

Fishy Parables¹

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‘The card index marks the conquest of three-dimensional writing, and so presents an astonishing counterpoint to the three-dimensionality of script in its original form as rune or knot notation.(And today the book is already, as the present mode of scholarly production demonstrates, an outdated mediation between two different filing systems. For everything that matters is to be found in the card box of the researchers who wrote it, and the scholar studying it assimilates it into his own card index.)’²

Narrative

I find the place heartbreakingly beautiful. Here’s a distant view [***]. You can see the fjord. If you look carefully, in the far distance you can see the glacier. If you look even more carefully you can see the salmon farm. It’s out there in the middle of the fjord surrounded by something that looks disturbingly like nature, summer nature, except that contemporary anthropology, STS and geography all warn us that nature isn’t natural. But, not to be clever, this is an appreciation of nature, or something like it, that I share with many of the people who live and work there. I’ve watched men and women on the fish farm pause at work and gaze out across the fjord and its snow in winter. I was with a worker-artist when he looked up at the hills, sparkling and glistening in the sunlight after a brief, fierce, summer rainstorm, and said: ‘Look at the light! I can see a picture.’

Narratives of place. We can tug these in several directions. First there is the **Romantic** (as in: ‘I am interpellated by the beauties of nature’ Romantic). Quote:

‘The appearance of the sea will change from day to day as weather and seasons are in continuous change. ... In the wild forests and mountains the deer is the king, living close to the fox, hare, capercaillie, black grouse, goshawk and eagle. ... From the mountain tops you [see] ... the open ocean to the inland glacier. Canoeing on the lakes hidden by forest and mountain ... lets you slide gently into the home of the wild animals and trolls.’³

I take this from a local tourist guide. And here again we have nature, and/or the mythical, and/or in some versions, the spiritual. Okay, in Norwegian English it turns out a bit twee too. At any rate, **place is being done here in a particular version of space and time.**

But alongside this we can move just as easily into the worlds of **administration.**

‘Fiskøy is a municipality in the county of Hordaland, Norway. It is located in the traditional district of Sunnhordland. The administrative centre is the village of Laksness’.

So that’s a second version of space or place. Administration and its subdivisions: this is in that, is in the other. Norwegian dolls. And then again, we can do something different yet again. A third possibility takes us to a **map** of West Norway [***]. The site of the salmon farm where we’re doing the ethnography is on this map. (I can’t show you where, because we’ve agreed anonymity.) Then again and somewhat though perhaps only somewhat related, I could also tell to you how to get there: the sequence of buses and ferries you need to follow to get to Fiskøy from Bergen.

² Benjamin (1985, 62).

³ <http://www.microman.no/Tysnes/Tysnett/fakta/komfakta/efaktrei.htm>

Notes on the Baroque

Big and small. Context and location. Global and local. Macro and micro. High and low. This much is clear. The way we talk in both common sense and social theory is permeated with spatial metaphors. At any rate, the ethnography is being done in a site. Together with Marianne Lien (my anthropologically literate collaborator) I am doing joint fieldwork. We're in the field, at a site (more accurately a series of sites) located, mostly, in West Norway. **But what to make of this spatialisation?** This is the topic I want to think aloud about this afternoon. With the health warning that this is work in progress; and the further health warning that I'm doing to do it indirectly.

Here's Bruno Latour:

'... for Tarde, the ... reason why there is no need for an overarching society is because there is no individual to begin with, or at least no individual atoms. The individual element is a monad, that is, a **representation**, a reflection, or an **interiorisation** of a whole set of other elements borrowed from the world around it. If there is nothing especially structural in the "whole", it is because of a vast crowd of elements already present in every single entity. This is where the word "network" — and even actor-network — captures what Tarde had to say much better than the word "individual".⁴

Latour's actor-networks and Benjamin's knots, runes and card-indexes, something particular is going on here to do with monadology and method. Let's follow Latour, though I'm very slightly twitchy here. I suspect that to say that monads borrow elements from 'the world', a single world that is, around them may be giving very slightly too much away. And Latour is certainly explicating Tarde in a manner favourable to actor-network theory and its projects. But it's not Tarde that is most interesting here. Indeed, it's not Latour either, though note that's he's also wrestling with the propensity to mobilise talk of big and small in social theory and life. I cite him simply because what he writes poses the question that I really want to explore: what it is that happens if we start to imagine **what it would be to live and the work in a monadological world**. What it would be if we were to embark on a voyage into the alternative imaginary of the baroque.

To think about this I borrow from Chunglin Kwa. For me his 2002 piece, 'Romantic and Baroque Conceptions of Complex Wholes in the Sciences'⁵ is one of the most important contributions to STS of the last decade. This is because he is trying to struggle out from under the holistic weight of what I take to be a hegemonic metaphysics of romanticism. Instead he is trying to imagine and articulate the possibility of baroque alternatives. Kwa's paper is on meteorology and on ecology. He's tracing two sensibilities that have, he suggests, informed these areas of science during the late nineteenth and the twentieth centuries. Here's what he says:

'The romantics **look up** and recognise collections of individuals as higher-order individuals. This is a process of **abstraction**, a search for **higher order laws and principles**. By contrast, the baroque **looks down**, and, like Leibniz, observes the **mundane crawling and swarming of matter**.

Following this, Kwa quotes Leibniz' famous lines from the Monadology:

⁴ Latour (2010, 10).

⁵ Kwa (2002). See also my own earlier attempt to draw on Kwa, Law (2004).

‘Every portion of matter can be thought of as a garden full of plants, or as a pond full of fish. But every branch of the plant, every part of the animal, and every drop of its vital fluids, is another such garden, or another such pond.’⁶

a metaphor that is perhaps particularly resonant in the present fishy context. Then he continues:

‘... To Leibniz, the unity of his body is political in form, a free republic of monads. So it is the direction of looking which matters. Only then does the fundamental difference between the **romantic conception of a society as an organism**, and the **baroque conception of an organism as a society appear**.’⁷

Let me repeat Kwa’s last and move here because it’s crucial. Look down, he says, and the organism will turn into a society. Look up, search instead for abstraction, and society will become an organism. Or, in the present context, something like an organism, something (at any rate) that takes the form of an **emergent property**. A set of general laws. A macro-structure. A society. Market forces. A country. This, of course, is what Latour is saying.

Here’s Kwa’s argument. There are two sensibilities at work. To make a big and thereby somewhat romantic story out of it, in the traditions of the north and the west it’s the romantic that is dominant, mostly. This is the metaphysical imaginary that has motivated and has been carried in predominant ways of knowing and recognising the world, at least since the Enlightenment. But alongside this romanticism, and again within the Western tradition, there’s also a somewhat subordinate tradition of baroque conventions or apprehensions. I’m not competent to spell out the history, nor indeed the philosophy. However it’s clear that the philosophers here include Leibniz and Whitehead. While the social analysts include: Gabriel Tarde; perhaps more interestingly, Walter Benjamin; and in the contemporary world, some of the versions of STS (not all)⁸ and some versions of anthropology and postcolonialism (again with the same health warning attached)⁹.

And this is the theme I want to play with as I circle around the spatial: I want to attend to the baroque and its tensions with romanticism in the telling of a fieldwork site. I take you, then, back to the fish farm.

Ceremony

Story one.

Look at this picture. We’re on shore. What you’re seeing here is a little unusual because the people are gathered for a **small ceremony**. Here’s the occasion. The very first small salmon, parr, are being piped into the very first tank in a giant new installation. This installation is only partly built. There’s no roof to it, no walls, and most of the tanks aren’t ready yet. But it’s a major investment. For the firm. But also, I guess, for the people who work there. Jobs are being made secure, and new jobs are being created. So, here’s the point, the moment is a bit special. Though it wasn’t scheduled beforehand, at lunch-time the manager and the owner agreed: today would be the day. So now it’s

⁶ Leibniz (1973, 277).

⁷ Kwa (2002, 26).

⁸ For instance, Mol (2002), Haraway (2007).

⁹ Verran (1998), Escobar (2008), Raffles (2010), Blaser (2010).

the afternoon and everyone (we're talking of less than a dozen people) has stopped doing whatever they would have been doing to watch. And there's a palpable degree of excitement in the air.

The **forklift truck** appears with a tank of young salmon. This is coupled to a pipe that leads to the new tank. Once this is done lots of photos are taken and everyone watches as the owner opens the valve. The fish are washed out and down the pipe. At the other end, the first of them **drop into the new tank**. There's a round of applause. The new installation, largely unbuilt as it is, is now in use. It's all gone well, so it's a celebration. Everyone is cheerful. Everyone is talking. Everyone is watching. Shortly the manager will produce **cigars** and hand them round. And those who aren't members of the Norwegian Temperance Union will each come away with a rather good bottle of wine, courtesy of the owner.

Comment: Allegory

I start with what may be the most difficult point. I return to Kwa, who is here talking about Deleuze:

'the usual [romantic] idea of concept refers,' he says, 'to a cosmological order which is grasped by the thinking subject. In the baroque, **the concept is never severed from the individual**. A baroque concept ... is an allegory, not a symbol of the cosmos. It is a narrative.'¹⁰

The baroque sensibility, then, is to **story-telling in specific places**. That's what knowing is about. 'Concepts' (if we want to use that term at all) are situated. Donna Haraway's way of working comes to mind, which is why I use her terminology¹¹. Words become tropes. They include the world (for the whole world is inside the practices assembled in the individual), and they operate upon that world too, they are performative. In short **concepts become parables or fables**. 'Once upon a times'.

So once upon a time, in the late winter of 2010, there was a ceremony. But what's the character of the fable? It's possible to **look up and to be romantic**. Indeed it's instructive to do so. It leads us to stories of **community** – for this is an island community. I don't say its cosy, but it's fiercely proud. This is West Norway. The way in which they talk distinguishes them from the next island. Everyone knows everyone else – and, to be sure, their business too. More than 50 years ago anthropologist John Barnes described the ordering of a West Norwegian island community in terms of three distinct systems: territory; industry; and network (or class)¹². There are no doubt differences between his 1950s island - Bremnes – and the pseudonymous Fiskøy, the island Marianne and I looking at in 2010. But there are unmistakable similarities too. For instance, what you see in the ceremony is both entirely egalitarian and not at all so. So one of the figures you see in the photo is a multi-millionaire, he's the owner. The others, most of them, are his employees. But can you tell them apart by looking at the photo? I suggest that both hierarchy and non-hierarchy are being expressed here.

This way of telling leads us to a more or less **big story**. It **looks up**. It's pushing us to **synthetic romanticism**. Island society is being turned into something a little like an **organism**. It has its structure. **Size-work** is being done too, so the ceremony is being turned into a more or less

¹⁰ Kwa (2002, 47).

¹¹ Haraway (1997).

¹² See Barnes (1954).

important **detail**; an **illustration**; another **example**. Of something in a larger context. But let's just hold on tight to the baroque alternative. This tells us **that we're trading in exemplary parables here**. If size there is, then somehow or other it's being **articulated or done** in this practical monadology.

Workday

Story two.

The man in this picture is an ex-seaman. In some sense he's a romantic. At any rate, the fjord country of Norway interpellated him so deeply that he moved from central Europe to Norway, and now he works on the fish farm. Here he's splicing a rope. He's a skilled ex seaman and he's good at this, just as he is with many other tasks.

He and his co-workers out on the fjord start at 7.00 in the morning. It's six or eight minutes in the **tender from the shore**. Depending on the time of year this is a journey that can be cold and bumpy, or bright and beautiful. Once they're on the farm, they first and urgently set the feeding system going. This is crucial, the most important task at the beginning of the day. Then they make coffee and sit for a few minutes. Then, coffee drunk, the daily routines start.

Here's a constant: they check the feed and supply the hoppers. They check the **feeding itself**. It's a constant preoccupation: how well are the fish doing? Are they not eating? And if not, then why not? Are they sick? Are they being overfed? One or two people (there are no more than four or five in the team) go round and suck the **dead fish**, the 'daufisk', out of the bottom of the pens and cart them to the macerator. Someone is keying data on feeding statistics and deaths into the computer, and sending this by broadband radio to the shore. There's a break for more coffee and breakfast at 8.30. And again at 11.00 which is, in Norwegian style, the time for lunch. Everyone sits around the table. Plates and cups and glasses and cutlery are laid. And there is **bread, spreads, tomatoes**, canned mackerel, salami, cheese; together with coffee, juice, tea. People eat and they talk and they rest. At the end of the hour everyone clears up and someone sets the dishwasher going. It's time to work again.

Two or three people may be shifting **the nets** (the latter have to come out of the water every fortnight to stop the growth of algae and shellfish). If it's a day that the supply ship is delivering, then someone will be working hard with the **fork-lift**, stacking feed. And then there's maintenance – there's always maintenance going on: ropes to be mended; painting; hosing down; rewiring a generator; sealing feed pipes. And then regularly but not every day, fish in the pens are being caught and weighed, or tested for sea-lice, or killed so the colour of their flesh can be checked (consumers like their salmon to be nice and pink). And then, from time to time, there's a visit from the vet.

And then it's 3.00pm. People are tired even if it's high summer and the sun is shining. So it's back into the tender for the short return to the shore. It's knocking-off time.

Comment: Sensuousness

We can do romantic on this – or baroque. We can, that is, look up – or look down.

I'm much more interested in looking down than up, so my gesture in the direction of the romantic is cursory. But to make that gesture, it would be possible, perfectly easy, to treat the working days of the people in terms of the categories, for instance, of labour process theory. The working conditions aren't bad. In fact they are rather good. Norway is rich, and even in this neo-liberal era the Norwegian state has a strong tradition of social democracy that extends deep into the workplace. So, for instance, health and safety are taken seriously, working days and breaks are regulated, as too are holidays. However, at the end of the day people like Knut, the ex-seaman, are employees of a medium-sized, efficient and profitably growing private firm. (Indeed we have already met the owner). Profits, we know from labour process theory, come from the labour of those who do not own the means of production. That is what is going on here. And since I am just gesturing, let me add that none of this seems entirely stupid. All those profits come from somewhere, and Marx's proposition that dead capital does not generate its own surpluses doesn't seem wrong.

That's the gesture towards romanticism. I'm sorry it's bland, but in one form or another, in this way of imagining the world, the fieldwork narrative turns itself to a description, no doubt one of many, of people working for private capital in the aquaculture industry. Note the **size-work** going on here. **Labour processes are structural**. In one sense or another they are **large**. Ethnographic accounts may be illuminating, but they are small.

But what happens if we look down? Kwa defends his use of the term 'baroque' by noting that it, the historical baroque, attends to and 'insists on a strong **phenomenological realness, a sensuous materiality**' (my italics). Leibniz' fish within ponds, and ponds within fish, and all that. In this experience, the mundane and sensuous world is a teeming pool (again I'm quote Kwa) of 'crawling and swarming ... matter'. The baroque sensibility, then is to **swarming**. The more you look, the more you turn up the magnification, there more there is there, and the more there is to be told about. This is because the whole world is present within the monad, one way or another. Though, we need to add this. Leibniz notes that monads know themselves more or less well, which is why Latour chooses his words with care in the quotation I cited above; why he talks of the monad as 'a **representation, a reflection, or an interiorisation**' of a whole set of other elements. To put it differently, parts but only parts of the swarming appear in narratives or stories. Others parts are known to the monad inexplicitly, so to speak as mere interiorisations. As Leibniz puts it:

'The [the monads] all reach confusedly to infinity, to everything; but they are limited and differentiated by their level of distinct perception.'¹³

This tells us that the baroque is sensitive to sensuousness, aware of it, but that it only ever articulates parts of it: that knowing is in large measure to do with the **tacit**; which is nearly the same as saying that what is told is better understood as **parable or allegory** than as representation.

A couple of observations before I move on.

First, what might all this mean in practice? STS offers us one version of an answer: work, labour if you like, is complex. What may seem simple isn't. There are, for instance, endless embodied tacit knowledges and skills. The person is an assemblage of crafts that is worthy of respect. And/or STS

¹³ Leibniz (1973, 276).

also suggests that behind their apparent simplicity the instruments of work are complex too, so to speak multiplicities rather than black boxes.

And two: what of the issue of spatiality? The answer is profound and it is also methodological. In a monadology the difference between big and small are (as it were) reversed (though that is a little too simple). That which romantics take to be large, that which they look up to see, is actually somewhere down **within** the teeming sensuousness of the monad. It has been interiorised, and (just maybe) articulated. This tells us that the labour process fable, then, **may be understood as an allegory about size**. It is a tale, possibly a productive tale, about what is big. It is doing size as something outside. A context. A context that determines.

Pipes

Story three.

The ethnography is collaborative. But though we arrive and leave together, on fieldwork days mostly Marianne and I try to talk to different people and see more or less different things. The way this works is more or less gendered. Marianne talks with people, sometimes, not always, with women. To caricature, she learns things about 'culture'. Though I also do this, I find that I'm particularly interested in the plant; meaning, the place as a physical structure. If I can find a way of working with the maintenance men (yes men) this is what I do. So I spend time, for instance, with Knut, and sometimes I'm useful, and sometimes I'm not and I'm simply getting in the way. And alongside all this I'm looking at and I'm fascinated by the machinery and the pipework, at the infrastructure. And when I get an opportunity, if this isn't too boring and if he isn't too pre-occupied, I'm asking him about it, and about how it works.

This, for instance, is the underneath of the vaccination cabin. Each year around 1.6 million small fish are **vaccinated** in that cabin. Indeed, Marianne and I have helped with this. But then, both inside the cabin and around it there's a maze of cables, stays, pipes and spars. Here's **another picture**. This time we're round the back of the cabin. As you can see, there's an obvious way in which we're far removed from the sleek and polished machinery of modernity and the nice smooth allegories that accompany it. But I've come to understand that there is a kind of order in this apparent disorder. There are electric cables that lead to the machinery, the lights and the heating in the cabin. And then, and more obviously, there are pipes for pumping young salmon uphill into the cabin. And there are more pipes which wash them downhill and back out of the vaccination cabin once they've been immunised. Those pipes lead in various directions. In this picture the most prominent of these – the long diagonal – is the pipe that carries the fish that are deemed too small to a holding tank. In due course they will be **asphyxiated**.

I can't resist **this photo** either. It's a winter morning, bitterly cold. And the **cold** is affecting the young salmon too. The fresh water in their tanks is starting to freeze. This is bad news. The fish are starting to die. What to do? The answer is: to pipe salt water in from the fjord and mix it into the fresh water. And that's what this pipe is doing. Isn't it beautiful?

Comment: Continuities?

How to think about these pipes? And how to narrate them? Again we can take this in one of two ways.

If we look **up**, then arguably the particular pipes that I've shown you become components in a **system**. I can tell you the story of this system. For instance, I am shown how the fresh water comes in at the top of the site and how it's filtered and sterilised. If necessary its temperature is adjusted. Silicates are added to control the levels of aluminium. So too is oxygen, and (as we've just seen) perhaps some sea-water to lower the freezing temperature. And then it circulates, so many litres a second, through a series of tanks. Or (in the case we've just been looking at) it's pumped to the vaccination cabin to wash the fish in and out. Either way, once it's done its job its channelled downhill through a series of sluices. On some sites it's filtered on the way out. And then it's released back into the river. All this tells us that what we have is an **open system**. Yes, it's open but it's nonetheless a **system**. It's something that is being understood as a whole. The different parts achieve their significance in relation to one another. They are being are co-ordinated and fitted together and controlled in reality, or perhaps in the breach.

A reminder:

'The romantics', says Kwa, 'recognise collections of individuals as higher-order individuals. This is a process of abstraction, a search for **higher order laws and principles**.'¹⁴

Described as a system, the pipes thus count as a modest version of romanticism. That is what 'systemness' is¹⁵. It looks up and discovers a governing logic of links and connections. Important here is that the logic, if it is working at all, works to **disconnects the system from its environment** to greater or lesser degree. That's what makes it, the system, knowable and controllable, for instance to engineers, to scientists, or to managers; or, if we choose to scale the whole thing up (as did Leibniz) to God and the universe.

But it can all be done differently. As I hinted a moment ago, pipes may not teem or swarm, but they are material, and they **interiorise** worlds. They interiorise the worlds described by the system stories, but other worlds too; worlds that indeed teem and swarm. Remember the pipe from the vaccination cabin for the undersized fish? That pipe is an allegory without words which can, however, be articulated quite endlessly into words; for it tells, in words or otherwise, stories of undersized fish. There are stories that take us to and include the **economics of feeding** (if the fish don't convert feed 'efficiently' then they aren't going to put on weight well); to stories about the practices of the **genetics of breeding** (weight gain is one of the preferred breeding traits, they select for it); to worlds that have to do with the **social behaviour of fish** (some are less aggressive than others, which may well be fine in the wild, but its less good on the farm). And these stories are just a beginning. Small fish may or may not do well, as individuals, when they are caged together with 50,000 others. They may become miserable and skeletal '**losers**', 'taperne', as they are called on the farm. Economics, genetics, animal behaviour, and losers, these are just four of the narratives that appear when we start to look, in baroque mode, down into the pipework; when we start to attend to it as allegory; when we attend to it as sensuous interiorisation.

¹⁴ Kwa (2002, 26).

¹⁵ Law (2002).

The conclusion: romanticism in this version generates **networks or systems** that recognise the environment, but try to close themselves off and generate relative sizes and significances by forming totalities that may be apprehended, probably described, and possibly controlled. (As I noted, the extreme case is a monotheistic God with his orderly omniscience). Whereas in the baroque sensibility there's no strong distinction between individual and environment; between context and content; instead this is a **continuity**; the outside is within and, somehow or other, it is known. The monad is its own world. This is what Latour is saying of Tarde's (possibly) mis-named 'individual'.

Figures

Story number four.

On the farm there are inscription devices everywhere. [***] Here's a humble set of scales. Well, not so humble: it has electronic innards. [***] There are endless tables and charts too, filled in daily, by hand. (These particular figures record oxygen levels in water in different tanks.) [***] Here is Irina typing figures into the computer. They'll go upstairs to the manager and on to head office. Some of those figures are being pored over and scrutinised on a daily basis. I mentioned two of these above: the statistics on feeding; and the count of dead fish. Some are examined if things are going wrong. (What might it be that correlates with a worryingly high death-rate? Water temperature is a candidate, though certainly not the only possibility). Then again, there are other statistics (for instance the pH counts of the river headwaters) that gather electronic dust in the file-servers most of the time.

And the purpose of this digital work? Some of it is regulatory. Is the water going back into the lake clean or not? Communities and the state take a lively interest in this. The state's also interested, for instance, in the levels of lice infestation: there are lice-related fears for the wild salmon population. But many of the figure have to do with efficiency [***]. Look at this. [*** [Fishtalk webpage](#)]

'We make your fish talk!' says AkVA, the software company. It adds: 'This is done by collecting data from a wide range of sources, then process[ing] this into information, knowledge and decision support.'

Fishtalk is one of the major software tools for managing fish farming. It (we learn from the blurb):

'enables vast drill down opportunities for powerful reporting and analysis.'

It is generating 'knowledge' and the agency of 'decision support'. And then, most important of all, what's being rendered calculable is the Holy Grail of commercial farming, the FCR or Feed Conversion Ratio:

In this world low is good. The best salmon farmers get their pound of flesh for only 1.1 or 1.2 pounds of feed. (Land animals manage between 4 or 7, though the ratios are suspect since feed is mostly dry, whilst animals are inconveniently wet inside.) Not that any of this is simple. To take an obvious

example, even fish that end up dead have also been eating for most of their lives, which is bad news for efficiency as well as the fish themselves.

Comment: Knowledges?

Once again this can be read in two ways.

We have seen a version of the romantic story already. It's about control and everything that goes with it. Indeed I scarcely need to make the argument myself. AKVA's own website does it for me:

'Requested information about environment, health, quality, growth and change in balance are logged from egg to harvest. At any time in the production cycle you can acquire needed documentation on what the fish has experienced (high water temperature, good appetite, low oxygen, vaccinations, grading etc.) Updated and consolidated information about environment and feeding are crucial for the operator in order to make the right decisions every day.'¹⁶

This is romanticism at work. To know is to abstract. It is to remove representations from their contexts and render them transportable. (Remember the daily broadband transmissions from the farm out on the fjord.) It is to homogenise them, centralise, them, and to juxtapose them. It is to create what Bruno Latour calls a centre of translation¹⁷. It is, of course, to generate asymmetries, a privileged space that oversees and controls. To state the obvious, what's being done is a **logic of organisational spatiality**: top or centre, versus bottom or periphery. It proposes a mode of sizing that is putatively transitive¹⁸.

The baroque alternative is, to be sure, to attend to the sensuousness of the work. Which implies a quite different version of knowing. A reminder: Kwa on Deleuze again:

'the usual [romantic] idea of concept refers to a cosmological order which is grasped by the thinking subject. In the baroque, **the concept is never severed from the individual**. A baroque concept ... is an allegory, not a symbol of the cosmos. It is a narrative.'¹⁹

I've said this already. In the baroque, knowledge becomes parable. Always looking down, it belongs in particular places. It's situated. It shifts. It comes in and out of focus. It's partly, indeed largely, tacit. It's incomplete and it knows it's incomplete and not very consistent. It's a set of stories, and unstoried apprehensions too, endlessly interweaving with one another. It's more or less cacophonous. It's unstable. It spreads out and apprehends in every direction. And it is dispersed. Which can also be used deconstructively, as it were, on purportedly context-independent romantic versions of knowing. And, space-wise, implies forms of knowing that are only provisionally hierarchical. The general case is uncertain intransitivity. Bigs and smalls are all jumbled together.

¹⁶ <http://www.akvagroup.com/index.cfm?id=202349> (5th June, 2010).

¹⁷ Latour (1990).

¹⁸ Law (2000).

¹⁹ Kwa (2002, 47).

Fragilities

Story number five.

Whilst I was preparing this piece a sobering item hit the headlines. On a big news day, Tuesday 27th April, 2010 (the Greek fiscal crisis was in full swing and Goldman Sachs executives were being cross-examined by the US Congress) three column inches found their way onto the front page of the Financial Times under the heading 'Prices Biting'. The text ran so.

'The price of fishmeal, the key feedstuff for salmon and shrimp aquaculture, has surged to an all-time high after an earthquake wiped out processing plants in Chile, the world's second biggest exporter of the commodity. Supplies have already been squeezed by the El Niño weather phenomenon which is hitting fish catches in Peru, the world's biggest fishmeal exporter.'

In the Companies and Markets section of the paper a larger article reported that during the previous week Rotterdam benchmark prices for fishmeal had hit \$1,937 a tonne (the highest in history, and 85% up from 2008's figure of \$1,000).²⁰ It also reported that fishmeal travels on average 5,000 kilometres, making it (I quote again) 'one of the world's most internationally traded commodities'; the reason for this being that it is produced primarily in Latin America and is fed to salmon, shrimp, pigs and poultry in Europe and in China.

All this feeds directly into the farm in a variety of ways. For instance, salmon and related marine farmed species consume nearly 90% of the fish oil currently being taken from the seas²¹. This is a problem for us all. But the problem comes in different forms. One. For industry including Sjølaks the shortage of fish oil is a major obstacle to the daily accumulation of fishy capital. As a consequence agricultural technoscience is investing huge sums to devise feed with more and more vegetable protein²². But then, two, both industry and salmon have a problem, because the latter are carnivorous. Salmon and soy don't mix terribly well, and if you push the process of adding vegetable oils or proteins too far the salmon suffer²³. Then, three, there is the future. Consumers are going to find that the price of salmon in the supermarket goes up. What used to be a luxury fish may become so yet again. And then, finally, we shouldn't forget the pelagic species. Anchovies, sardines, herrings, mackerel and whiting are taken from the seas – especially in the south – in very large numbers to be reduced to fish meal and fish oil. Stories here vary, but we may be reaching the point at which the stocks are under threat. As is obvious, there are both economic and environmental issues here²⁴. Whether aquaculture is sustainable is quite uncertain.

²⁰ Mapstone and Blas (2010).

²¹ In 2006 that aquaculture consumed 88.5% of fish oil, and 68.2% of fish meal, with a 'fish-in-fish-out ratio of 0.70'. These figures are reported in Tacon and Metian (2008).

²² Tacon and Metian (2008, 150). Their Table 4 indicates that in Norway in 2007 compound aquafeeds were composed of 28% fish meal, and 18% fish oil. See also Goldburg and Naylor (2005).

²³ See Bakke-McKellep *et al.* (2007). These authors review literatures (page 66) which report that full fat soybean meal lead to intestinal inflammation, and affect intestinal function and structure, though their own findings are more ambiguous.

²⁴ 'Depending on whom you talk to'. For a sanguine view, see Shamshak and Anderson (2008, 92). For a balanced discussion see (Schipp: 2008, 8ff).

Comment: Looking Up, Looking Down?

I've thrown this 'larger story' in because it deals directly with the global. What's at stake here is not so much whether the global exists. Rather it is its, status and how it is narrated. Again, to be sure, it is a matter of whether to look up or to look down.

Obviously the romantic imagination looks up to find the global. The latter is the ultimate worldly surface. Everyone goes on within it. (That's a **cartographic** version of totality.) But, and perhaps even more powerfully, there are **system versions** of this totality at work too, most notably the **world market** and the **global environment** which can become conjoined, since markets may reflect environments, as they do in the story I've just told about feed prices. (There's a biological reality out there too to do with the malleability or otherwise of salmon as biological systems, but I'll put that on one side). In the romantic imagination, then, the farm, the firm, and indeed the industry as a whole, are small locations in a larger whole. We're back in a transitive world and it is to that world and its relations that we need to look if we want to understand the conditions that shape (say) life on the farm. What happens at a particular site may reveal local variations, but in the last instance what's going on is being driven by large scale system forces – market prices, the availability of feed, or possibly long term changes in climate. Explanations in this way of thinking thus depend on what one might think of as large scale upward reductions. It is **big factors** that shape the small. Both from the point of view of Sjølaks and of social theory.

As we have seen, in the baroque imagination to see the global we need to look down. It's all there in the teeming sensuousness of the farm already. Correction: the globals (we need to move to the plural) are all there in that teeming sensuousness. The latter, or the practices in which it is embedded, recognise, know, articulate, or otherwise interiorise, the globals. (Which is not to say, let me add, that everything being interiorised is 'global' in any romantic sense.) What's important about this move is not only that the globals are within. It's not even that they are plural. Rather, it's an implication or a consequence of that plurality. Posed voluntaristically, the important question is this: which are the globals that might be, that should be, articulated? That it is worthwhile narrating in words? What is it that should be made global in this way? I think this is the key question. It's a question of politics: to decide what to try to recognise and respond to, in words. And, and simultaneously, in the context of the global, it's a question of size or scaling. Here's the question: what should be said to be very big? So big that it contains, includes or dominates everything else?

Conclusion

I've set this up as an opposition: the romantic as opposed to the baroque. Following Kwa I've suggested that the two traditions weave their way through the traditions of Western thought and practice, but that it's the romantic that is predominant. I've tried to show what this might mean in practice: in an ethnography of the salmon farm and its context understood, on the one hand romantically, as a system or a part of a system where we look up in order to understand and explain what is really going on; or the same farm understood through the sensuous, tension-ridden and necessarily incomplete storying of the baroque where the whole is always within. I've played with the politics of this and suggested that the baroque forces questions – analytical as well as political – about what might best be articulated in its allegories. The problem, but the potentiality, being that there are multiple possibilities – alternatives that are characteristically closed off in favour of a single solution within romanticism.

As a part of all this, I've talked about the sizing implied in the two positions. The romantic, I've said, tends to make instances small, and then works to locate them and their components within in a larger and more or less transitively ordered whole. The predominant questions for romanticism thus tend to become technical or epistemological. The issue is how best to measure or otherwise properly characterise size, the character of a relational hierarchy, and or the location of whatever is being explored within a larger whole. By contrast, the baroque treats sizing and scaling as multiple, varied, shifting, and necessarily complex. Scale transitivity would be an unusual special case in the world of the baroque. Instead it becomes necessary to find ways of dealing with allegories of size, with the tensions between multiple sizings. The issues are not simply or even primarily technological or epistemological. Instead they become ontological. Which are the sizings to include and narrate? Which are to be storied? And which are not²⁵.

Working within the baroque takes effort. The hegemony of the romantic is always in the wings, waiting to reassert itself. For instance, monopolistic representational narratives are doing the rounds in the fieldwork site and in the writings of professional social scientists. The saving grace, however, precisely lies in the fact that there are so many of them. Put voluntaristically (which will not really do) we are faced with questions like: do we take global markets seriously, or the class struggle? Do we treat communities and their identities as what is most important? Or would it be better to attend to failing ecological systems? This multiplication denaturalises individual romanticisms. It forces them into interaction with one another. And, importantly, it allows us to locate romanticisms (our own included) within particular sites and practices: to situate them, however grand they sound.

In this baroque procedure we necessarily move between different versions of the romantic. And it is this instability and tension that gives a baroque sensibility the possibility of traction. Which interiorisations to articulate? Which to put alongside one another? Which particular set of weavings might hold for a moment? And this, of course, is why I have built this paper by putting different more or less romantic parables together. It is why I've tried to shuffle them, articulate their interferences, and put them into conversation with one another. Not because in so doing I therefore arrive at a stable place with the right account (such a hope or aspiration would be a version of romanticism); but because this makes it possible to articulate specific realities that might otherwise have been interiorised in less linguistic ways. In the present paper these have been to do with the ultimate implausibility of the romantic imagination, at least in its monopolistic forms; and, alongside this, the plausibility and productivity of the baroque, for instance with respect to the multiple and provisional character of sizing and scaling.

But here's the really interesting question. Which parts of the teeming sensuousness to look down into? And how to know when to stop? I often hear these questions from my students. Actor-networks, they say, have no end. Yes, I say in answer, that's right. That's in the nature of monads. There are fish in the ponds and ponds in the fish. But then again, the students aren't wrong either. Since life is short, the issue is: how to weave well and to stop well? My stock response is to ask: well, why are you doing this study? Or better, what kind of a difference do you hope to make with it? Understood monadologically, this is a question about articulating that has been interiorised by other means: about what to story, and what not to story, in the context in question. And, here's a paradox.

²⁵ I have not explored the performativity of narrative here. In part this relates to the non-compossibility of post-Whiteheadian monadology. For Leibniz an overall order, compossibility, was arranged by God.

It's clear that a good answer to this question will grow out of a series of cut-down, modest, and thoroughly located commitments to romanticism. To put it differently, some allegories matter more than others. Some seem like good places to stop. Not transcendently, or for ever, but for the time being. It's worthwhile pressing them, articulating them, circulating them, in the hope they interiorise themselves in the patterning of other practices.

Take this matter-of-factly. Some realities are articulated in the practices we stumble through and get told. Then, too, some routines – let's call them devices – inscribe or articulate our storying in particular ways. They version narratives. They redo narrative patterns in particular modalities. Fishtalk and its statistics. Prices determined by market mechanisms. Water temperatures inscribed by thermometers. Counts of sea-lice. Those are some of the Sjølaks' patterning devices. Inscription devices. But these don't just have to do with numbers. As we've seen for instance, ceremonies, big or small, narrate egalitarian communities or organisational hierarchies. And let's not forget the allegorical narrative devices of social and political theory as they story systems, social classes, democracy or environmental degradation. As we do our fieldwork this necessarily embeds and grows out of these narrative devices, devices that lift particular fish and particular ponds into articulability. They articulate our practices, our commitments, and the kinds of differences that it becomes important to make.

All this suggests that for the baroque the real tension is not between romantic foundations on the one hand and relativism on the other. This is itself a romantic all-or-nothing choice. Rather, it's between different modest romanticisms and their parables and how to handle these. For in this way of thinking, the scholarship and the politics of the baroque start to look distinctive. Where to stop telling stories and putting them in tension with one another becomes a practical matter, both political and analytical. It is not fixed. The question then becomes: which are the modest romanticisms that it might be useful to articulate? Which are the interferences that it might be good to stage?

References

Bakke-McKellep, A.M. *et al.* (2007), 'Histological, digestive, metabolic, hormonal and some immune factor responses in Atlantic salmon, *Salmo salar* L., fed genetically modified soybeans', Journal of Fish Diseases, 30: (2), 65-79.

Barnes, John A (1954), 'Class and Committees in a Norwegian Island Parish', Human Relations, 7: (1), 39-58.

Benjamin, Walter (1985), One Way Street and Other Writings, London: Verso.

Blaser, Mario (2010), Storytelling Globalization from the Chaco and Beyond, Durham and London: Duke University Press.

Escobar, Arturo (2008), Territories of Difference: Place, Movements, Life, Redes, Durham and London: Duke University Press.

Goldburg, Rebecca, and Rosamond Naylor (2005), 'Future seascapes, fishing, and fish farming', Frontiers in Ecology and the Environment, 3: (1), 21-28.

- Haraway, Donna J. (1997), Modest Witness@Second Millennium.Female Man© Meets Oncomouse™: Feminism and Technoscience, New York and London: Routledge.
- Haraway, Donna J. (2007), When Species Meet, Minneapolis and London: University of Minnesota Press.
- Kwa, Chunglin (2002), 'Romantic and Baroque Conceptions of Complex Wholes in the Sciences', pages 23-52 in John Law and Annemarie Mol (eds), Complexities: Social Studies of Knowledge Practices, Durham, N.Ca and London: Duke University Press.
- Latour, Bruno (1990), 'Drawing Things Together', pages 19-68 in Michael Lynch and Steve Woolgar (eds), Representation in Scientific Practice, Cambridge, Mass: MIT Press.
- Latour, Bruno (2010), 'Tarde's Idea of Quantification', pages 145-162 in Mattei Candea (ed.), The Social after Gabriel Tarde: Debates and Assessments, London: Routledge.
- Law, John (2000), 'Transitivities', Society and Space, 18, 133-148.
- Law, John (2002), Aircraft Stories: Decentering the Object in Technoscience, Durham, N.Ca.: Duke University Press.
- Law, John (2004), 'And if the Global Were Small and Non-Coherent? Method, Complexity and the Baroque', Society and Space, 22, 13-26, also available at <http://www.lancaster.ac.uk/fass/sociology/papers/law-and-if-the-global-were-small.pdf>.
- Leibniz, Gottfried Wilhelm (1973), 'Monadology', pages 179-194 in Philosophical Writings, London: J.M.Dent.
- Mapstone, Naomi, and Javier Blas (2010), 'Fishmeal Prices at All-Time High after Supply Squeeze', Financial Times, 27 April 2010, 34, also available at <http://www.ft.com/cms/s/0/e0c22b16-5193-11df-bed9-00144feab49a.html>.
- Mol, Annemarie (2002), The Body Multiple: Ontology in Medical Practice, Durham, N. Ca., and London: Duke University Press.
- Raffles, Hugh (2010), Insectopedia, New York: Pantheon Books.
- Schipp, G. (2008), Is the Use of Fishmeal and Fish Oil in Aquaculture Diets Sustainable?, Darwin, NT, also available at <http://www.nt.gov.au/d/Content/File/p/Technote/TN124.pdf>.
- Shamshak, Gina, and James Anderson (2008), 'Future Aquaculture Feeds and Feed Costs: The Role of Fish Meal and Fish Oil', pages 79-96 in National Oceanic & Atmospheric Administration (ed.), Offshore Aquaculture in the United States: Economic Considerations, Implications & Opportunities, July 2008 (Pre-Publication Copy), Silver Spring, Md: National Oceanic & Atmospheric Administration, also available at http://aquaculture.noaa.gov/pdf/econ/econ_rpt_all.pdf.
- Tacon, Albert G.J., and Marc Metian (2008), 'Global overview on the use of fish meal and fish oil in industrially compounded aquafeeds: Trends and future prospects', Aquaculture, 285: (1-4), 146-158.

Verran, Helen (1998), 'Re-Imagining Land Ownership in Australia', Postcolonial Studies, 1: (2), 237-254.