not primarily known as a social theory at all, but rather as an increasingly influential approach in the sociology of science and technology. These origins remain significant, for the study of science and technology opened up

31. Gilles Deleuze with Claire Parnet, *Dialogues* (New York: Columbia University Press, 2007).

32. Georgina Born and Andrew Barry, 'Art-Science: From Public Understanding to Public Experiment', *Journal of Cultural Economy* 3, no. 1 (2010): 103–19.

33. Andrew Barry, Georgina Born and Gisa Weszkalnys, 'Logics of Interdisciplinarity', *Economy and Society* 37, no. 1 (2008): 20–49.

34. See, for example, R.B.J. Walker, *Inside/Outside: International Relations as Political Theory* (Cambridge: Cambridge University Press, 1993); Andrew Barry and William Walters, 'From Euratom to Complex Systems: Technology and European Government', *Alternatives: Global, Local, Political* 28, no. 3 (2003): 305–29; Martin Coward, 'Against Anthropocentrism: The Destruction of the Built Environment as a Distinct Form of Political Violence', *Review of International Studies* 32, no. 3 (2006): 419–37; Doerthe Rosenow, 'Dancing Life into Being: Genetics, Resilience and the Challenge of Complexity Theory', *Security Dialogue* 43, no. 6 (2012): 531–47.

the critical importance of studies of expertise for the anthropology of the contemporary and the question of the role of non-human agencies and forces in social and political life. In this way, actor-network theorists sought to reverse a move made by the sociologist Emile Durkheim who argued, in a critique of Gabriel Tarde, that the 'physical' environment had nothing to do with the 'social' phenomenon of suicide.³⁵ For Durkheim, there was a clear division between the proper domains of social and natural scientific research. By contrast, one of the tasks the early actor-network theorists set themselves was to attend to the agency of non-human actors, including the physical environment, in social and political life.

In this way, actor-network theory poses two immediate challenges for international relations. Firstly, it raises the problem of how to think through the significance of non-humans, including surveillance devices, pollutants, mineral resources and biological material, and international relations, however the latter is conceived. Secondly, science and technology studies direct us to the critical importance of scientific and technical knowledge to international relations, whether this knowledge is related to nuclear and biological weapons, climate change, carbon markets, genetically modified organisms, biodiversity or computer security. The challenge of actor-network theory, in the guise of science and technology studies, is not just to recognise the general importance of scientific institutions and epistemic communities in international relations, but to attend to the ways in which specific claims to scientific knowledge acquire a remarkable political and governmental importance. In short, international relations has to be concerned with the content of scientific knowledge claims and not just the social and institutional forms through which they are articulated.

Where might these challenges lead? I shall briefly describe two examples of the ways in which both material object and scientific knowledge play a part in international relations, drawing on my own research. Firstly, 15 years ago, when I was working on a book about the European Union, I became interested in the fact that the only visible sign of the EU in the neighbourhood of Goldsmiths College in south-east London, where I then taught, was an experimental air-quality monitoring zone. The observation was both surprising and instructive. For while the teachers, policemen and doctors of south-east London were regulated and employed by national and local institutions, the measurement of air quality was partly a European matter, the development of an air-quality monitoring zone acquired European support and measurements of air quality were based on European standards. In short, the molecular composition of the air became a matter of concern to international institutions in a way in which, for example, the educational curricula of London schools or the conduct of the Metropolitan Police was not. If one was to find international relations in this place, one needed to examine the political organisation of measurement or the constitution of what I have termed its metrological zones.³⁶ The presence of the European Union in south-east London rendered the air

35. Eduardo Viana Vargas et al., 'The Debate between Tarde and Durkheim', *Environment and Planning D: Society and Space* 26 (2008): 761–77.

36. Andrew Barry, 'Technological Zones', *European Journal of Social Theory* 9, no. 2 (2006): 239–53.

of this part of the city comparable to the air in Paris or Milan. More generally, if one wanted to list all those things that had been transformed through the development of the European Union, one would need to consider not just the political identities of European citizens, but also the molecular composition of things ranging from air to light bulbs or toxic chemicals.³⁷

A second example derives from fieldwork carried out along the route of the Baku–Tbilisi–Ceyhan oil pipeline in Georgia in 2004–5. This led to a brief investigation into the circumstances in which Donald Rumsfeld and Colin Powell became indirectly involved in the question of whether the pipeline should be buried one or two metres beneath the ground, an issue that had been discussed in meetings between the Georgian and US governments in the summer of 2004. For a period at least, the technicalities of pipeline construction became an issue of international politics. Fieldwork also led to the deliberations by the Trade and Industry Committee of the British House of Commons in London that had surprisingly come to be intensely interested in the synthetic material that joined two sections of pipe together, following the failure of the coating material in the winter of 2003–4. This interest arose following allegations that BP, which played a lead role in the construction of the pipeline, had failed to inform the UK government of the failure of the coating material even though the UK Export Credit Guarantee Department was in the process of deciding whether to support the project. In these circumstances, the House of Commons Trade and Industry Select Committee received reports about the technicalities of pipeline engineering and material science in Georgia; but at the time, this committee had no interest in the significance of the Rose revolution that had brought the government of Eduard Shevardnadze to an end in late 2003, or in the potential relation between the oil pipeline and the possibility of armed conflict in the Caucasus, which in the event did break out just three years later in August 2008.³⁸ In the Commons in 2005, the relations between Britain and Georgia were discussed only in the context of a controversy about the suitability and integrity of a pipeline coating material, not in relation to the potential for civil war or international conflict in the region. One of the lessons of science and technology studies in general, and actor-network theory in particular, is an empirical and methodological one. In the study of international relations, we should not ignore the significance of pipes, coating materials and air-quality monitoring devices to political life, but trace the importance of such objects wherever they may lead. Such materials and devices play an integral role in the conduct of government. At the same time, the design, construction and properties of materials and technologies can themselves become objects of international dispute. Rather than take the existence of such objects for granted, as a stable base on which the superstructure of international politics is subsequently erected, we have to recognise that their material existence can itself become a political matter.

37. Andrew Barry, 'The Constituents of Europe', speech at the opening of 'Making Things Public', Karlsruhe, 19 March 2005, available at: [http://on1.zkm.de/zkm/stories/storyReader\\$4881](http://on1.zkm.de/zkm/stories/storyReader$4881) (last accessed 7 December 2012).

38. Andrew Barry, 'Materialist Politics: Metallurgy', in *Political Matter: Technoscience, Democracy and Public Life*, eds Bruce Braun and Sarah Whatmore (Minneapolis: Minnesota University Press, 2010), 89–118.

The empirical examples I have just outlined are more than just empirical examples which can be readily added to the range of examples typically studied by those interested in international relations. After all, their study involves some understanding of specific fields of science and engineering, such as atmospheric chemistry and pipeline engineering. Social scientists, including theorists of international relations, have become attracted to natural scientific accounts of complexity and chaos in recent years, viewing such approaches as the source of new insights that can be translated into the social sciences. But one of the lessons of science and technology studies is that researchers in international relations also have to consider the importance of the more mundane accounts of materials and their properties, such as pipelines and air, which are routinely generated by natural scientists. The challenge of science and technology studies – in its actor-network theoretical version in particular – is to think through the relations between the molecular and the international. This is likely to involve a much closer attention to the practices of the natural sciences than has hitherto tended to exist in the discipline of international relations.

Although, as I have shown, it is necessary to address the importance of actor-network theory and science and technology studies for international relations, it is equally important to pose the question of the relation the other way round. In other words, we also need to address the problems that international relations poses for actor-network theory, and the forms of translation and modification that are necessary if this movement is to be achieved. Given that actor-network theory emerged as an approach to the study of science and technology, how does it need to be adjusted to the demands of the field of international relations, which may pose a different set of problems? In the remainder of this article, I address four key challenges posed by international relations to actor-network theory, none of which have yet been adequately addressed. One concerns the role of political expertise in political life. A second concerns the importance of secrecy, and, conversely, the growing importance of the idea and practice of transparency, in international relations. The third concerns the challenge that the importance of history might pose to actor-network theory. Finally, I return to the question of translation and its difficulty.

Politics, Expertise and Practice

One of the most influential accounts of politics in actor-network theory is not a study of what might conventionally be understood to be politics at all, but rather an analysis of medical practice. Annemarie Mol's *The Body Multiple* both developed from and challenged earlier accounts of the politics of science in significant ways.³⁹ Crucially, she researched a location, the hospital, which was not oriented towards the construction of alliances and the mobilisation of allies, but towards collaboration, coordination and care. As she demonstrated, hospital specialists were interested in establishing relations between multiple forms of existence of a disease as it was enacted through a range of

39. Mol, *Body Multiple*.

diagnostic techniques. In this context, the vocabulary of actor-network theory needed to be supplemented and modified. In particular, the reliance of actor-network theory on semiotics and information theory failed to attend sufficiently to the materiality of the body and the practical interventions of medicine in its transformation. In her 'praxiological' analysis, medical practice did not just construct new discursive identities, but acted on the body, multiplying its forms of existence. The politics of medicine in Mol's analysis revolved around the question of the ways in which medical practice creates new biomedical objects and materials.

But despite the brilliance of her analysis of medical practice, Mol's account of the ontological politics of the hospital provides a limited model for the analysis of politics in general, and international relations in particular. Indeed, she did not intend to provide such a model. Her analysis in *The Body Multiple* was more modest, and site specific. It derived from her ethnographic research in the hospital and could not be translated, without modification, elsewhere.⁴⁰ Indeed, if Mol's conception of ontological politics were simply applied outside of the space of the hospital, it would run the risk of being over-generalised, rendering everything a political matter, without interrogating how things become political in different situations and settings.⁴¹ In this way, a sense of the specificity of medical practice and the differences between, for example, the practice of doctors and the conduct of activists or regulators would not be recognised. Her doctors were engaged in the coordination of multiple forms of existence of a disease through a form of collaborative practice, which would be uncommon in the field of international relations, however this is understood. In short, the translation of actor-network theory into the field of international relations cannot readily be derived from Mol's work, but has to be thought afresh.

I have already stressed the importance of scientific and technical experts to the field of international relations. But in addition to such experts, the researcher in international relations is likely to come across a vast range of what I shall call political experts who possess diverse forms of political knowledge. The political experts routinely encountered in international relations exist in a whole range of organisations and groups: parliaments and governments, of course, but also non-governmental organisations (NGOs) and trade unions, as well as activist movements and militant groups,⁴² and multinational corporations. Some of these individuals may be known as political experts or analysts and some may not; some might not consider themselves to be experts, but have a form of political expertise, nonetheless, derived from political or professional experience as much as training. They are concerned in diverse ways with the problem of how to judge the political situations in which they are enmeshed, as well as how to intervene.

The study of political expertise poses a problem for actor-network theory. After all, actor-network theorists have argued, firstly, that scientific and technical practice is a form

40. John Law and Annemarie Mol, 'Globalisation in Practice: The Politics of Boiling Pigswill', *Geoforum* 39 (2008): 133–43.

41. Latour and Weibel, eds, *Making Things Public*.

42. Andrew Barry, 'Modest Witnesses: Donna Haraway, Science and International Relations', *Millennium: Journal of International Studies* 27, no.4 (1998): 869–83.

of politics and, secondly, that non-humans should be understood as part of the political realm. In effect, early actor-network theory sought to expand the domain of what we take to be political. But political experts, as I understand them, tend to have a much more restricted understanding of what is political at any one time. For most political experts, not everything is political. Some things might become political, or should become politicised, whether it is the private conduct of politicians, the causes of floods and other natural disasters, or pollution emanating from a particular factory, but generally they do not.⁴³

Natural scientific expertise is often expected – although not always – to be applicable at other times and in other places. But what is striking about many political experts is their situated understanding of politics. Political experts are invariably immersed in political action, keeping up with events as they unfold. The politician needs to know when to speak and what to speak about. The activist needs to understand not just the symbolism of protests, but also the ways in which urban space is policed, the degree to which social media sites are monitored or the time and location at which it might be most appropriate to act. The analyst employed to perform political risk assessment on behalf of companies investing in the Middle East needs to be able to judge the significance of press reports from the region. Not surprisingly, many political experts possess an expertise in a particular region, industry, institution or problem, and are aware of the shifting configuration of forces in that particular setting. The knowledge of the political expert is likely to have to be adjusted, or should be adjusted, as events unfold. Often the political expert has a particular concern with the significance of the near future and the recent past – a time period to which academic research has tended to be peculiarly blind.

The existence of political expertise, then, potentially poses a challenge to actor-network theory, which has offered its own analysis of politics as an alternative to the narrowly political expertise of those who think they are experts in politics. Arguably, actor-network theory had over-expanded the notion of politics, thereby forgetting any sense of the specificity of what is conventionally understood to be politics. Bruno Latour sought to address this oversight in a paper on the specificity of political speech first published in 2003. In this article he argued that political speech was not intended to make factual claims or to impart information at all. Rather, it had to be understood as a specific regime of enunciation, directed towards the formation of a collective:

If we could define this particular enunciation regime with some precision, we would be able to identify the times, places, topics and people who do actually ‘knit’ politics, without any concern for the fact of belonging or not to what political science refers to as the political.⁴⁴

Latour’s argument in this article was explicitly a conservative one. While many social theorists had earlier wanted to expand the domain of politics to include virtually any act, Latour sought instead to focus our attention on a particular form of speech, the existence of which, he believed, was in peril: for, ‘invaluable and fragile, it survives only with

43. Michel Callon, ‘An Essay on Framing and Overflowing: Economic Externalities Revisited by Sociology’, in Michael Callon, ed., *The Laws of the Market* (Oxford: Basil Blackwell, 1998), 244–269.

44. Bruno Latour, ‘What If We Talked Politics a Little’, *Contemporary Political Theory* 2 (2003): 143–64.

meticulous care by a culture as delicate as it is artificial'.⁴⁵ At the same time, he wanted to distance himself from those, such as Habermas, who aspired to make political speech more reasonable, more honest and more rational. One of the key virtues of political speech, and its distinguishing characteristic, in his view, was that it did not have to be constrained by such normative demands. Latour's intervention sought to preserve the tradition of political speech in the face both of its evident decline and of the failure of critical social theorists to recognise its specificity. The distortions of political speech, or what Latour termed its 'spin', were to be treated as something to be valued rather than taken as an object of critique or denunciation.

In this article Latour sought to recognise the specificity of politics, but he also deliberately limited the scope of his analysis. He did not concern himself with the significance of political expertise, or the practice of politics more broadly, or even with the machinery of parliamentary democracy.⁴⁶ Yet the conduct of politics necessarily involves much more than making speeches; it also involves, amongst other things, attending to the staging, the setting and the timing and spacing of political action. The study of politics may concern itself with the specificity of political speech but, as actor-network theorists including Latour recognised, it also has to consider the importance of architecture, bodies, cameras and forms of violent and non-violent direct action, which cannot simply be understood as forms of speech. In short, it also demands attention in addition to the material apparatus, the practice and the atmosphere of politics.⁴⁷

In this context, the challenge that international relations poses to actor-network theory is quite complex. For in its early formulations, actor-network theorists were simply content to expand the realm of politics – by including such things as microbes and medical technologies in the field of politics – without much concern for the domain of what was commonly recognised as political by political theorists. In this respect, the arguments of actor-network theorists paralleled the development of social and feminist theory more broadly in the period from the 1970s onwards, enlarging the domain of politics to incorporate many issues that had previously not been widely considered to be political. But if actor-network theory was to engage with the diversity of forms of political expertise and practice, then it needed not just to inflate the scope of politics indefinitely, but also to have something to say to those who, recalcitrantly, pointed to the specificity of these practices. In this light, the challenge posed by the field of international relations to actor-network theory is twofold. On the one hand, the actor-network theorist should be concerned not just with the study of international political institutions or discourse, but also with the study of political expertise and practice, including the expertise and practice of international relations. On the other hand, just as sciences raised the question of the constitution of the distinction between science and non-science, so the study of politics raises the question of how the distinction between what is political and what is non-political is sustained and transformed in practice. In effect, actor-network theory had to address a problem addressed by Foucault, who, in his lectures on biopolitics and governmentality, also recognised that

45. *Ibid.*, 162.

46. Jeremy Waldron, *The Dignity of Legislation* (Cambridge: Cambridge University Press, 1999).

47. Andrew Barry, 'The Anti-political Economy', *Economy and Society* 31, no. 2 (2002): 268–84; Latour and Weibel, eds, *Making Things Public*.

he needed to study the history of explicitly political reason, rather than expand further the range of objects, bodies and practices that should be considered political – as he had in preceding years. However, while Foucault's approach in the late 1970s was to focus on the history of governmental rationality, actor-network theorists have also been drawn towards the possibility that political practices and apparatuses could be observed directly in real-time, whether through ethnographic fieldwork or, more recently, through the use of a variety of online methods.⁴⁸ The injunction of actor-network theory has always been, after all, to 'follow the actors', whatever form they might take, whatever they might become and wherever they might go.⁴⁹

Secrecy and Publicity

If the actor-network theorist is expected to follow the actors, then the field of international relations poses a particular series of challenges, which are both practical and conceptual. The practical challenges should be self-evident. After all, one common feature of international relations is the importance of secrecy and discretion. While it has proved possible for the actor-network theorist to negotiate access to institutions such as scientific laboratories, a hospital and a court of law,⁵⁰ it is difficult to envisage the same level of access to, for example, an embassy, an intelligence agency or even an international organisation. Likewise, those engaged in forms of oppositional political practice may be as sceptical as the diplomat or the military about the value of allowing an ethnographer to study their practice in detail and in real-time. Indeed, there may be suspicion that the anthropologist is not merely an anthropologist, but someone who possesses their own political expertise, motivations and interests. While few would mistake the anthropologist of science for a scientist, the distinction between the anthropologist of politics and the professional political analyst or consultant is not as clear. Indeed, many anthropologists and sociologists work on a range of issues, including human rights, conflict resolution, migration and drug trafficking, which are directly relevant to the work of international organisations and government agencies.

The problems that international relations presents to actor-network theory are not, however, merely those of access to institutions that wish to preserve their secrecy, or individuals and groups who want to maintain their anonymity, or companies that wish to protect their commercial confidentiality. For there are also key conceptual issues posed by international relations to actor-network theory, and they revolve around the importance to the field of the practice of secrecy. In particular, actor-network theory has often been criticised for dealing with surface appearances, and failing to interrogate the structures of relations that are thought to lie beneath the surface. This criticism has been forcefully made, for example, in debates that ensued following the proposal by Michel Callon to translate actor-network

48. Bruno Latour, 'Tarde's Idea of Quantification', in *The Social after Gabriel Tarde*, ed. Matei Candea (London: Routledge, 2010), 145–62.

49. Bruno Latour, *Science in Action* (Milton Keynes: Open University Press, 1987).

50. Bruno Latour, *The Making of Law: An Ethnography of the Conseil d'État* (Cambridge: Polity, 2010).

theory into the field of economic sociology.⁵¹ The accusation of political economists has been that Callon and others fail to provide a critical analysis of the capitalist economy and, in the absence of critique, end up endorsing the visions of mainstream economics. But in the field of international relations, the question of the relation between what is visible to observers and what is beneath the surface cannot be avoided. It is continually raised in practice. Indeed, individuals and agencies are routinely concerned with the question of what is beneath the surface of international political events. Some may make use of the tools of political economy to interrogate political appearances, while others seek to expose the truth that lies behind what is officially made public through investigative journalism or activism, while still others rely on rumour or speculation. In these circumstances, the tendency of the actor-network theorist to remain on the 'surface' is continually challenged as informants themselves seek to go beyond what is immediately apparent.

History, Situation, Context

The study of international relations raises a third problem for actor-network theory: namely, the problem of how actor-network theory addresses the question of the historical circumstances or contingency of international politics. This question arises because, in its early formulations at least, actor-network theory tended to bracket the question of history.⁵² Perhaps this was not surprising given the microsociological orientation of actor-network theory. After all, although laboratory scientists are concerned with the current state of scientific debate, as embodied in the recently published scientific literature, they do not necessarily have any immediate interest in earlier scientific arguments, which they can largely take as given. There is no need for the scientist to read the original papers of Maxwell, Einstein or Born, for example, not because these are unimportant or forgotten, but because their lessons and insights are likely to have been absorbed into the undergraduate curriculum that he or she has already been taught.⁵³ But the student of international relations cannot so readily bracket the question of history. On the one hand, those involved in international politics, however this is conceived, frequently understand their own actions or the actions of others in a historical context, even though they may radically disagree about what that historical context is. Where an understanding of history may seem to be irrelevant to the immediate concerns of the scientist, it may explicitly or implicitly inform the actions of those involved in international politics. Consider the critical importance of historical writing to the Israel–Palestine conflict, for example, or the

51. Michel Callon, ed., *The Laws of the Market* (Oxford: Basil Blackwell, 1998); Michel Callon, 'Technology, Politics and the Market' (interview with Andrew Barry and Don Slater), *Economy and Society* 31, no. 2 (2002): 285–306; Ben Fine, 'Callonistics: A Disentanglement', *Economy and Society* 32, no. 3 (2003): 478–84; Philip Mirowski and Edward Nik-Khan, 'Markets Made Flesh: Performativity and a Problem in Science Studies, Augmented with a Consideration of FCC Auctions', in *Do Economists Make Markets?*, eds Mackenzie et al., 190–224.

52. Kristin Asdal, 'Contexts in Action – and the Future of the Past in STS', *Science, Technology and Human Values* 37 (2012): 379–403.

53. Isabelle Stengers, *Cosmopolitics I* (Minneapolis: Minnesota University Press, 2010), 180–9.

significance of the two world wars to the development of the European Union from the 1950s onwards. On the other hand, those concerned with the study of international relations are likely to have to attend to both the particular contingency and the path-dependency of events, which are the resultant effect of multiple historical antecedents.

Elsewhere, I have argued that actor-network theory needs an analysis of what I have termed political situations, an idea that is informed in part by the sociology of Gabriel Tarde.⁵⁴ The notion of political situations can be defined in three ways. Firstly, political situations are the meeting point of diverse currents and movements, of ideas and practices, of beliefs and desires, which coalesce in particular settings or over time.⁵⁵ If one were to consider, for example, why the coating material of an oil pipeline came to be discussed in a House of Commons select committee, one would need to address, amongst other things, the critical importance of BP to British foreign policy since the early 20th century, the stated commitment of both the British government and BP to the principle of transparency, the dynamics of innovation in the oil industry, the development of radical anti-corporate politics in the UK, the history of labour relations in Georgia, and the promises made by the Shevardnadze government to the Georgian people about the wealth that would come from the pipeline in the years previously.⁵⁶ That is to say, in 2005 a whole series of currents and movements came together to make the integrity of pipeline coating material, rather than, say, the possibility of war between Russia and Georgia, a matter of public dispute in the UK to the extent that it was taken up by the core institutions of British government. Secondly, as actor-network theory would lead us to expect, political situations are not merely discursive constructs. They are assemblages that include material artefacts and technologies such as monitoring devices, border posts and information and energy infrastructures. Political situations are grounded in material forms as well as the ideas, passions and interests with which these forms become associated. Thirdly, political situations are likely to be uncertain, ambiguous and contested. They are animated by passionate antagonisms and wild speculations, as well as by sober disputes over matters of fact. In these circumstances, we should not expect there to be a definitive analysis of what the political situation is. All of those involved in a political situation – whether it is the Eurozone crisis or the Iraq War – are likely to be concerned with the identity of the political situation. Political situations are unfolding and multiple. Inevitably, the analysis of political situations, including the work of researchers in the field of international relations, enters into the very nature of what political situations are.

Conclusions: The Translation Zone

The starting point for the development of actor-network theory was a very specific institution: the scientific laboratory. Starting from this position, a number of key themes

54. Andrew Barry, 'Political Situations: Knowledge Controversies and Transnational Governance', *Critical Policy Studies* 6, no. 3 (2012): 324–36.

55. Georgina Born, 'On Tardean Relations: Temporality and Ethnography', in *The Social after Gabriel Tarde: Debates and Assessments*, ed. Matei Candea (London: Routledge, 2010), 232–49.

56. Barry, 'Materialist Politics: Metallurgy'.

characteristic of actor-network theory emerged. One was an interest in how the world external to the scientific laboratory could be translated into an experimental form and back again. From the point of view of the scientific laboratory, the external 'macro-social' context of the laboratory was not given or external to the laboratory, but waiting to be defined and transformed through the 'micro-social' practice of experiment or field research. A second theme was a commitment to following the actors, in whatever form they took, and wherever they went. A final theme took the shape of a lack of interest in borders and boundaries, and a corresponding emphasis on the importance of networks and fluids. One defining problem for actor-network theory was to understand how scientific practice made it possible to 'act at a distance', far beyond the laboratory walls. Another was to show how scientific and technical practices become translated, modified and adjusted across space and time.

All of these themes posed important challenges to social theorists in general, and sociological studies of scientific knowledge in particular. However, the challenges posed by actor-network theory do not translate directly into the field of international relations. After all, in the field of international relations, actors are preoccupied by the importance of the historical context or the political situation in ways that scientists are not. Moreover, experts in international relations, unlike scientific experts, cannot so readily disentangle and purify their knowledge claims from the context in which claims are made. On the contrary, experts in international relations have to be attentive to the ways in which their own work forms part of the political situation with which they are concerned. And while actor-network theorists have emphasised the techniques with which scientific and technical practices can be translated across space, in the field of international relations, borders continue to matter. International relations is marked by enduring blockages and intransigent obstacles, zones in which translation is contested, ambiguous and problematic. It follows, as I have suggested throughout, that actor-network theory cannot simply be applied to international relations, but must be adjusted and reconfigured in response to the problems that the field itself poses.

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Author Biography

Andrew Barry is Professor of Political Geography at Oxford University. He is author of *Political Machines: Governing a Technological Society*, and co-editor of *Interdisciplinarity: Reconfigurations of the Social and Natural Sciences*.