From the Belly of the Whale[1]

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The Whale
In the Old Testament Jonah is delivered from the belly of the whale by divine intervention. In the comic book reworking of the story that I knew in my childhood, kids who'd been swallowed by the whale lit a driftwood fire in the stomach of the beast, which then choked and coughed them up. But by now, deprived of the monotheistic transcendental power both of god and of science and technology, those who find themselves in the belly of the whale are well and truly stuck there. Prayer or firewood will no longer serve to secure an exit.

So what's the point if this small morality tale? The answer, as I ponder the questions set by the workshop organisers, is that I find myself stuck in the belly of the 'northern' whale. What's important about this is that this position brings its own invisibilities and irresponsibilities – but, to be sure, its own specific visibilities too. It is these that I want to reflect on in the context of the workshop. What it is to be 'in the North', and what this might teach us if we're interested in pluriverses, multiplicities and asymmetries.

1. The north isn't a monoculture.

Let's start with this. Philosophers Bruno Latour, Isabelle Stengers and Annemarie Mol, and STS feminist Donna Haraway are just some of those who warn us that 'the north' is not a monoculture[2]. The narratives they offer differ somewhat, but their general plot-line is clear and consistent. It, the north that is, is best understood as a set of not-very coherent practices even if it pretends that it's rational, efficacious, cool, calm, consistent and coherent. To use Boaventura de Sousa Santos's language, the story is that this 'North' is best understood as an ecology[3], despite the fact that it tries to pretend otherwise. It's already an assemblage of different modes of being, organising and acting, before we even start theorising what might be 'other' to it. It is non-coherent. This is where I start.

2. Simple stories about the north won't do

Various consequences follow. For instance, there is a lesson about naming. To talk of 'modernity', or alternative big labels such as the 'West' or the 'North' both catches something, and doesn't catch very much at all. For the subtlety of the so-called 'northern' whale is both that it is something, something that is singular, can be named and pinned down, and that at the same time it isn't. Since I am located in the belly of the whale, I can dissect if from inside, and thus prefer to avoid the big names and the big stories that tend to go with these[4]. The trick, or the challenge, is to find ways of dealing with it that both respect its singularity, and at the same time don't do so at all: to treat its non-coherence and the effects of that non-coherence seriously. Here, I will do so by drawing on various resources, but first and foremost on the tradition of science and technology studies.

3. A method for attending to practices

Here, perhaps, is the first question to address: how to articulate non-coherence, how to make it visible within 'the North and/or the West'?

One way of doing so, is to not go with the epistemological presumption that 'scientific knowledge' is a story about, or a representation of, the world, but to approach (research, understand) technoscience consistently as a set of practices. The notion of practice is a somewhat over-freighted

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[2] Latour (1993), Stengers (2008), Mol (2002), (Haraway: 1997).
[3] de Sousa Santos (2004).
[4] For an example, see Beck (2004), which is, in this way of thinking, effectively demolished by Latour (2004).

term, at least in sociology and anthropology. In the former it tends to imply the totality of relevant social action for particular social groups. (I'm thinking of Bourdieu's field sociology as I write this[5].) It's thus assumed that a practice is a naturally occurring and therefore discoverable entity that lies within and helps to generate a determinate field of social relations[6].

But I don't want to use the term in that way. Rather, and following Annemarie Mol and others in material-semiotic versions of STS[7], I want to treat practice as an analytical category for talking about imputable patterns that that relationally produce realities. Two things are important here:

- First, it's important to avoid making strong prior assumptions about what is related to what in the practices being explored, as so to avoid making strong assumptions about what there is in the world. To put it in Michel Callon's terms, it is good idea to proceed as symmetrically as possible[8]. It won't do to assume (for instance) that scallops 'really exist' whereas spirits don't. This, then, is a version of practice that attends to ontology. The latter is variable.
- And then, second, it is also important to work in a way that tries to avoid making assumptions about size or scale. Rather than being given in the order of thing, 'big' and 'small', not to say 'macro' and 'micro' are also effects or products[9].

One of the most important methodological implications of this stance is that it is always possible to look more carefully and in more detail at whatever is being explored. Practices are, so to speak, scale-independent. Very small things have their own imputable relational regularities. This means that it is always possible to turn up the magnification to discover or impute further divergence within whatever is being explored. But (note this) the term 'detail' is already misleading. A serious commitment to analytical scale-independence suggests that there are no 'details' – except in so far as specific relations enact the macroscopic or the microscopic and so generate momentary details. Rather than talking of 'detail', it would be better to speak of 'specificities'[10].

In short, in this understanding of 'practice' the art of studying 'practices' is to identify various orderings within them in indefinitely many ways, without assuming anything about their larger coherence. It is also to proceed empirically. The questions at hand for our purposes are: what kinds

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[5] Bourdieu (1984).

[6] Which is not to say that results are often not interesting. See not only Bourdieu, but also (Savage: 2010). What one discovers is relationality in a social field. STS authors tend to worry about the 'social', but also about what's implied if singular fields are identified.

[7] Mol (2002), Mol, Moser and Pols (2010).

[8] Callon (1986). Latour talks, similarly, of 'following the actors' (1987). The slogan does good work – it is a way of telling ourselves that it is good to be surprised – but as a form of radical empiricism it cannot be followed to the bitter end. Research practices are themselves practices that embed assumptions. Marilyn Strathern (1996) explored this for the seemingly permissive network metaphor, and a similar intuition continues to inform important work in anthropology (as in the 'Reconsidering Detachment: the Ethics and Analytics of Disconnection' workshop (30 June 2010 to 3 July 2010) at Girton College, Cambridge). Note, that an unmoving commitment to the willingness to be moved is itself self-defeating. See Henare, Holbraad and Wastell (2007).

[9] This argument was enthusiastically adopted in so-called 'actor-network theory' (see, for instance, Callon and Latour (1981) as a way of avoiding a rapid move to the social reductionism implied in (for instance) some versions of sociological class or gender analysis. But there's a risk of over-enthusiasm too. In many practices large objects, indeed macro-social objects, are routinely assembled, and actor-network theory is less sensitive to what is implied in this.

[10] For an empirical example of scaling at work see Law (2000).

of realities are being <u>done</u> here? <u>How</u> are they being assembled together? What is being <u>un-done</u>? What is being <u>othered</u>? And would it be useful to explore the specificities of <u>further</u> practices?

Note before we move on that I have smuggled in the term 'assembled'. The word 'assemblage', poorly translated from the French <u>agencement</u> catches the contingency of non-coherent practices in ways that I want to unpack[11] – including especially those that comprise the Northern whale.

4. Looking for vulnerabilities in practices

Now I want to make a detour. If the west/north may be analysed as non-coherent, then this tells that it does not live up to its own image of itself. But what doesn't follow is that this actually weakens it. On the contrary: its non-coherence may well be part of what makes it strong.

 This has to be traced empirically, but various studies taken together suggest that practices disrupt themselves if they become too <u>coherent</u>. Conversely (though perhaps more obviously) there's also a good chance that they will founder if their specific fragile/robust <u>non-coherence</u> breaks down: if they move, that is, from specific forms of <u>non</u>-coherence to outright <u>in</u>-coherence (a distinction that, I suggest, is thoroughly worthwhile holding onto[12].)

A word on these two versions of fragility.

5. Excessive coherence can lead to vulnerability

Let me put this in the form of a question: isn't history littered with enthusiastic attempts to cultivate monocultures that then collapsed because they were simply too successful? Citation for the anarchist/state-related version of this story: James C. Scott. For the technical/organisational version: Charles Perrow[13].

I'm keen on both of these versions for thinking about overcoherence. But let me stick with Perrow's story. I take it that this needs some reworking. In the way that he develops it, it is somewhat (technologically) determinist. Perrow is also a foreigner to the relational version of ontology – to the pluriverse – and so to ontological multiplicity. But I think that what he tells us is useful even so. His story is that that when things go wrong (as they endlessly do), collapse results if the structure of relations makes it easy for local failures to ramify rapidly and unpredictably. (He's thinking of nuclear power stations, of Three Mile Island, but also of other complex technological systems). They're <u>less</u> fragile if the structure of relations is less responsive, slower, and also if it is composed of fewer complex feedback loops. The short version of his story is that tolerant systems are systems with play built into them, play in the engineering sense, that is. Perrow's examples (mostly technological) and Scott's (which tend to have to do with hubristic states and agricultures) both illustrate the fate of systems created with little or no flexibility or play. I don't want to make too much of this, but I think it tells us quite a lot about vulnerable ecologies in the de Sousa Santos sense. To put this differently,

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[11] (Deleuze and Guattari: 1988). And let me note in practice that though I have no interest whatsoever in defending so-called 'actor-network theory' – many unpardonable sins have been committed in its name – what I have just described is consistent with its original inspiration. See, for instance, Latour's <u>Irreductions</u>, which I return to later in this piece.

[12] Incoherence, of course, is itself an effect of particular sets of relations. It is detected and attributed from particular points of view, and implies a strong normative or political commitment to consistent and coherence. I've explored this in Law (2004).

[13] Scott (1998) and Perrow (1999).

it's fairly easy to engineer vulnerable ecologies, which in turn implies a politics of troublemaking: one would go about insisting on (excessive) coherence. The difficulty being, of course, that catastrophic failures tend to take everyone with them, and not just those who orchestrated the practices that them. Correction: all the evidence suggests that they differentially hurt those who are most vulnerable.[14]

There is a strong resonance here with the purity/impurity oscillation that underpins Bruno Latour's suggestion that we have never been modern[15]. So, for instance, in his Irreductions he talks about how colonialism came in the multiple form of priests, administrators, geographers, merchants, soldiers and engineers. All of these arrived at the same time but also insisted that they were quite different. Latour goes on:

> 'If they had come completely united, sharing the same beliefs and the same gods and mixing all the sources of potency like the conquerors of the past, they would have been still more easily defeated, since an injury to one would have been an injury to all. But they came together, each one separated and isolated in his virtue, but all supported by the whole. With this infinitely fragile spider's web, they paralyzed all the other worlds, ensnared all the islands and singularities, and suffocated all the networks and fabrics.'[16]

This surely catches something of profound importance. 'Resilience', as the risk analysts like to call is, lies in relative non-coherence, an issue to which I will return in due course.

6. Ways of handling non-coherence:

But if the North/West is not coherent, and if this is not a threat to its stability, the questions present themselves: how to think this? How to research it? And how to interfere with it? So let me touch on four analytical and political possibilities that I draw from different versions of the STS literatures. Note that I'm not making large claims here: think of these as gadgets, as initial candidates for inclusion in a toolkit for knowing and otherwise relating to and working with, ontological non-coherence.

a. Styles for handling multiplicity

One of the ways of understanding that reality is 'multiple' is to see co-existence in liberal terms, as a plurality of different things that exist side by side. This would suggest that looking for what is 'good' depends on making a choice between different 'options'. You criticise one way practicing reality while arguing for another. But this is misleading if we know that the different versions of reality that co-exist are also interdependent. Their 'value' is not necessarily similar and yet criticism/argument may not be the most suitable mode of being political. As an alternative analytical and political strategy for intervention we may think of Isabelle Stengers' craft of nurturing[17]. Citation: Annemarie Mol on health care[18].

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[14] This is documented in many disaster studies. See, for instance, Klinenberg (2002).

[15] Latour (1993).

[16] Latour (1988, 213). I have questions about his characterisation of 'the conquerors of the past', but the core point is crucial.

[17] Stengers (2008)

[18] Mol (2008).

Practices of 'care', says Mol, are being edged out in countries such as the Netherlands in favour of politically fashionable alternatives that celebrate patient or citizen choice. But (she argues) care cares better than choice. This is because it's experimental, unfolding, relatively decentred, responsive, non-utopian, heterogeneous, and doesn't demand a centred principle of ordering. Note that what's at stake here is Political, indeed with a capital P. At the same time note, however, that it's <u>also</u> about ontology and the question of how to handle different versions of the real. It's about what <u>is</u>. Here's the argument.

Health-care practices enact relational realities. For instance, practices of choice depend on and bring into being centred and discretionary subjects, and knowledges to match. They also enact decision-points and distribute particular forms of (subject-related) agency to people at those decision-points. All of which is in tension with the logic of care. The latter, as I've just tried to say, is iterative, adaptive, and allows for a continuous shift between ontologically different versions of the world even if these are non-coherent, and (says Mol) all the better for it, at least a lot of the time[19]. So contrasting 'choice' and 'care' is a way of contrasting different <u>styles</u> of living with multiplicity. And, obviously, it is also an intervention. The argument, then, is that some styles may be preferable to others, at least in particular locations. For Mol the hope is to bring out the strength of heterogeneous, iterative and materially embodied tinkering and practices, and push aside (in health care in the Netherlands and elsewhere) the style that favours centred and discretionary choice. [20]

b.   Ontological politics

If the <u>styles</u> for dealing with multiplicity are variable, then so too are the <u>realities</u> that are being done in difference partially connected practices. Citation: again, Annemarie Mol, this time on <u>The Body Multiple</u>.[21] Here she takes a disease (lower limb arteriosclerosis) and shows that it is enacted differently in different medical practices: it <u>is</u> pain on walking in the GP's surgery; it <u>is</u> a Doppler signal in the ultrasound laboratory, and so on. These are different realities that may, or may not, fit together in practice. If they don't fit then practices have been organised to make sure that they don't meet, or medical practitioners have rules of thumb, which may vary from time to time, about which reality to prioritise and which to ignore. (You'll see the relation between this and Latour's colonialists. In both cases we're in a non-coherent pluriverse, and parts of it are being discarded in order to sustain the ecology of practices in question.) But <u>which</u> reality is to be preferred? Well, some answer to this has grown up in the practices concerned. But sometimes it may be interesting or worthwhile to open this up. What if it is established practice to intervene surgically in many people with severe atherosclerosis, while walking therapy (which would have them walk twice daily) might also 'work' to lessen their pain when walking?, Mol shows that in order to make space, it may be necessary to undermine the so-called 'gold standard' – for as long as this is measured in the ultrasound lab, the patient is likely to appear not to have improved as a result of walking therapy. S/he only improves if 'pain upon walking' is prioritised as the most relevant reality.

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[19] Again, general rules don't work.
[20] The argument about ontological styles has been further developed in Law and Mol (2010, forthcoming).
[21] Mol (2002).

An analysis like this opens the space for what Mol calls an <u>ontological politics</u>[22]. Here one version of lower limb atherosclerosis (the one enacted in surgery) is played out against another (the real of 'pain' that patients feel upon walking, and may heal with walking.) Why? What is the normativity relevant to this politics? It may be money (walking therapy is much cheaper) but it may also be: which kind of health care to live with – one that localises 'disease' in our bodies, or one that attends to 'problems' in our lives? To ask such questions is part of a politics that isn't primarily critical. Instead of complaining about biomedicine in general, or the patriarchal character of the medical profession (which are common tropes in parts of medical sociology), it works by taking the professionals seriously instead. It <u>joins</u> in their debates. Social criticism, so to speak from the outside, is replaced by a form of politics from within, a form of intervention that belongs to the belly of the whale. This is a form of politics that works by levering the ontological non-coherence of the practices of the oscillations between singularity and multiplicity to shift the balance of the realities being enacted – and the normativities that are embedded in these.

c. Material-Semiotic troping

Here's another form of analytical/political intervention that profits from the non-coherence of reality-enacting practices. If language and practice weave a fabric, then it is possible to <u>trope</u> terms, to <u>bend</u> them, and to articulate them, with the object of interfering in their ecology. Citation: Donna Haraway[23].

Here's the argument. As we have seen, what's real is not locked down. Rather, it's a <u>material-semiotic</u> effect. Semiosis orders, or seeks to order, relations, and it does so in particular ways. Haraway shows this beautifully for the primates that are enacted in primate research[24]. They can, for instance, be put into separate cages joined only by small 'child-sized' doors, and so help to naturalise the American middle-class nuclear family. But attend instead to the 'cyborg'. Haraway describes the history of this trope. A part-human, part-machine enhancement of the merely human, it was born in the US space programme and its military entanglements in the 1950s. This was a semiotic <u>and</u>, in due course, a material ordering that carried notions of the person – and of the world – that were masculinist and militaristic in ways that are obviously highly problematic from the point of view of any form of radical politics. So Haraway does a politics of critique, but she is also doing something that is much more subtle. She tropes the term – that is, she bends it – to produce an alternative cyborg figure that is feminist and libratory. Like its predecessor, in her writing this is part human and part machine. But it is also a partial and incomplete combination of other and unexpected components. It's a <u>surprising</u> cyborg that wrestles with political and reality-related problems that have nothing to do with its masculinist predecessor. In particular, it holds together uneasy political allies (an example might be black activists working in industrial disputes with white-dominated organised labour). And it also holds together that which is materially enacted, and that which is a dream or a hope: reality-possibilities that are barely being enacted at all. In other words it holds together reals and not quite reals – and in so doing opens a space for political-reality possibilities. Reality is no longer destiny. It's an effect of tropic practices.

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[22] Mol (1999)
[23] Haraway (1991a).
[24] Haraway (1989).

Haraway is doing a bunch of things here. For instance, she's arguing against essentialisms – even radical essentialisms. Thus she's arguing against a particular version of radical feminism that rejects technoscience as an inherently masculinist project. But most important for present purposes, she's generating another technique for intervening in the non-coherent assemblages of the real. That is what the cyborg is – a set of partial and non-coherent connections[25], and a trope for re-articulating these. So hers is another intervention from within the belly of the whale. Indeed, no-one is more explicit about her inability to escape from that belly (for Haraway it is 'the belly of the monster'). All knowledges, she says, are situated. There is no possibility of escape. There is no God's eye view, and the God-trick is just that, a trick – the pretence that it is God.[26]

d. Disconcertments

Here's a fourth instance of – or method for bringing out and attending to non-coherence This has to do with bodily disconcertment. Citation: post-colonial STS scholar Helen Verran – but I guess most of the people in this room too have been in the kind of context that she so interestingly articulates.[27]

Verran was working in Nigeria and teaching school teachers how to teach natural science and mathematics. In her work she tells about a moment when she laughed, when things did not fit and the non-fitting was puzzling, strange, and illuminating. This moment came after one of her pupils, the teacher Mr. Ojo, had told how in his classroom he had taught his own pupils how to measure their own and each others' length. He allowed them to use a length of string and hold it next to a child and then to wind it around a 10 cm piece of card. In this way the kids were being taught to count in a way that was multiplicative rather than by extension. The string should have been compared with a ruler, that was what the textbook suggested. But since this wasn't happening, the kids weren't being taught their maths 'properly'. Mr. Ojo was deviating from the script. But, here's the oddity, the kids were doing the task just fine. They managed to measure how tall they were. There was a moment, then, when the lesson was going wrong – but at the same time it was going right. This recognition produced what Verran describes as a belly-laugh. For her this was a profound moment of bodily disconcertment.

What to make of this? Verran's proposal is that disconcertment is an embodied expression of metaphysical difference. It is, so to speak, an embodied version of the clash between different versions of the world. Now it's possible to tell a large story about this: the grand narrative is that Western and Yoruba numbering rest on different foundations. I've already given the clue: they are respectively based on extension and multiplicity (meaning, here, multiplication). It's possible, in other words, to set up a large-scale metaphysical contradiction. Verran explores this carefully in several versions. So, for instance, it's possible to tell it in terms of Northern superiority ('our'

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[25] The notion of partial connection is explored at length by Marilyn Strathern (1991). What's important here is the scale-independence of partial connection. Strathern explore this by mobilising the metaphor of the fractal. An implication is that the different partially connected elements are likely to include one another. The same argument about inclusion is made by Annemarie Mol in her (2002). What's at stake here is a difference – admittedly somewhat awkwardly caught in the English language – between pluralism and multiplicity. Pluralism implies that everything has its proper place in a single, as it were flat, universe. Multiplicity points to a pluriverse in which different realities intersect in messy, complex and, yes, non-coherent ways.
[26] Haraway (1991b).
[27] See Verran (1998; 2001); but I see it, for instance in (Blaser: 2010).

numbering is better than Yoruba counting because we know more and better). Alternatively, it is possible to tell a relativist story: they do it their way, and we do it ours. Doubtless contrasts of this kind teach us something, but Verran shows that what it leaves out is the specificities of the classroom: the cheerful and often productive chaos of the embodied <u>practices</u> of numbering as these were cobbled together by Mr. Ojo and the kids. Those involved worked on the task by drawing from what people like Verran were telling them about numbering, and what they knew from, for example, the practices of buying and selling in street markets. We're back to a story of practice, of course, of 'non-coherent' practice. It's 'non-coherent' because (this is the scale-independent method at work again) if we turn up the magnification we discover that it includes different metaphysical traditions. But at the same time, here at least, it hangs together in a pragmatic sense. It gets the job done perfectly well.

Here's the take home analytical and political point, however: as practices are <u>embodied</u>, their non-coherences may lead to bodily disconcertments. It is important to take these seriously, and to inquire into them. They may be instructive and help us to figure out where things do and do not fit – either, or both. .[28]

7. Closing questions

Devices for discovering and attending to non-coherences: that is I what I have been listing. From within the belly of the Northern whale.

I think there's an argument for saying that these are <u>archaeological</u> techniques. Perhaps, indeed, they are all versions of the <u>baroque</u>. Citations: Michel Foucault[29] (albeit, perhaps diffracted through the lens of a version of STS), and Chunglin Kwa[30]. I say this because I think that we are here in the realm of a subordinate tradition of techniques coming from the North or the West, techniques that work to turn up the magnification to reveal patterns of practice and impute non-coherences. I could write about that, and it deserves further thought. But perhaps it would be more productive to end with questions.

- If this is a useful way of proceeding, then what might we <u>add</u> to the list of tools for levering away at and articulating the deniable non-coherences of the Northern whale?
- What do these tools – or others like them – imply for, or offer those working on and within 'north/south' relations? Are they of any <u>use</u> for those in the 'south' caught up, as they also no doubt most are, in 'northern' relations of one kind or another? In markets, states, organised crime, violence, or regulations?
- What is it that the tools do <u>not</u> do? Or, to put it differently, what might those of us caught in the belly of the whale learn from the ontologically-lumpy and power-saturated post-colonial encounters described by so many of the members of this workshop? How else might we work upon the North from within?

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[28] For further thoughts on this, also in a 'post-colonial' context, see Law and Lin (2009).
[29] Foucault (1972).
[30] Kwa (2002).

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