



# Heterogeneities<sub>DOT</sub>net

## Good Passages, Bad Passages

**John Law\* and Ingunn Moser\*\***

---

\*ESRC Centre for Research on Socio-Cultural Change, Department of Sociology,  
Faculty of Social Sciences, The Open University, Walton Hall, Milton Keynes MK7  
6AA, UK ([j.law@open.ac.uk](mailto:j.law@open.ac.uk))

\*\*Diakomhjemmet, P.O. Box 184, Vinderen, 0319 Oslo, Norway  
([moser@diakomhjemmet.no](mailto:moser@diakomhjemmet.no))

This paper was originally published as:

John Law and Ingunn Moser (1999), 'Good Passages, Bad Passages, in John Law and John Hassard, (eds) *Actor Network Theory and After*, Oxford, Sociological Review and Blackwell, pp 196-219. Please refer to the original publication for the definitive text.

This version was published by heterogeneities.net on 31<sup>st</sup> December 2011 at  
<http://www.heterogeneities.net/publications/MoserLaw1999GoodPassagesBadPassages.pdf>.

Please acknowledge and cite any use of this on-line publication.

### **First Story**

Ingunn is ringing the front door bell of Liv's flat, and there's nobody at home. Indeed she has been ringing for some time. It's getting monotonous. Then she hears the sound. It's the sound of an electric wheelchair. She turns round. There's a woman coming towards her. The woman is driving the wheelchair. And she's looking at Ingunn. She's wondering who Ingunn is and what she's doing there. The wheelchair rolls to a halt. Later it will become clear how it works, the wheelchair. And how this woman – it turns out that she is Liv – lives, spends much of her day, in the wheelchair.

Apart from the fact that she is confined to a wheelchair, Ingunn knows almost nothing about Liv. She knows that she can't answer

the phone, but that's about all. For instance, she doesn't even know how Liv controls the wheelchair. Liv is going to explain that she steers her wheelchair with a switch. She doesn't work the switch with her fingers: she does not have the use of her arms and her hands. Instead she works it with her chin. It takes the form of a long stick – perhaps we should say a joystick – which is attached to the back of her chair. It goes from the back, over her right hand shoulder and arm, and ends just beneath her chin. If she leans her head forward a little then she can move it, move it forwards and backwards, to the left and the right. If she holds it to the left, then the chair turns left. And if she holds it to the right, then, well, it turns to the right. To start it she uses a key, which takes the form of another switch, attached to the same stick that goes over her shoulder to the back of the chair. The key has a green button on top. Having unlocked the chair, she can start it by moving the first - black - switch in the direction she wishes to go. To stop, she simply releases the switch. To make it go faster, she knocks the switch to the right. This moves the three-level speed regulator one step upwards. But she says that she doesn't do this very often.

### **Extension**

The story is prosaic - though vital, of course, for Liv. The joystick and her wheelchair give her mobility. But, at the same time, it's prosaic because Liv has been living with it since 1983. But at the time, well, it was an extraordinary event, the arrival of this wheelchair and its joystick. It was, she remembers it well, 'the greatest day of her life'. Until that moment she'd only had a manual wheelchair. Well, actually, for much of her life she'd not had a wheelchair at all. At first there was nothing, then her parents laid her out, flat, in a home-made carriage. Later there was an equally home-made wheelchair, a series of such wheelchairs, homemade wheelchairs, followed finally by one that was manufactured.

The 1983 wheelchair spelled a revolution for Liv. At an age of 44 she could move by herself for the first time in her life. She could control where she went. She could stop and start at will, turn left or right, move faster or slower into the sun or into the shade, indoors and out of doors. She could, as we say, go for a walk.

So by now it is part of the mundane, the everyday, for Liv. And, to be sure, it's a prosaic story in technoscience studies too with its stories about extensions, prostheses and heterogeneous actor-networks.

We know about the ways in which different materials interact to produce cyborgs, and the way in which we are more than bodies, bodies alone<sup>1</sup>. But we are, perhaps, less clear in other ways. In this paper we want to focus on the material specificities - corporeal and otherwise - which lead to or affect the character of dis/ability. It is our argument that dis/ability is a matter that is highly specific: that people are dis/abled in endless different and quite specific ways. But we are also interested in the ways in which dis/ability is linked up with identity or subjectivity. Indeed, we take it that the links between dis/ability and subjectivity are close - which means that any study of the materialities of dis/ability is incomplete unless it also attends to the continuities and discontinuities of subjectivity - a topic that has attracted rather little attention both in actor-network theory and, more generally, within the field of science and technology studies.

## **Second Story**

So Liv is looking at Ingunn. There's a question written on her face. Ingunn explains who she is and asks her: 'are you Liv'. Yes, she's Liv, though it turns out she's not expecting Ingunn today. But it's okay to visit anyway. 'No, it won't be inconvenient. Yes, you can come in. Yes, we can talk'. So now she's opening the door.

Opening the door? Again it isn't clear how she's doing this but Liv is going to explain. She's going explain about a third joystick, this time with a red button. She can move it, again by shifting her head, her chin. But this time it's different. Because this joystick is working something called an 'environmental control'. So what happens?

The answer is that once she sets the environmental control running it moves through a series of functions, click, click, click, a different function each time. Liv knows the order in which they come. It turns out later that it is the first sub-option within the fourth main function, after the fourth click, that is going to open her front door. She moves her chin at the right moments, moves the joystick. And finally the door opens. And then Liv is rolling forward. Her wheelchair is taking her through the door. Ingunn is following her, and once they are both through, a few seconds later, the door closes. It closes automatically. They're in the flat and they're ready to talk.

## **Specificities**

Altogether there are five joysticks. That is, five long switches which branch out of a single support. One of these works the environmental control. Click, click, click, this shifts itself through its functions. So what are its functions? Well, that depends on the set-up, on how it's been arranged. Liv's environmental control works a series of functions: it answers the telephone; it makes telephone calls; it switches the lights in her flat on and off; it turns the television on and off; and it operates a series of what they call 'apparatuses'. That's the first level. But there's more than one level. Go down one step and you can control the specificities. For instance, the specificities of the television. What channel does she want to watch? How loud should the sound be? Or, on this level, again under apparatuses, you can turn the radio on and off, you can open or shut the front door and the patio doors, lock or unlock the front door, and call for help if an emergency should occur. The environmental control is a little - or not so little - hierarchy of controls, commands that work this and that in her flat.

Specificities. A command to do this. The capacity to do that. Liv is able, she is able to control the television, to open her front door, and all the rest. And, we've seen this, she can move, move around in her wheelchair. Mobility, specificity. She can work parts of her flat. The door, that's a specificity. The television, that's another. But she can't work the blinds, not for the moment. They're not hooked up the environmental control, not yet. They're not hooked up to it because she hasn't got round to it yet. So the blinds don't have the electric motor they'll need if they are to be worked from the wheelchair. She's planning to get this. Does she want anything else? Well, possibly, though she's not bothered about having an alarm. No, she says, she doesn't need that, there's always someone around. 'There'd be someone around if something went wrong. And I could ring them anyway.' Liv's flat is one of 18 in a new and relatively uninstitutionalised local authority home for people with disabilities. This means that her flat is her private home - her personal territory. Care workers come in - but as visitors - though Liv can get help around the clock.

The environmental control is a set of specificities. It is like the wheelchair, which is another set of specificities. Forwards, backwards, left or right, movement is possible on a surface that is reasonably solid and reasonably smooth. These are specificities

about mobility. Dis/ability is a set of specificities – which means, to be sure, that we might imagine ourselves as abled, but abled in a million ways. Just as Liv is dis/abled in million ways.

Opening doors. Going up and down stairs. Brushing our teeth. Reading the newspaper. Using the telephone. Writing a letter. Cleaning the kitchen. Making a meal. Eating in a restaurant. Going to the cinema. Doing up our shoelaces. Sitting a granddaughter on our knee. And so on. And so on.

Specificities.

### **Third story**

So Liv has got it worked out – but then again, Liv is a pretty determined person. She's 56 and she's been dis/abled since birth. She was born at a time when there was no formal education for severely dis/abled people in many parts of Norway. It was her mother who taught her to read and to count – her mother and friends of the family. She has battled her way towards relative ability for decades.

Here's another story. Liv is from Trøndelag which is hundreds of kilometers from where she lives now. But she's still got family there, family and friends, and she likes to visit them. Though visiting isn't so easy she's determined about it. She was determined, for instance, to go back and visit the institution she'd lived in for years which was having a celebration. So she and her carers made the arrangements. She bought the train ticket. She told the railway she was dis/abled, confined to a wheelchair. No problem, they said. The trains are built for people in wheelchairs too. There's a lift, a hoist, at every station. You roll the wheelchair onto the hoist. It lifts the wheelchair up. And then you roll into the train.

The day arrived. Liv was there at the station. She was waiting for her train. The train arrived. But where was the hoist? Answer: it was missing. They tried hard and found a kind of a ramp with rails. Then they tried to haul the wheelchair up the ramp, but it didn't work because the wheelchair was too heavy, and the ramp was too steep. The train left without Liv.

### **Passages**

Movement between specificities. Between, for example, the platform of the station and the train itself. Or her home town and her desti-

nation. We need to say that the movement between specificities is also a specificity in its own right. Here it takes the form of a hoist and a taxi - for though the railway had got it wrong and failed to make the specificity needed to bridge the gap between the platform and the train, they did do the next best thing. They ordered a taxi and paid for it too, though the story doesn't have an entirely happy ending, because, on the way back, there was a hoist. So they lifted Liv and her wheelchair into the train, but then they parked her in the only place where there was room for a wheelchair: in the baggage compartment. Liv found herself travelling with the baggage.

So the argument has to do with specificities and the relations between specificities. Once we start to attend carefully to specificities, the passages between those specificities also come into focus. We find that we need to pay attention to them too. We need to look into how they are done, done, or not done, these passages which are also specificities in their own right. And talking with, talking of, Liv, already tells us quite a bit about the character of some of those passages. It tells us, for instance, that some are easy and some are difficult. It tells us, for instance, that for Liv the passage between opening her front door and switching on the lights is pretty straightforward, as is the passage between controlling the front door and moving her wheelchair. Whereas, on that day in that railway station, it turned out that the passage between platform and train was insurmountable.

Note that: on that day, and in that railway station. Because we're dealing with specificities here, specificities, and the equally specific passages between specificities. Specificities – let's remind ourselves – that are specific because they come in the form of networks of heterogeneous materials. To repeat the standard lesson from STS: if the networks are in place, if the prostheses are working, then there is ability. If they are not, well then, as is obvious, there is dis/ability. So here's the proposition. Dis/ability is about specific passages between equally specific arrays of heterogeneous materials. It is about the character of the materials which en/able those passages. And it is about the arrays which secure or don't secure them - like absent lifts.

### **Fourth Story**

We said it earlier: Ingunn knew almost nothing about Liv before she visited her for the first time, except that Liv couldn't answer the

telephone. So she knew that Liv couldn't talk so well, and the question was: how would they communicate?

It turned out Liv could talk. Ingunn discovered this in the first five seconds, at the moment when they met outside her front door. But could they have a proper conversation? Could they talk for two or three hours? Would Liv be able to respond to her questions? And in turn, how well would Ingunn understand her answers? None of this was clear as they entered Liv's flat. Ingunn looked around for the aids which she had become familiar with in the course of other interviews. For instance, the portable computer with its little screen or the little box with its menu of chosen sentences – devices which speak the words when words made by voices break down. But she couldn't see any such devices. It seemed that they were going to talk to one another face to face. Voice to voice.

And so it turned out. Liv asked Ingunn to take a seat – and she sat on her sofa. Liv moved her wheelchair to the right of the sofa. Liv started to speak and Ingunn concentrated – and though it wasn't easy Ingunn understood what Liv was saying. She was asking about the study, about the reason for Ingunn's interest in her disability. And so the conversation started. Indeed it started well, though, to be sure, sometimes it came unstuck.

Came unstuck? Well yes. For every so often even with concentration it wasn't possible make sense of Liv's words. Ingunn was looking at her face, her expression, her mouth, her lips, attending to her voice, to her words, but also to her intonation, to the emotions carried in her voice, the intonations of pleasures and sadnesses. She was listening, for instance, to the moments when her voice trembled or became thick. For Liv had much to tell, and she conveyed it well, yet sometimes, even so, it wasn't possible to make sense of what she was saying.

How much did it matter? Answer: it didn't matter much - but it also mattered a lot. It didn't matter much because Liv was watching Ingunn and could see if she wasn't following. Or Ingunn would repeat what she thought Liv had said, and ask her: 'is this what you mean?' And she'd agree, or not. And then, at least sometimes, it would be turned into a joke and there would be laughter to relieve the tension of failing communication.

Which meant that communication also mattered very much to Liv. Here is an excerpt from the interview notes:

'I feel myself so handicapped, she says, with a voice that is moved to tears.... She says this to me, and asks me whether I understand her, do I understand her when she speaks?

- Yes, I say, if we sit opposite one another.
- For not everyone understands me when I speak, says Liv, with sorrow and pain in her voice, a lump in her throat. That is so..... Yes. She speaks, and then there is a long pause. It is not easy for her to say this.'

### **Bad passages**

So talk is another set of specificities. Each moment in a conversation is a moment that joins together the moment before and the moment after. Artful work, well, yes, there is artful work in holding on to incomplete meanings, in joining them together, in making the necessary passages. Harold Garfinkel showed this thirty years ago<sup>2</sup>, all the business of repairing indexicality by means of reflexivity. But then there is breakdown. If you go beyond a particular point and the words no longer make sense. The words that you didn't make out can no longer be retrieved, rebuilt and inserted back into a context, and then sense is lost.

Which is all very well, and no doubt right, but perhaps it also pays insufficient regard to the materialities of words<sup>3</sup>. So what of the materiality of words? If they are spoken then these have to do with air and acoustics. But also with ears and with tongues. With throats and voiceboxes. With stomachs and breaths. With heads and cheeks and tongues and lips. With the way in which the mouth is held. With many muscular abilities. With the coordination and ordering of no less than fifty eight muscles in the tongue alone. There are so many muscular abilities, abilities that are so important, that there is a whole profession called speech therapy which reorders the disciplines of the voice when these are disrupted. But the materialities of words also have to do with the way in which speakers face each other, or don't, with what they are able to see of one another. And with ears and the sense of hearing. So once again we are dealing with specificities, specific material heterogeneities and the passages between those specificities. Which brings us to Liv's urgency, her desire to be understood. And to her self-evident pain when she is not understood.

The reasoning is so: pleasures and pains, or so we are suggesting, have in part, perhaps in large part, to do with passages. They have to do with difficult passages that are then made easy, or easy passages that are then made difficult. Or they have to do with what we might think of as 'necessary passages' – by which we mean passages

that are, as it were, set for subjects in the material and discursive conditions which order relations. Which help to constitute normative subjectivity. Which order what will come to count as the passages that are important. Or simply taken-for-granted, at any rate by those who are normatively competent. Or, to put it differently, by those who happen to take the form of relatively standardised technico-bodily packages. Such as, for instance, the business of opening and closing a front door for someone who has voluntary control of their hands. Or not. Going for a walk for someone who can indeed, use their legs. Or not<sup>4</sup>. Or speaking to someone else, having a conversation by using the voice. Or otherwise.

There are passages that are presupposed, normatively prescribed: if these turn out to be bad passages for the subject, then they make lacks. And if such passages are made better then this, perhaps, makes for pleasure<sup>5</sup>.

### **Fifth story**

This is Ingunn's second visit to Liv. By now things are different. Liv has acquired a computer which she uses to write. Of course she cannot use a keyboard. So Ingunn is asking how she works the computer. The answer is that it has a special control, a further joystick. This controls a special program called Wivik that replaces the keyboard. The program has its own window on the screen - the bottom half - while the text she's writing is in a second window in the top half of the screen. Liv can't control the cursor in the text window directly - only the way it moves in the special program in the lower window. But how does it work? Here is an excerpt from Ingunn's fieldnotes:

'How do you start, for instance?' I ask. And she says 'I push the blue joystick' till I hear a 'click', which means that I am connected to the computer.' By pushing the joystick in four directions Liv can move the cursor within the Wivik program. This has four big boxes with four arrows. And each of the big boxes is subdivided. So the whole thing is like a chinese box. And then Liv is demonstrating to me how she uses this system. She says 'I'll write my name'. She pushes the joystick to the left to get into the upper left square of the Wivik window where there are four smaller squares. She pushes the joystick away from her chin to move the cursor into the square for 'l'.

So that's the 'l'. Turning this into a capital involves further moves. She has to move the cursor down into the big box at the bottom on the right of the screen. This is subdivided into something like sixteen boxes. One of these is a function called 'sp'. 'sp' means 'special functions'. Once she is inside this she can open up another menu, or another display in the form of four further boxes where she chooses between special functions such as 'capital letters', 'save', and 'print'. Now she chooses 'capital letter' and the 'l' turns into an 'L'. This done, she has to get back up again to the boxes with the letters of the alphabet. So she continues to write, first an 'i', and then a 'v'. She's written 'Liv'. All of which means that there are a lot of operations involved in writing a single symbol or word, not to mention a sentence. And if she wants to correct things it is similarly complicated. She has to find a special sign to get into the equivalent of the backspace function on the keyboard.

However Liv works it all okay. It's almost in her body by now, an embodied skill. It's almost in her chin, the ability to work the system without thinking explicitly about every move. But it takes time. Even writing her name is a very long operation. 'It is very slow,' she says. 'But I can write more now, and I can write alone.'

### **Better Passages**

So good passages have to do with moving smoothly between different specificities and their materialities. Bad passages are about awkward displacements, movements that are difficult or impossible. So what, then, of this Wivik program? First let's note that it isn't really very easy to use – or, more precisely, it is pretty laborious. It is much easier for someone who has the use of their hands to sit and type at a keyboard. Liv takes several minutes to write the three letters that make up her name. And it takes her two days to write a two-page letter to her friend. So we wouldn't want to say that Wivik is actually a way of making good passages.

But. But we can approach the argument the other way round, and then it looks rather different. Before Liv was given the computer and the Wivik program - indeed at the time of Ingunn's first visit - she couldn't write on her own at all. She could dictate what she wanted to write to her teacher or perhaps to her carers. But her writing time was limited. There were two hours with the teacher a

week - and however much time she could beg or borrow from her carers. Most of the time, then, she simply couldn't write at all. Which was, so to speak, the literary equivalent of her inability to get onto the train. A passage so bad that it wasn't really a passage at all.

Now hoists and Wivik programs are not that wonderful. In the case of Wivik she has to chase up and down the hierarchy of commands dictated by the structure of the program. On the other hand, she can chase up and down that hierarchy. She can write letters and sentences when no-one else is around. She can spend a weekend writing a letter to one of her friends. The passages it affords, then are not that wonderful. But they are a great deal better than what there was before. They are a great deal better than nothing.

### **Sixth Story**

At that first interview Ingunn is with Liv for three hours. They talk, and near the end Liv sends Ingunn to the canteen where she is given something to eat and drink. She returns to Liv's flat to eat it and drink it. That's it: Ingunn eats and drinks, with her hands and her mouth, but Liv does not join in. Instead, she sits there, and she watches.

And what is the significance of this? Of course, there is a severely practical matter. Liv cannot feed herself. But there is something else going on too. The Norwegian custom runs so: if you visit someone's house then you are offered something to eat and drink. It is a part of the custom, the ritual, a part of playing the role of a good host, a gesture of friendship. Liv cannot play every aspect of that role. She cannot get up and go to the kitchen to make a cup of coffee. But she can send - she does send - Ingunn to the cafeteria to get a sandwich and a cup of coffee. And, note this, it is understood that Ingunn will not pay. She is a guest, Liv's guest.

### **Orderings**

Does Liv want to eat with her guest, or does she prefer to wait, wait until she has gone? Empirically, the question is one that is open. And, no doubt, it is in part a matter of discretion: Liv's discretion. For if she chose to eat with Ingunn then she would need her help, and perhaps she would prefer to avoid that. Perhaps for her this is a personal

matter – something that she does not want Ingunn to see. Though what counts as personal is, of course, a tricky matter, one of negotiation and discretion as the story about the role of the host suggests.

Here perhaps, we are all students of Erving Goffman, or Norbert Elias, or Judith Butler, or Leigh Star<sup>6</sup>, with their lessons about the division between private and public, visible and invisible, back stage and front. This is an oblique way of saying that not everything is as it seems, that the public smoothnesses always conceal work, and indeed may also conceal private disruptions. So the good passages which we see are concealing other passages – the hard work, for instance, and all the time that goes into a two page letter. Of course, some of these secret passages are good, but some of them may also be bad. To say it again, the apparently effortless movement from one specificity to the next conceals work. It conceals pain, the effort, of arraying the materials of successive specificities, of ordering them<sup>7</sup> or, perhaps, the shame involved in the materialities of their arrangement<sup>8</sup>. So there are front-stage slickness and back-stage complexities, difficulties, or bad passages.

So Liv? Well, isn't it like this? She is like any person. For any person is, after all, a set of more or less complex and difficult passages. And an economy that distributes those passages between visibility and invisibility. Not all of those distributions have to do with difficulty or ease – or (which is not necessarily the same thing) to do with pain or pleasure<sup>9</sup>. Not all. But some of them do. For instance, what we think of and perform as the 'intimate' bodily functions. These passages, passages which are taken to be difficult, are certainly not visible for most of us, most of the time. And if Liv's dis/ability requires that here she needs the help of carers, then they are certainly invisible to Ingunn, a visiting sociologist. They are back stage.

If our lives are the performance of specific passages between specific material arrays, then no doubt we might tell stories about the ways in which they are ordered, about the various ways in which they follow one another, and the degree to which they do so smoothly. There are, to be sure, whole literatures on this. For instance, thanks to Leigh Star, in STS we know something of the difficulties of being allergic to onions: yes, it is usually better to be a standardised bodily package<sup>10</sup>, one that is normatively approved, where the norms are embedded in the ramifications of the networks of specificities, and the passages between them. Of course, what it is that counts as 'standardised', what it is that is made to be standardised, are also matters that deserve inquiry. And then, again as we know well, packages that are standardised also prefer to imagine

themselves, perform themselves, as unmarked categories. Or are imagined and performed in this way as the invisible body, the corporeal-technical body that is 'naturally able', that has been normalised to the center. The unmarked normativity that is standard, that is standard and invisible – and is therefore invisible<sup>11</sup>. Is made invisible by being made smooth, made standard, or not. For passages are smoother for some than others. Stairs don't mix with wheelchairs. They mix better with legs – but legs, for instance, without the pain that comes with lower limb atherosclerosis. And non-standardised bodies, some of them, don't mix so well with onions. So there is the question of the materialities of passages – those materialities that are assumed, normative materialities, those which are provided like stairs, and those that are not like ramps or hoists.

### **Seventh story**

Here is another excerpt from the interview notes. Ingunn is asking what Liv is able to do now, that she couldn't do before, without technology?

'– Decide for myself, Liv says with emphasis. I can decide when I want to get up, and when I want to go to bed. What and when I want to eat. I can prepare and cook my own food – with help. I can decide how to decorate and arrange my flat. I couldn't do that before, not where I lived earlier. There I only had a single room. Here I have decided about everything in my flat. Every flat here is different, she adds. And she repeats; I can eat at home by myself here, I can have visitors, prepare the food myself – with help. Those who want to can go to the canteen and buy their food there instead. And I can go out for a walk whenever I would like.'

'Where I lived earlier'. Liv is making a contrast between her current living conditions and the home where she used to live, which was much more institutionalised. Elsewhere she tells stories about this, about the grey and white, the walls that were painted in interminable tones with different greys and whites. And of the single light in every room, hanging from the center of the ceiling, that cast a harsh glare over everything. Every room was the same. There was no individuality. It was a world of institutional regimes, going to bed and getting up at fixed times, the meals at the same times each day, the menus on a weekly schedule, rigidly fixed – the same, week in and week out.

So life is different now. Liv can decide about time, about when to do things. Though, of course, since she often needs someone to help her, she may have to wait if the carers are already busy. Which, she also adds, is usually no great problem.

### **Discretion**

So there are smooth passages, and then there are passages that are more awkward. And then there are public passages and those that are private. All of this has to do with ordering. But then there is also the matter of order. Literally, we mean that. The questions of what comes before what, and crucially, how it is determined, what comes before what. Which brings us to the vexed question of discretion, of choice, of centered decision-making, questions that have to do with the final triumph of the modern subject in all his glory.

But before we get completely carried away into irony, let us note that this is what Liv, who is scarcely an unmarked category, is seeking and is talking about. It is what she has been struggling for. Indeed, it is what she has been struggling for, for most of her life which has, as a consequence, dramatically improved in quality with its computers and its intelligent flats and the creation of new forms of care for people like Liv, forms of care that are no longer scheduled like life in a barracks. With huge institutions. With everyone the same, stripped of individuality, stripped of discretion, without the slightest ability to choose, to make decisions.<sup>12</sup>

### **Eighth story**

A further excerpt from the field notes.

‘– Is there something you miss or wish you could do?’

– Liv instantly replies: – ‘to write’. She says this with some force. She goes on: – ‘because it has always been so cumbersome. I learned to use a word processor, and got help with it, in the place I lived before. At that time I had pc with a special mouse. I still have it in the school in the old building here’. .... Then Liv confides to me: ‘I am writing my memoirs, my autobiography’. She says this in a low voice and with a big smile on her face. I have the sense that if she had been able to lean forward as she said this, then she would have done so. This is obviously very important for her. It turns out that Liv has written over 25

chapters! – ‘I have so much in my head, she says with another smile. Recently I have been writing about my time here, what happened after I moved here. I have two school hours each week and then I write. That means that what I do is to dictate, since it is so cumbersome to use the writing system that I have got. And the teacher writes down what I say. ... I really think it is important for young people to know how it is to be handicapped, and how it was to be handicapped in the old days.’”

Indeed, Liv has written twenty five chapters of her memoirs. She’s been working on it hard – ever since she moved to her new home. It isn’t her only priority, but it is near the top of her list, perhaps even at the top.

Ingunn has looked at the autobiography and discussed it with her. Many Norwegians are interested in their family origins, and Liv is no exception. So the memoirs starts with a family tree, and then describes what it was like to live on a farm in Trøndelag in the 1940s: bringing in the harvest; slaughtering the animals; curing the meat and making sausages; Christmas celebrations. The round of the year. And then woven into this, Liv is telling the story of her own life: her premature birth; the fact that against all the odds she survived; the fact that in celebration of this, she was christened Liv (in Norwegian this means ‘life’); the virtual impossibility of getting an education for someone as disabled as her; the first primitive technical aids; the purchase of her first manufactured wheelchair. An important moment, of this Liv remembers: ‘it was shiny, green and beautiful’. Then the move from home to an institution at the moment when her father fell ill and her mother could no longer cope, which was a moment of great anxiety, the night she first slept alone – but also, or so it was to turn out, a moment of release and liberation. The moment when it became possible to make new social contacts, to build a new social life. And then the trials and tribulations – we have already touched on these – of living in a large institution with all its interminable routines. But also a whole chapter devoted to her new electric wheelchair, to the freedom and mobility that it brought, and the pleasures that followed.

And the story continues to grow.

### **Continuities**

We want to talk about the importance of the act of writing for Liv.

What is happening as she writes is that Liv is building a life. Let

us emphasise that: she is building a life. She is building it. And it is also the narrative of a singular life, of a life that holds together, a life that has grown, grown through a series of narrated passages. There are good passages. Her life has grown out of a family context that can be traced back – she has done this – to the sixteenth century. It has grown out of the context of a rural family history and has unfolded, to be sure, through endless struggle and adversity. This means that there are bad passages, her birth in the winter and her survival against all the odds. But then there are better passages, the things that she did, Liv did, on the farm, in her home, in her commune. For there is a strong sense in her autobiography of agency. Of Liv as a positive agent. Of someone who is able to act in a way that is independent of others. Move from place to place, metaphorically. Of someone who is able to ignore her physical dependence on her carers and enablers. Who knows perfectly well – to put it in STS language – that she is inserted in a series of heterogeneous networks, human and non-human. But for whom – how should we say this? – this is not morally important.

‘Morally important’? We have some anxieties about the term. We don’t want to build a dualism between the moral on the one hand and the pragmatic on the other. Though it is perhaps difficult to avoid some kind of divide: we have seen this already in the difference between back-stage and front, between the somewhat disembodied agent and the difficult passages that she conceals. But in talking this way, we want to follow Goffman and catch something about the interdependent importance of both independence and unity for Liv as a moral agent. For what we might think of as Liv’s ‘moral economy’? Her sense of self. Her sense of herself, to repeat, as an active and autonomous agent. Her sense of herself as a unitary agent. A unitary agent? This takes us into deep waters. But we are tempted to tell a story about activities or narratives of continuity, of good passages, of stories that are ‘rational’. Which means that they are planful and coherently ordered – and no doubt, in fair measure, centrally controlled. Which is the point about discretion, the normatively desirable state of discretion in the modern discourses of Western subjectivity.

Rationalisation: of course the term has a double sense. The act of making rational, of ordering. And the act of pasting coherence on after the event. No doubt storytelling, autobiography and memoirs lie somewhere between the two: retrospective and prospective. What will happen, what the agent will do, these are made in large measure by the narratives of the past; the genres of telling and sensemaking,

of which, to be sure, autobiography is only one, all be it one that is important for many – and not least Liv.

So Liv is performing herself as a rational agent. This means that she is also performing herself as a continuity. Liv in 1939 leads to Liv in 1997. The one grows out of the other. It is in some sense a continuous passage, or a continuous set of passages. The earlier and the later Livs are both part of a single chronological narrative, a narrative in which Liv as agent makes herself, struggling against all the difficulties of a dis/abled body. Against or with all the everyday contingencies, there is nevertheless a real coherence in which she has some degree of control.

Autobiography, then, is a prosthesis. It is an extension to the person. Or the person is an extension to the autobiography. Cyborg-like, they are partially connected, internally related, and irreducible to one another.

### **Ninth story**

Towards the end of our first interview, there was a knock on the door, and a care worker came into the flat. She'd expected Liv to be alone, and was a little surprised to see a visitor.

However, she wanted to talk with Liv about two or three things, and went ahead and talked about them anyway. There was the matter of Liv's laundry, but also a question to do with her personal finances. In an earlier correspondence, Liv had said that she wanted to take full responsibility for running her personal finances. Now a letter responding to this had arrived from the administration of the home. The carer read it out to Liv. It turned out to be a question about Liv's earlier letter. How important was it for her to control her own finances? Did Liv really mean what she had said? Did she really understand what was involved?

As the carer did this Liv got very upset. Ingunn's fieldnotes say:

'Afterwards I ask her if she is angry. And what kinds of things make her angry anyway.  
– Yes, says Liv, when people want to make decisions for me. When they overstep the boundaries. For instance, when they involve themselves in my financial affairs. I want to manage my money for myself. I have always done so. I will not have them interfering in my private life or in my finances.'

## **Discontinuities**

Here Liv is making herself separate. She is insisting on the performance of a discontinuity. Of course we have come across discontinuities already. Liv separates herself from her environment in physical ways. She has her own flat with its environmental controls. As we have seen, she can close the door on the flat. It is her private space.

But separation is not simply a physical matter. Indeed, the physical separations are significant because they point to what we have referred to as 'moral' divisions and distinctions: Liv as an autonomous and discretionary agent. Which is of course the point of the last story. Here another agent is invading Liv's space both physically and morally. Physically she has come into the room and started a conversation despite the fact that someone else was already there, and despite the fact that another conversation was already going on. And if this is also a moral intrusion, then it is perhaps doubly so because the intruder wants to talk about Liv's personal finances.

Note that: we write 'personal' finances. We scarcely need to create a full-blown narrative of the development of normative rationality and that of the modern Western subject to appreciate that something rather sensitive is going on here. The competent subject is indeed one that can count, can calculate, can plan, can exercise discretion and so take responsibility for the decisions it has taken. And if decisions about matters of finance are particularly important within this paradigm of subjectivity, this is perhaps not so very surprising given the links between the formation of normative subjectivity and the development of market relations.

All of which is a way of saying that this intrusion performs Liv as an incompetent subject. Which means, in turn, that here the performance of discontinuity is the essence of competence.

## **Tenth story**

Well perhaps we don't need to make another story, because what we want to do is to point to some of the complexities of Liv's situation. She is totally dependent on care for many of her daily activities. She is totally dependent on the environmental control in order to work her flat. She is totally dependent on her wheelchair in order to

achieve mobility. The list of continuities that are also dependencies is endless, as it is for all of us – though, so be sure, it is the fact of Liv’s dis/ability that witnesseses this, that makes her passages, good, bad and indifferent, so much more visible than would be the case for a person with a normatively standardised bodily package.

All this means that at the same time (again like all of us) Liv is indeed independent. She can write. She can go out for a walk when she wants. She can watch the television like anyone else. And, we haven’t mentioned this, she can knit - she knits caps and legwarmers. She can paint - her flat is full of her own paintings. She can bake cakes. She makes Christmas decorations with the help of an assistant. Her life is full, she is a busy person. And she is indeed in a real sense, a person who is independent.

### **Dis/continuities**

Here it seems we are faced with a puzzle, or a paradox. Somehow or other, if we are to understand what is going on for Liv, then we have to hold together both continuity and discontinuity. Or, to put it a little differently, it seems that continuity and discontinuity are being performed together.

Paradox? No doubt, the paradox is more apparent than real. Empirically it is obvious enough what is happening. Indeed, perhaps it is obvious at more than one level. For instance, first, it seems that moral continuity also depends on – indeed performs – moral discontinuity. To be a competent agent, is in some sense to be separated from other agents at times. We have just seen that. But, at the same time, it is also to extend the moral continuities of planful action and sustained identity into both the past and the future. Hence the importance of Liv’s autobiography, not to mention her artistic and craft activities mentioned above.

Moral continuity/moral discontinuity, an oscillation or alternation. But then, second, there is a link of a similar kind between the discontinuities of moral agency, and the continuities of material support. We’ve made the point above, so it scarcely needs labouring. Liv is able to move, able to write, able to act as an autonomous agent, only because she is embodied in and performed by an endless network of heterogeneous materials, human and non human.

Perhaps, then, it is something like this. Liv is a cyborg. She’s not simply a cyborg in the easy sense that she is part machine, part human. That this is the case is self-evident – though it is self-evident

for all of us, inserted into and produced by the specificities of heterogeneous networks. No. She is also a cyborg in another and yet more important sense. She is a cyborg in the sense that she is irreducible, she is irreducible to a unity – even though 'she' is also a unity.

Perhaps there are various ways of saying this – though no doubt our languages with their preferences for singularities or binarisms strain away from the possibility, make it/them difficult to say<sup>13</sup>. We need to exercise the imagination in order to elbow away at the conditions of im/possibility. And this, or so it seems to us, is what Donna Haraway is trying to do with this metaphor, the cyborg. For a cyborg is a unity but also a composite of parts that cannot be reduced to one another, which are different in kind, and which are not homogeneous. But which are also internally related to one another. Which would not be the way that they are, individually, if it were not for that link, that internal relation.

How to press the point? Perhaps this will help. Marilyn Strathern recounts that there are two Stratherns: Strathern the feminist and Strathern the anthropologist. And notes that there are partial connections between the two. The anthropologist is not the same as the feminist – but it would not be the way it is if it were not connected to the feminist. And vice versa. Note that: Strathern's argument, which tells of her as a cyborg, does not depend on the material heterogeneity of a woman/machine assemblage. Heterogeneity, partial separation, may come in quite other forms. Prosthesis does not necessarily have to do with artificial limbs.

Except we should end, where we began, with Liv, who more visibly than most of us lives in a place and performs herself through physical prosthesis. She is indeed a cyborg, yes, in an obviously material sense, but is a person, yes, a modern western subject, whose struggles to achieve that normative form of subjectivity make it easier to see what is at stake for all of us. For all of us as we make, are made by, good passages and bad passages. As we make and are made by the desires for continuities and discontinuities. As we weave, are woven, in the partial connections, in the particular oscillations and dis/continuities of normative subjectivities.

In which case Liv is made, created, within an economy of non-coherence, a heterogeneous economy, an economy that cannot be told and performed in one place at one time. Which cannot be drawn together. Absence and presence, yes, these go together. That is the character of subjectivity<sup>14</sup>.

## **Acknowledgements**

This chapter draws on interviews with Liv conducted by Ingunn Moser as part of a larger study of dis/ability funded by the Norwegian Ministry of Health and Social Affairs and the University of Oslo. We are grateful to the Ministry, the University of Oslo, the Research Council of Norway, and the British Council for the financial support which has made this work possible. We are grateful to Britta Brenna, Mark Elam and Annemarie Mol for sustained intellectual

support and discussion. But most of all we are grateful to Liv for her interest, support and encouragement, and her willingness to describe and explore important aspects of her life.

### References

- Akrich, Madeleine, & Bernike Pasveer (1996),  
Comment la Naissance Vient aux Femmes: le Technique de l'accouchement en France et aux Pays Bas, Le Plessis-Robinson: Synthélabo.
- Butler, Judith (1990),  
Gender Trouble: Feminism and the Subversion of Identity, New York and London: Routledge.
- Callon, Michel (1986),  
 'Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of Saint Brieuc Bay', in John Law (ed.), Power, Action and Belief: a new Sociology of Knowledge? Sociological Review Monograph pages 196-233, London: Routledge and Kegan Paul.
- Callon, Michel, & Bruno Latour (1981),  
 'Unscrewing the Big Leviathan: how actors macrostructure reality and how sociologists help them to do so', in Karin D. Knorr-Cetina & Aaron V. Cicourel (eds.), Advances in Social Theory and Methodology: Toward an Integration of Micro- and Macro-Sociologies pages 277-303, Boston, Mass: Routledge and Kegan Paul.
- Callon, Michel, & John Law (1995),  
 'Agency and the Hybrid Collectif', South Atlantic Quarterly, 94, 481-507.
- Callon, Michel, & John Law (1997),  
 'Representing Nature, Representing Culture', .
- Cussins, Charis (1997),  
 'Ontological Choreography Agency for Women Patients in an Infertility Clinic', in Annemarie Mol & Marc Berg (eds.), Differences in Medicine: Unravelling Practices, Techniques and Bodies pages forthcoming, Durham, NCa.: Duke University Press.
- Elias, Norbert (1978),  
The History of Manners, Oxford: Blackwell.
- Garfinkel, Harold (1967),  
Studies in Ethnomethodology, Englewood Cliffs, New Jersey: Prentice Hall.
- Goffman, Erving (1968),  
Asylums: Essays on the Social Situation of Mental Patients and Other Inmates, Harmondsworth, Mddx.: Penguin.

- Goffman, Erving (1971),  
The Presentation of Self in Everyday Life, Harmondsworth: Penguin.
- Haraway, Donna (1989),  
Primate Visions: Gender, Race and Nature in the World of Modern Science, London:  
Routledge and Chapman Hall.
- Haraway, Donna (1991a),  
'A Cyborg Manifesto: Science, Technology and Socialist Feminism in the Late  
Twentieth Century', in Donna Haraway (ed.), Simians, Cyborgs and Women: the  
Reinvention of Nature pages 149-181, London: Free Association Books.
- Haraway, Donna (1991b),  
'Situated Knowledges: the Science Question in Feminism and the Privilege of Partial  
Perspective', in Donna Haraway (ed.), Simians, Cyborgs and Women: the  
Reinvention of Nature pages 183-201, London: Free Association Books.
- Haraway, Donna (1996),  
'Modest Witness: Feminist Diffractions in Science Studies', in Peter Galison & David.  
J. Stamp (eds.), The Disunity of the Sciences: Boundaries, Contexts, and Power pages  
428-441, Stanford, California: Stanford University Press.
- Latour, Bruno (1988),  
The Pasteurization of France, Cambridge Mass.: Harvard.
- Latour, Bruno (1990),  
'Drawing Things Together', in Michael Lynch & Steve Woolgar (eds.), Representation  
in Scientific Practice pages 19-68, Cambridge, Mass: MIT Press.
- Latour, Bruno (1993),  
'La Clef de Berlin', La Clef de Berlin, et autres Leçons d'un Amateur de Sciences  
pages 33-46, Paris: La Découverte.
- Law, John (1994),  
Organizing Modernity, Oxford: Blackwell.
- Law, John (1997),  
Aircraft Stories: Decentering the Object in Technoscience,: submitted.
- Law, John, & Annemarie Mol (1995),  
'Notes on Materiality and Sociality', The Sociological Review, 43, 274-294.
- Law, John, & Annemarie Mol (1997),  
'On Hidden Heterogeneities: the Design of an Aircraft', submitted.

- Mol, Annemarie (1995),  
‘Missing Links, Making Links: the Performance of Some Artheroscleroses’, in  
Annemarie Mol & Marc Berg (eds.), Differences in Medicine: Unravelling Practices,  
Techniques and Bodies pages 141-163, Maastricht: Department of Health Ethics and  
Philosophy, Limburg University.
- Mol, Annemarie (1997),  
Differences in Medicine: the Case of Artherosclerosis: forthcoming.
- Moser, Ingunn, & John Law (1997),  
‘Notes on Desire, Complexity, Inclusion’, Machines, Agency and Desire, Brennbu,  
Røn, Vestre Slidre, Norway: TMV, Universitetet i Oslo, Norway.
- Singleton, Vicky (1993),  
Science, Women and Ambivalence: an Actor-Network Analysis of the Cervical  
Screening Campaign, unpublished PhD, University of Lancaster.
- Singleton, Vicky (1996),  
‘Feminism, Sociology of Scientific Knowledge and Postmodernism: Politics, Theory  
and Me’, Social Studies of Science, 26, 445-468.
- Star, Susan Leigh (1991),  
‘Power, Technologies and the Phenomenology of Conventions: on being Allergic to  
Onions’, in John Law (ed.), A Sociology of Monsters? Essays on Power, Technology  
and Domination, Sociological Review Monograph pages 26-56, London: Routledge.
- Star, Susan Leigh (1992),  
‘The Sociology of the Invisible: the Primacy of Work in the Writings of Anselm  
Strauss’, in David Maines (ed.), Social Organization and Social Processes: Essays in  
Honor of Anselm Strauss pages 265-284, New York: Aldine de Gruyter.
- Stone, Allucquère Rosanne (1995),  
The War of Desire and Technology at the Close of the Mechanical Age, Cambridge,  
Mass: MIT Press.
- Strathern, Marilyn (1991),  
Partial Connections, Savage Maryland: Rowman and Littlefield.
- Turkle, Sherry (1996),  
Life on the Screen: Identity in the Age of the Internet, London: Weidenfeld and  
Nicolson.

<sup>1</sup> The relevant STS literatures include publications by Madeleine Akrich, Michel Callon, Charis Cussins, Donna Haraway, Karin Knorr-Cetina, Bruno Latour, John Law, Annemarie Mol, Vicky Singleton, Sandy Stone, Leigh Star, Sharon Traweek and Sherry Turkle. See (Akrich and Pasveer: 1996; Callon and Latour: 1981; Cussins: 1997; Haraway: 1989; Haraway: 1991a; Latour: 1988; Latour: 1990; Latour: 1993; Law and Mol: 1995; Mol: 1995; Mol: 1997; Singleton: 1993; Singleton: 1996; Star: 1991; Stone: 1995; Turkle: 1996)

<sup>2</sup> See (Garfinkel: 1967).

<sup>3</sup> 'Perhaps': for Garfinkel was also deeply interested in the materialities of ordering, at least in many cases. For instance, in the records kept by jurors, or the materialities of Agnes' performance of female gendering.

<sup>4</sup> Going for a walk. Here we think also of the people who turn up at hospitals suffering from pain when they go walking, pain which in the textbook stories, is caused by arteriosclerosis in the blood vessels of the legs, which means that the blood supply is impaired. How do doctors decide whether or not to operate? There are a thousand and one indicators and contingencies. But one has to do with the style of life of the patient. If she always walked everywhere then this is a specificity to do with an important passage. Or to put it a little differently, she is dis/abled in a way which is not the case if she is happy to sit in a chair in a home all day. For details of this case see (Mol: 1997). A similar logic applies to the passage towards pregnancy: as is obvious, not every women wishes to have a baby. But those who really wish to get pregnant and are unable to do so unaided, are under certain circumstances, now able to secure technological intervention to achieve this passage. See (Cussins: 1997).

<sup>5</sup> For further discussion of forms of pleasure and pain, see (Moser and Law: 1997).

<sup>6</sup> See: (Butler: 1990; Elias: 1978; Goffman: 1968; Goffman: 1971; Star: 1991; Star: 1992).

<sup>7</sup> Perhaps the point is made in a similar manner within the work of the actor-network theorists when they talk about 'black boxing'. In which case an agent is one who comes to stand for, to speak for, a lashup of heterogeneous bits and pieces, awkward and disruptive passages which are, for the moment, pushed into the background. See (Callon: 1986; Callon and Law: 1995; Callon and Law: 1997; Latour: 1988; Law: 1994).

<sup>8</sup> Which is, to be sure, a somewhat different point: the making of back-stage front-stage distinctions is also a 'moral' matter in which certain aspects of corporeality and embodiment are taken to be discrediting. There is a large feminist literature on this, and it is also developed in an historical context in the writing of Norbert Elias. We will return to the question of the 'moral' below.

<sup>9</sup> After all, sexualities, often backstage, are equally often sources of pleasure.

<sup>10</sup> The reference is to (Star: 1991).

<sup>11</sup> As has been extensively considered in some of the literatures of feminism. See, for instance, Donna Haraway's writing: (Haraway: 1991b; Haraway: 1996), and also in the writing of Annemarie Mol, which explores the normativities that are implicitly performed in devices and organisational arrangements.

<sup>12</sup> Ordering. Deciding what comes first. Deciding what comes first? Well, that is the way we have set it up. As a matter of choice. But if we put it this way, then it also implies that matters are drawn together, arrayed and displayed at a single place and a single time. As, for instance, on the screen of a computer, whose material arrays and specificities perform the possibility of centering. But this is only one possibility, and there are others. Perhaps, then, we might imagine subjectivities built in other ways: subjectivities made in alternatives to centred discretion: subjectivities performed in indeterminacy, undecidability.

<sup>13</sup> A binarism is also a singularity. That is, the parts of the binarism perform themselves as singularities. The same argument applies to pluralities. Pluralities are made up, in the standard stories of political economy, by primitive and homogenised singularities. Donna Haraway wrestles with these linguistic difficulties, as do Marilyn Strathern, Annemarie Mol and John Law.

<sup>14</sup> The heterogeneities of absence/presence are discussed at some length in: (Law: 1997; Law and Mol: 1997). But the metaphor of partial connection draws on (Haraway: 1991a) and (Strathern: 1991).