Practising Nature and Culture: an Essay for Ted Benton

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Foot and Mouth, UK, 2001

Foot and mouth disease came to the UK in 2001. It was discovered in Essex at an abattoir on February 19th, and tracked back to a pig farm at Heddon on the Wall in Tyne and Wear where it was, it turned out, already well-established. After investigation the State Veterinary Service concluded that this was the 'index case', the point of origin of the epizootic[1]. But, and more important, by the time it was discovered the disease had already spread to neighbouring farms, and from those to Longtown Market in Cumbria. Longtown is a very large livestock trading centre, and as a result at least 24,500 more sheep had been exposed to the infection and transported all around England and the lowlands of Scotland. Indeed, by the time the disease was discovered over 70 premises had already been infected[2]. Thus began a national epizootic that lasted six months that afflicted 2030 premises in the UK. In the attempt to eradicate it six million animals were slaughtered. The costs, financial and otherwise, direct and indirect, were huge[3].

Foot and mouth 2001 was a terrible episode in British public life, and particularly for the rural communities including Cumbria and Devon most caught up in it. For many farmers it spelled isolation, fear, loss of irreplaceable flocks of sheep and herds of cows, grief, and isolation. For others in many rural communities it was also deeply traumatic: the losses for tourism were very serious – in economic terms much larger than for farming[4]. The health of farmers and rural communities suffered[5]. For many beyond rural communities the animal slaughter and the methods of disposal of the animals killed was deeply troubling. Some good things came from it – for instance, increased consciousness of the fragility of agriculture, the delicate balance between agriculture and environment, and the extent to which the rural economy is no longer primarily dependent upon agriculture[6]. But one thing is certain: it was complicated, messy, and mostly a disaster.

My question is: what might a social scientist make of this episode?

'After ANT'

Self-evidently, there are many answers to this question and I come to foot and mouth with my own intellectual and political baggage. These intersect only in part with those of that motivate Ted Benton's impressive and generous scholarship in the philosophy of social science and on the sociology of the environment[7]. Accordingly, I will write a little about the alternative traditions that I come from. I do this not primarily to defend these (though I hope they

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[1] For more details see Department for Environment Food and Rural Affairs (2002) and Law and Mol (2007b).

[2] Department for Environment Food and Rural Affairs (2002, 9).

[3] For details see Foot and Mouth Disease 2001: Lessons to be Learned Inquiry (2002), Cumbria Foot and Mouth Disease Inquiry (2002), and The Royal Society (2002), National Audit Office (2002).

[4] Losses to the private sector have been estimated at £5bn (National Audit Office (2002).)

[5] Convery, Bailey, Baxter and Convery (2005).

[6] Law and Singleton (2007).

[7] As the readers of this volume are aware, Ted Benton's work has been crucial in reshaping a range of radical intellectual agendas, including Marxist-inspired understandings of the environment, animals, and the natural world. See, in particular, Benton (1993a; 1993b).

have their merits!) but in the hope of securing clarity, enabling comparison, and fostering discussion.

Let me, then, first mention the term 'actor-network theory', ANT. A multitude of sins have been committed in the name of this acronym. Some, I suggest, have been attributed to it rather than really belonging to it. On the other hand it has certainly been fairly accused of others, and many of these I would freely recant. Thus whatever the aspirations of those who initially developed it, some of its earlier versions were unduly managerialist and strategic in tone[8], and/or overemphasised the coherence of actor-networks[9]. It also suffered from an associated and unfortunate penchant for military metaphors[10]. Its early practitioners also evinced an excessive enthusiasm for coining neologisms as they sought to kick over the analytical traces. (Though many of the intuitions that led to these terms were good, most of the niceties of this terminology deserve, and perhaps have been accorded, a decent burial.) Neither was it nearly as good as it might have been in situating its own accounts, and in particular of understanding their performativity – something that it learned, if it has learned it at all, from feminist technoscience studies. It wasn't terribly clever (the point is related) in its understanding of the political implications of its own writing[11]. And, as perhaps happens to any more or less popular approach to social theory, it was often summarised and so reified by being turned into a short list of 'principles' or 'attributes', and an equally short list of 'criticisms'. Indeed, I am compounding this sin in this brief paragraph!

All in all, it seems to me that 'ANT' (but the point applies just as much to 'critical realism', to 'symbolic interaction', or to any other 'approach' to social theory) is a lot more than any possible short label or formulation makes it sound, or allows it to be. The labels make it appear to be neater and tidier than it actually is. They make it easy to move it around. Thus I can give a lecture on 'ANT', on 'critical realism', or on 'symbolic interaction', and something that is possibly useful has been transmitted to the students. But at the same time this way of talking misses out on what lies below the waterline. So what is this?

The answer, as for any approach to social theory, is: a body of experience; a set of practices; a series of struggles; a collection of political, moral and analytical preoccupations; a somewhat pre-linguistic sense of what is important, what it might be worthwhile devoting time to, and what must be resisted; a willingness, or at least a matter-of-fact ability, to encompass intuitions and assumptions that do not necessarily cohere very well; a sense that matters are incomplete; and then a way of experiencing or apprehending the world that doesn't really have all that much to do with formal theory. All in all, in this way of thinking there may be indeed be formal theory, theory that it is possible for formulate, but (I exaggerate, but I hope only a little) this is the least part of it.

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[8] It was often more interested in the successful actor-networks that concentrated power in particular locations. For critical commentary see Star (1991).
[9] Singleton and Michael (1993).
[10] Bruno Latour's otherwise exemplary study of the Pasteurisation of France (1988) displays both of these tendencies, though it is important to remember that one of the most important points of this work is to argue against a 'great man' theory of innovation and system building.
[11] See, in particular, the work of Donna Haraway, and especially her (1997).

My touchstone here is Thomas Kuhn's book <u>The Structure of Scientific Revolutions</u>[12]. Kuhn said and was accused of many things. For my present argument we don't need to detain ourselves with his particular claims about science, about scientific revolutions, or about the distinctions between paradigmatic and pre-paradigmatic science. This is because, a generation on, what I think I most learned from his argument is that science may be understood as a set of practices in which the tacit, the embodied, that which is first learned and then taken for granted (Kuhn talks of presuppositions and 'acquired similarity relations'), is at least as important as the explicit theories, and the formalisms (or 'symbolic generalisations') which tended to concern an earlier generation of philosophers. Following Wittgenstein, Kuhn tells us that it is <u>practice</u> that is primary, and practice is always excessive to its particular formulations or its explicit rules[13].

Returning, then, to ANT, working within this tradition I sense it as a divergent set of practices. Four points. First, and most simply, it is <u>many things</u>, indeed almost a diaspora. ANT in (say) information systems is quite unlike ANT in studies of nature and culture, or geography, or disability. 'It' is certainly multiple, and perhaps there is no 'it' at all. This is one of the reasons I prefer to talk of '<u>after ANT</u>' or, more generally, of <u>material semiotics</u>. Second, and following Bruno Latour, I take it that 'after ANT' most certainly <u>isn't a theory</u>[14]. Since its practitioners are mainly interested in <u>how</u> things turn out rather than why, it neither makes nor seeks to make the strong predictions preferred in parts of social science. Third, this then suggests that it might be better understood as a <u>methodological toolkit</u>, a set of practices for inquiring, turning over interesting stones, tracing links, and most of all, of following unexpected leads and connections (this is one of the reasons for imagining, as did Michel Callon, that scallops might be actors similar in important ways to fishermen[15].) In this way of thinking, it is a set of devices and tools for detailing connections that may, and indeed often do, run counter to common sense. But most of all, and fourth, I imagine it quite informally but also rather deeply as a set of embodied <u>sensibilities</u>. If the material semiotics of after-ANT is anything at all for me, then it is a form of attentiveness and respect to the world. A few words, then, on this.

First, it attends to <u>materialities</u> and the <u>stuff</u> of the world. Nothing is 'simply social'. Everything is <u>also</u> material, happening in practice. In foot and mouth such materialities included the slaughter of animals, the building of pyres, the pollution of groundwater, the caring practices of vets, the silences on farms, and the webs of distribution and finance woven by agribusiness. Such, then, is the first sensibility. Revealing its origins in the propensity of the sociology of science and technology to work through case-studies, after-ANT works in and through a profound sense of the <u>materiality</u> of the world and its practices. Little is taken for granted. People influenced by 'after-ANT' are obsessed with the mess of material practices and this is why they ask, to the concern of many, about the role of non-human actors.

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[12] Kuhn (1970).
[13] I also learned a similar lesson from symbolic interactionism (Rock: 1979) and subsequently from Michel Foucault (1979).
[14] Latour (1999).
[15] Callon (1986).

Second, it attends to relationality. Here the intuition is informed by a post-structuralism. The material semiotics of ANT and after (and the related feminist work of Donna Haraway) comes in many respects from the same intellectual space as that of Michel Foucault, Louis Althusser and Gilles Deleuze. It is assumed that nothing exists in and of itself. Instead, things exist and take the form that they do by participating in an emergent web of materially heterogeneous relations. As Deleuze talks of 'agencement' (inadequately translated into English as 'assemblage'), so ANT and after talks of the oxymoronic 'actor-network'. So, for instance, the Holstein-Friesian cow or the Herdwick sheep are the effects of webd of genetic, nutritional, veterinary, farming, technical and environmental relations[16]. But then the same could be said for bumblebees, though perhaps for these the relations of capital and the technologies of genetics and nutrition are less direct[17]. And hopefully the genetic diversity of bumble bees is larger than that, at least, of the Holstein-Friesian, which, on some accounts is so small that by 2015 its US gene-pool will be equivalent to a herd of only 66 animals[18]. So this is a second after-ANT sensibility – a profound respect for the generativity of materially and discursively heterogeneous relationality.

Third, as a part of this interest in generativity, the material semiotics of after-ANT attends to processes and practices. Again, the intuition is that things don't exist in and of themselves. Instead they keep on practising and interacting, and it is this that gives them whatever shape and continuity they may have. The Holstein-Friesian is an effect of a web of relations. So, too, are upland Cumbrian farms, hefted sheep, and (in the densely farmed environment of the UK) the lapwing and the song thrush. Then again, some of my Shropshire neighbour farmers are extremely wealthy in their web of rich lowland soils, dairy herds, and (sometimes bungled) CAP payments[19]. And agribusiness in its various modes looks pretty well entrenched in many places too (though even Monsanto sometimes gets it wrong). The point, however, is that practices need (forgive me) to be practised, or what they are producing – relations and realities – disappears. Some practices are pretty obdurate, but the relations that they carry would disappear if they themselves disappeared. Which leads to an apparent paradox, for this material semiotics is a sensibility that both insists on the extreme fragility of the web of relations, and, at the same time, on the way in which many such relations are extremely obdurate. The Holstein Friesian and Monsanto (think of Enron) are simultaneously resistant and brittle. They might be other than they are, but right now they are not. Such is the third component of this after-ANT sensibility. A fascination with practice, with its obduracies, and simultaneously with its uncertainties.

In this way of thinking, materiality, relationality and process become modes or techniques of mapping the real and (I'll argue) enacting it. One implication of this is that after-ANT is profoundly empirical. Applied to foot and mouth this means that I need to try to trace the webs of relations that run from and are enacted in global trade, via the Cabinet Office Briefing Room, the hurts of farmers, the sensibilities of vets and the machinations of the media, to the

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[16] On sheep, see Law and Mol (2007a).
[17] Benton (2006).
[18] Blackburn de Haan and Steinfeld (1998).
[19] Bunting (2006).

sequences in viral RNA. Though, of course, my attempts to trace and reproduce such relations are limited by time, competence, patience and focus, there is in principle no way of knowing beforehand which of these chains of relations is more important than any other[20]. In other words, there is nothing mechanical here. We are dealing with an art form, not a science (though science, I'd add, is also an art form.)

In one way, much of this is common sense. In other ways it isn't. So what doesn't sound so commonsensical if one ploughs this furrow? Three thoughts.

First. As I've already suggested, ANT and after does without strong explanations. The webs and practices of relationality are seen to ramify in all sorts of different directions. What caused foot and mouth 2001? I can give you lots of explanations. WTO rules about trading animal products. The evolution of EU non-vaccination policies[21]. The tight coupling of UK agricultural trade networks[22]. The contingencies of weather[23]. The differing infectivity of different species. The different visibility of the disease in different species[24]. The historical practices and policies of pig-feeding[25]. And the delinquency, financial stress, and physical ill-health of a pair of struggling pig farmers at Heddon on the Wall. All of these appear in the web. So there is no shortage of real relations, real causes and real effects. But do any of them have special significance?

The answer is uncertain, at least before the event. To put it differently, material semiotics does without the kind of strong theoretical machinery for detecting effectivity common to much social science. This means that its explanations tend to look weak to those committed to strong social science. To put it differently again, as I've already hinted, its instincts, both theoretically and politically, are Foucauldian rather than Marxist. Sometimes, indeed, it's useful to think of it as an empirically small-scale version of Foucauldianism. It works, that is, by attending to the microphysics of relationality and materiality. Not, at least immediately, to big things.

Second, the differences between different kinds of actors aren't given beforehand. Instead they are treated as effects. If Holstein-Friesians and Shropshire farmers exist together in a web of relations, then, inter alia, it is this web that produces them as different. The webs of relationality include and enact many kinds of materialities. 'Foot and mouth 2001' is a set of heterogeneous relations that generates farmers, viruses, cows, clinical tests, epidemiological models, field sizes, wind directions, the NFU, MAFF and all the rest. Which is, of course, a controversial claim, partly because it is another

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[20] One implication of this is a degree of scepticism in after ANT about the usual social science distinctions between the macro and the micro. These are seen as effects rather than causes. Thus another important feature of Latour's argument about Pasteur is that his laboratory is an arrangement that destabilises the scales being practised in other locations. In this way the virus and the inoculation come to be bigger than other actors. See Latour (1983). For this argument developed in another and technical context see Law (2000).

[21] For a fascinating historical account of this contingency see Woods (2004).

[22] Law (2006).

[23] The virus survives longer outside the animal in cold weather.

[24] This was the first foot and mouth epizootic in history driven primarily by the pattern of infection in sheep. This was important, and led to controversy amongst those modelling the disease and proposing control strategies, since the infection is both relatively difficult to detect in sheep, and passes relatively slowly through a population of sheep.

[25] Law and Mol (2007b).

way of talking about the refusal to endorse strong theoretical machinery, and partly because it ignores claims about <u>essential</u> moral or ethical differences between different kinds of actors. (In this way of thinking differences arise during the <u>process</u> of interaction, not before).

Third, if after ANT is <u>realist</u> (and I propose, of course controversially, that it is), then it obviously isn't a form of critical realism. I can't unpack this properly here, so I'll content myself with a single comment about what I take to be a widespread misunderstanding[26]. Whatever else it is, 'after ANT' is <u>not</u> socially constructivist. It <u>doesn't</u> say that realities are constructed by people or interest groups. The argument it makes is quite different.

It is that the real is, or arises in, materially heterogeneous relations and practices. Vegetarian arguments in 2001 didn't create a vegetarian reality because they weren't effectively and materially entangled in the skein of agricultural relations. They didn't make much of a difference. By contrast epidemiological theory created an effective reality. (Highly controversial) advice helped to remake the networks of slaughter and (for instance) led to the contiguous cull announced in March 2001, because the webs of policy, administration and farming didn't sufficiently resist this[27]. Where it mattered – in Whitehall and up and down the country – a particular version of epidemiology was enacted into being as 'true'. (I put the word 'true' in inverted commas).

This, then, is an 'after-ANT' version of realism. Nothing is ever constructed by humans alone. The world is a web of tangled and embedded relations that are generative of more or less sustained realities. In one way they are fragile, but they also resistant to wishful thinking. Most ideas, bright or otherwise, simply don't make it.

Politics

But what, then, of politics? How does politics look in this way of thinking?

A contrast. I think we are used to a radical politics that draws on and in turn adds weight to strong versions of theory: for instance about patriarchy, the labour process, or about post colonial relations. But clearly whatever 'after-ANT' is doing it isn't doing this. The contrast produces an interesting and instructive fault-line.

Strong theory and strong politics simplify the webs of relations, determining which connections are important and which are not. Then they suggest what might be required to put things right. For instance, it is easy to argue that agricultural intensification was an important contributory factor to foot and mouth 2001. It makes monocultures (in this instance hundreds of pigs in sheds, and gigantic sheep markets) which are almost always good for disease transmission[28]. It is also easy to argue the importance of global networks of agricultural trade: these, too, help to transmit disease. But, and again to state the obvious, agricultural intensification goes with capital intensification. Altogether, then, this is a system that produces simultaneous and multiple

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[26] I explore the nature of its realism at greater length in Law (2007) and (2004).

[27] This has been widely discussed. See, for instance, Campbell and Lee, 2003 #1727}.

[28] See the magnificent polemic from James C. Scott (1998) on the relations between the state, the monoculture, and visibility.

disaster: poverty, ecological loss and environmental degradation, unsustainability, hunger, obesity, and (as we saw in 2001) fragility even in the privileged northern agricultural systems[29]. All in all, one doesn't need to have read very much Karl Marx to see the relevance of capital accumulation to these dynamics.

But the mapping and tracing of after ANT doesn't work like this. Instead it leads us to what philosopher Annemarie Mol calls an ontological politics[30]. So what is this? The answer is that it's a politics that presses us to find ways of dealing with and interfering in different versions of the real. Look, for instance, at this excerpt from the first page of the National Audit Office (NAO) report on foot and mouth 2001:

> 'Foot and mouth disease was suspected at an abattoir in Essex on 19 February 2001 and confirmed the following day. By the time the disease had been eradicated in September 2001, more than six million animals had been slaughtered: .... The direct cost to the public sector is estimated at over £3 billion and the cost to the private sector is estimated at over £5 billion.'[31]

And it goes on, of course.

This isn't a simple description: no description is ever simple, and the NAO wants to learn policy lessons. But this partial description is performative too. Prospectively it might influence the world by reshaping future policy. Retrospectively it helps to enact one kind of foot and mouth 2001. It helps to make history. More grandly, I want to say that it helps to make the reality of the past.

I appreciate that this is a large claim. But narratives, I'm saying, have more or less real material effects. They form an important part (though only a part) of the weft and weave of the performativity of practice. This implies that the NAO report isn't innocent. And its lack of innocence is not simply because it offers us some kind of more or less partisan perspective. It is, and much more fundamentally, because to the extent it circulates and gains currency, in particular locations and for particular purposes it also helps to make reality. It helps to make the material-semiotic webs of the real[32].

So what follows?

We can debate. Foucault, in this respect similar to Althusser, imagines that the practices are playing to a single score – for Foucault, that of the modern episteme[33]. But the material semiotics of 'after-ANT' is neither as grand analytically, nor as pessimistic politically. Instead of looking for epistemes of similarity it looks for differences. It searches out different performances and practices in different places and suggests that these produce more or less different versions of the real. Then it argues that these intersect, overlap,

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[29] See Lang and Heasman (2004) and Law (2006).
[30] Mol (1999; Mol: 2002).
[31] National Audit Office (2002, 1).
[32] The term 'material-semiotic' comes from Donna Haraway's feminist technoscience studies. See her (1991a; 1991b).
[33] For Althusser (1971), of course, the score was that of the state. For Foucault the modern episteme can be understood as a set of implicit and sometimes implicit disciplinary strategies which started to spread through the body of the social in Europe in the late eighteenth century. See (Foucault: 1972),

interfere, and contradict one another to produce what one might think of as ontological complexity[34].

This, however, implies the possibility of an ontological politics. Why? Because if different realities are being enacted and sustained in different practices, then we may hope to make a political difference by performing some realities, whilst chipping away at others. This is what Haraway tried to do with her feminist trope of the partial – and partially connected – cyborg[35].

How does this work for foot and mouth 2001? Look back at the NAO citation. This enacts a particular foot and mouth reality. It's a kind of mini-history of the epizootic, understood in part in economic terms. This means that it doesn't just propose an historical reality, but also offers a putative context for understanding that reality. For instance, it describes and helps to produce particular versions of space and time. Space is treated as a UK state-based territory with certain economic attributes, and time as a linear, progressive, and teleological flow of a specific duration, again with economic implications. Then, having made a single space-time box, it populates this box with a summary story about struggle, slaughter, events, relations and causes. Some of these are made important (for instance the total number of animals slaughtered, and the cost) while others, by implication, are not because they do not receive a mention. Finally, it conceals its own productivity by presenting itself as a description rather than an enactment. As a consequence (or such is my argument) a particular state reality is turned into reality, tout court. This is how it was. A specific reality gets itself naturalised in a particular location, while, at least by implication, other possible realities – and other possible times and spaces – disappear. To adapt the feminist slogan, this turns state biology into destiny.

As is obvious, it isn't fair – and neither is it convincing – to pick on a single paragraph and expect it to bear such a large theoretical weight. Two responses. One is practical: if the argument about the performativity of textual practice is accepted at all, then I think it can be shown that this NAO paragraph is not alone in working in this kind of way. Though I cannot demonstrate this here, the report as a whole does similar kind of contexting work. So too do other government-sponsored reports and, for that matter much academic commentary[36]. The times and the spaces that these make vary in some degree. Sometimes space extends beyond the shores of the UK, and time stretches back, for instance, to the mutation (in India around 1990) that produced the particular version of the virus that came to the UK in 2001. The second response is to note that my argument should not necessarily be read as a criticism of the NAO and its report, or any of the other state-sponsored documents. I am not trying to say that they are false. Neither am I trying to say that other documents – for instance my own – are different in kind and somehow escape the predicament of performativity. All practices including textual practices create or assume contexts, for instance in terms of

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[34] The point is carefully developed by Annemarie Mol in her text The Body Multiple (2002). Similar arguments are made by Law (2002) in the context of technology, and for Alzheimer's disease by Moser (2007).

[35] Haraway (1991a)

[36] As an example of the former see, in particular, see Foot and Mouth Disease 2001: Lessons to be Learned Inquiry (2002).

space and time. This is given in their performativity. If there is a critical move here it has nothing to do with the fact that they enact contexts, times and spaces. It is rather that we allow ourselves to assume that they represent (or misrepresent) an independent reality that is detached from their practice.

Now we get to my core analytical and political point. I don't want to say that state biology (or state time and state place) are not real. On the contrary, they are constantly being realised in the practices that work to make the state and its ramified doings. To that extent there are more or less – often more – real. But I do want to say that state biology isn't destiny. In particular, I want to say that other foot and mouth realities, times, and spaces, are being done in other practices and other narratives. And this has been my adventure and my politics since 2001. To find, re-tell, and so to try to re-make other foot and mouths. To open up a space for ontological politics. To chip away at the state version of foot and mouth. To try to re-locate it is a powerful reality, but only one reality among a range of others.

I cannot develop this properly here, but let me make two gestures.

First gesture.

Peter Frost-Pennington, a temporary vet, wrote a poem, 'Into the Valleys of Death', that became iconic in Cumbria. It talks about the attitude of a vet to his killing. He writes:

> 'I have to believe this mass sacrifice of animals I love
> Is worth it'.

Then he adds:

> 'But don't get me wrong
> I have now seen plenty of this plague
> And it is no common cold.
> The animals suffer horribly, as the skin of their tongues peels off
> And their feet fall apart.
> We must try to kill them quick and clean,
> As soon as it appears in a herd or a flock.'[37]

Later he adds:

> 'This is not what I trained for.
> I hope that familiarity will never make me immune from the trauma of killing
> But I do hope – for the animal's sake – to be good at it.'[38]

I want to say that foot and mouth here is being enacted as the clinical attitude. Frost-Pennington isn't sentimental. Neither is he cruel. Instead he is matter-of-fact, caring, sympathetic, practical, and more or less distanced[39]. Here, in a clinical foot and mouth, time and space depart from those imagined by the NAO. Instead they turn in the first instance around a judicious moment-by-moment and located combination of embodied skills, love, and detachment. Even though they are related to one another, and the occasion of the killing by the vet is also an expression and a re-enactment of the realities being done by the state, this contexting of the real takes us far from state space and time. To

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[37] Frost-Pennington (2001, 7).
[38] Frost-Pennington (2001, 8).
[39] On the character of care in health care see Mol (2006).

put it differently, in the world of the vet foot and mouth <u>is</u> at least in part, a matter of local care and local killing.

Second gesture.

Mountaineer Chris Bonnington, who lives above Caldbeck at the northern edge of the Lake District, writes that he loves to 'wander straight out onto those gentle lovely hills'[40]. Then, reflecting on the 'closure of the countryside' that came in 2001 when most footpaths were closed to walkers for fear that they would spread infection, he adds:

> '… I must have climbed High Pike a thousand times in the last twenty-five years and I never tire of the views across the Eden Valley to the east and the Solway Firth to the north-west. We haven't been on those fells for six months and I miss them grievously …'[41]

It is easy to do a straightforward deconstruction on this. We are, of course, watching the enactment of a form of philosophical romanticism and its awe in the sublime in nature that was most prominently expressed in the context of the Lake District by Wordsworth when he sought to resist the extension of the railway to Lake Windermere[42]. But the fact that we can deconstruct it doesn't mean that it isn't real. Just, indeed, as the fact that we can deconstruct technoscience claims about the habits of the virus, or state performances of costs and times and spaces does not mean that these are not real. All of these realities are being real-ised, made more or less real, in endless different practices, and trivial deconstruction does not undo those realities[43]. So the reality of the Cumbrian landscape is that it is not just a place populated by infected sheep. It is also a place of reflection and exercise in nature. In this reality, then, <u>space</u> is openness, and a form of physical, moral and even spiritual freedom, while time has little to do with clocks and calendars, and becomes a process of bodily exercise, skill, tiredness, and an appreciation of (or communion with) nature. All of which is a world away from the space-time box of the state.

Except that it is taken away in 2001: foot and mouth here is about the body constrained, and a rupture with nature.

Conclusion

I have talked of state politics, state space and state time, and the insistence that the space-time box of the state is what is real. This is the work of reality-building being done by the NAO. To the extent it is enacted it denies the possibility of an ontological politics because it cannot imagine the enactment of alternatives. I have also talked of care space, care time, and a particular version of embodiment. This is the reality being done in Frost-Pennington's poem and in the practice of vets. Finally I have touched upon the boundlessness of romantic space time: here time and space are out of time and space. This is the reality of fell walking being done by Bonnington. So I

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[40] Bonnington (2001, 32).

[41] Bonnington (2001, 32-33). He adds that his grief is small compared with those who have lost their stock and their livelihoods.

[42] See also Bunting (2001), and for commentary Macnaghten and Urry (1998) and Franklin (2002).

[43] This point has recently been explored by Bruno Latour (2004).

have argued that we have three different spaces, three different times, three different sets of practices. And I have argued that three different realities are being realised.

With more time and space it would be possible to add to that list, distinguishing, for instance, between the realities of epidemiologist and vets, or exploring those of the Cumbrian fell farmers. However, I hope that the general shape of my argument is clear. For what this material semiotics does is to open up the intellectual and political space that Annemarie Mol calls an ontological politics. This is the proposal that since they are grounded in practices, and practices are many, the materialities of reality are also <u>multiple</u>. It is, therefore, the insistence that any particular reality is not destiny. It is the suggestion that once we come to understand realities are enacted in practices then they may be strengthened, or they may be weakened. It is the acknowledgement that our narratives are never ontologically innocent. It is the recognition that in some small way they make some realities and erode others ('small' because we should not exaggerate the performativity of our arguments). It is the suggestion, then, that there is no reality-monopoly. And finally, it is the suggestion that politics might be better if we were modest enough to acknowledge the obduracy but also the provisional character of the real. This is the intellectual and political space created in and by and through this strange version of realism. An insistence on the need to write in ways that <u>matter</u>, in ways that help to make <u>good</u> matter, and in ways that recognise both the obduracy and the defeasibility of any particular version of the real.

This form of realism a long way from Ted Benton's critical realism. At the same time, I would like to think that its practical politics are not so far removed from his: the desire, the need, to intervene, and make a difference; to find ways of thinking, respectfully, about differences, inequalities, and the state of the natural environment. Even so, as I earlier suggested, my main aim in this chapter has been to clarify and draw distinctions. Ted Benton's scholarship draws learning, rigour, political commitment, and generosity together in a exemplary and graceful combination. It also reveals what many lack: a hinterland of commitment and involvement in matters far removed from social science. The scope of this volume witnesses the importance of his scholarship to social thought, to the philosophy of social science, and to the sociology of nature and the environment. It demonstrates the respect and affection in which he is held far beyond his immediate intellectual tradition. I am honoured to have been given the opportunity to contribute to this volume.

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