A body that matters? The role of embodiment in the recomposition of life after a road traffic accident

Ingunn Moser*

Department of Nursing, Diakonhjemmet University College, Oslo, Norway

(Received 1 October 2008; accepted 20 December 2008)

Drawing on a study of life after road traffic accidents, this article explores the role of the body and embodiment for disability—as well as ability. It introduces the empirically more open and less medicalized terms ‘decomposition’ and ‘recomposition’ to get around and avoid being appropriated by the medical discourse, while staying true to the body and its role in the shaping of life. Inspired by feminist and social studies of science, technology and medicine, it approaches bodily realities as emerging in practices and as an ongoing open process of mattering and embodying. The argument is that a road traffic accident is better conceived as the starting point of a series of contingent shifts and dynamic recompositions than as a single radical breakdown in people’s lives, subjectivities and biographies. People are decomposed and recomposed, disabled and enabled, in shifting and complex ways, in specific practices and relations.

Keywords: body; embodiment; subjectivity; recomposition; material semiotic; road traffic accidents

Introduction

The topic of this article is the role of the body and embodiment for disability—as well as ability. The concern is with how disability studies, but also social and cultural studies of health, bodies and disability more generally, have become trapped within a split reality with medical versus social or cultural models of the body. The implication is a neglect of bodily realities, with pain, suffering and limits; what for the lack of a better word is called ‘impairment’, but also the practices in which one seeks to intervene with, transform and live with such realities. Although it was necessary to carve out a space for disability studies outside of the realm of medical discourse, in order to get out of the reach of the othering of lived experience and disabling arrangements exercised by a medical focus on individual impaired bodies, the critical distancing has in turn produced its own form of othering. This leaves little room for development of a capacity for critical assessment—and appreciation—of the role of the body and of medical and health care interventions. My aim here is therefore to contribute to a recent move towards reclaiming the body and engaging with medical practices and technologies in ways that neither deny the body and experiences of pain and suffering nor fall back upon the individual, impaired body of the medical model. For this purpose I explore a material semiotic approach to bodily

*Email: moser@diakonhjemmet.no
realities as emerging in practices and as an ongoing open process of mattering and embodying, inspired by feminist cultural studies and science and technology studies. Instead of locating disability in given, objective and individualized bodies divorced from their everyday context, as a medical model does, or bracketing the objective (impaired) body in favour of the socially and culturally constructed (and so disabled) body of knowledge, meaning and experience, as social and cultural models do, this makes the nature of the body an empirical question and turns from a concern with essence or being to exploring embodiment in practice, as ongoing enactment, materialization and process.

Drawing on a study of life after road traffic accidents in Norway, I trace how it is the body and different forms of embodiment that matter and come to play a part in the disruption of life and subjectivity following an accident as well as in the continuous recomposition of the embodied subject, and of ability and disability, in the various settings and practices it gets moved through. For this I work through excerpts of interview data, field notes and textual materials given to me from a single empirical case, that of a young man I have called Hallvard. I also introduce the empirically more open and less medicalized terms ‘decomposition’ and ‘recomposition’ to get around and avoid being appropriated by the medical discourse, while staying true to the body and its role in the shaping of life after a road traffic accident. But first I introduce the debate in which I want to intervene and the tools and resources for studying bodies as practice and the ongoing process of embodying and materialization.

**Reclaiming the body, embodiment and medicine: tools and resources for a material semiotic approach**

Asking how it is that the body matters to disability as well as to ability and to subjectivity, I join a growing choir of voices questioning the othering of the body and with it also medical practices and technologies in social and cultural studies of health, bodies and disability (Hughes and Paterson 1997; Seymour 1998; Shildrick 2002; Goggin and Newell 2003; Struakhamp 2005; Diedrich 2005; Shakespeare 2006; Thomas 2007; McNeil 2008). I am, however, aware of the provocative ring to such a claim – and especially that not only the body but also medicine has become othered in disability studies. It may seem to turn things totally on their heads. It was necessary to carve out a space for disability studies outside of the realm of medical discourse in order to get out of reach of the othering of lived experience and disabling arrangements exercised by a medical focus on individualized impaired bodies. The denaturalization of disability was also a precondition for the politicization of disability (Oliver 1996; Barnes 1997). Nevertheless, the critical distancing has in turn produced its own form of othering.

This othering of the body and of medicine has some peculiar collusive effects. The bracketing of the objective, impaired body of medical discourses and interventions in favour of the social, cultural and subjective body of experience and meaning seems to rest comfortably on a split reality: one objective body, and one subjective and cultural body. The objective part tends to be left over to medical science. The consequence is that this objective body remains unquestioned, unexplored, and, ironically, becomes re-naturalized and re-essentialized. Many social and cultural approaches to disability fall back on and contribute to the maintenance of a naturalized notion of the
objective body as a biologically given, stable reality next to or underneath the social play and cultural formations, and so to the reproduction of a split reality rather than more constructive ways of interfering with medical practices and the bodies they work with.

It is therefore time for another turn to bodies, embodiment and medicine, and one that seeks to work within and with, in situated participation, rather than upon and outside the (medical) practices it makes its object of study (Haraway 1991; Singleton 2007). I believe that disability studies have much to learn from feminist and social studies of science, technology and medicine – and vice versa – on these issues. In the last few years, the exchange between these academic fields has increased (Galis 2006; Goggin and Newell 2003; Winance 2007; Struhkamp 2004; Moser 2003; Didrich 2005; Tremain 2005), and the ambition here is to contribute to this traffic and circulation.

So what are the tools and resources for such an inquiry and intervention? My suggestion is that we mobilize a particular material semiotic approach to medical science in feminist/social studies of science and technology and investigate the nature of the body empirically, in practice, as doing, enactment, and an ‘ongoing open process of mattering’ (Barad 2003) and embodying without presupposing an a-historical, naturally given and bounded individual body (Haraway 1991; Butler 1990, 1993; Berg and Mol 1998; Mol 2002; Mol and Law 2004; Akrich and Pasveer 2004; Moser 2003; Callon and Rabeharisoo 2004). 2

This strand of work rests, first, on a longstanding tradition and interest in science and technology studies in exploring the constructed nature of facts, objects, embodiment and matter in scientific practices, as well as the role of facts, objects, technologies and materiality in the structuring of social life (Asdal, Brenna, and Moser 2007). Investigating how these objects and matters get constructed in social practices and also actively mediate these, yet cannot be reduced to them, this body of work has come up with tools for exploring the agency and composite nature of realities that are never simply social or discursive but always both socio-historical and natural, discursive and material (Haraway 1991; Law and Singleton 2000; Law 2008).

Considering bodies as ongoing processes of mattering and embodying (Barad 2003; Haraway 2003) is one example here which allows one to explore how bodies are not just matters of fact but also matters of concern, value, meaning, contestation and transformation (Latour 2004; Moser 2008).

Further, the approach draws on but also extends a semiotic tradition tracing meaning and order as relationally emerging from the study of texts, representations and knowledge to the study of interactions, material practices and social realities. As such it constitutes a ‘material semiotic’, focussing on the heterogeneous material relations and interactions which make the conditions for something to become possible and real. In this it draws on the genealogical work of Michel Foucault and a French non-essentialist tradition in philosophy and cultural history in which one traces the conditions of possibility of knowing as well as of being empirically (Foucault 1979, 1981, 1998).

What material semiotic studies add, or perhaps stress, compared with discursive and cultural approaches on the one hand and social constructivist approaches on the other, is, first, the material heterogeneity of the conditioning arrangements – the fact that these are neither simply social nor necessarily discursive. Indeed, the material semiotic approach takes quite literally the Foucauldian definition of ‘discourse’ as a strategy in materials (Foucault 1981, 94–5; Law 1994, 105–10) and traces it in local,
situated practices and a wide set of relations and arrangements. Secondly, the approach is focussed on process rather than product, with how realities emerge and events unfold, in practice, and with the recursive and precarious process of ordering. Accordingly, it stresses that order, or construction, is not something that is done and achieved, once and for all, but an ongoing process that has to be continually established, made actively present, enacted and re-enacted in order to persist, to materialize, and, sometimes, become obdurate. Finally, a material semiotic is attentive to the multiplicity and dynamic recomposition of practices, circumstances and ordering arrangements.

**Decomposition of a body**

Let me introduce you to Hallvard and his situation. His autobiographical essay ‘Tanker i ettertid’, or ‘Afterthoughts’, gives an account of the motorbike accident he was involved in, how it changed his life and how his body was involved in this disruption. It starts as follows:

It was in September 1984 my whole life fell to pieces. I was doing military service at that time and was home on leave for some days. Since it was almost the end of the motorbike season, I wanted to go for a last ride... I came to the crossroads at Helleland when a van turned up from the right, wanting to get across the motorway. I can remember this thought passing through my head: ‘But he is not stopping! This is not going well!’ In my mind’s eye, I saw my own funeral. But then it turned out that I had some years of struggle ahead.

In interview, Hallvard expanded:

I just couldn’t stop fast enough. I crashed into it, was thrown off and hit the van with my head... Someone called for a helicopter ambulance, and I was transported to the regional hospital. My brain stem was seriously injured, and I was in coma for eight weeks. When I woke up, I could only move my head and eyes. Only after three months came my first sign of life, and of a need to communicate – I made a small sound! An ’a’-sound. My only sound... I could not speak. I have however learned to speak again. But I don’t have much control of movement of arms and fingers. I only have some use of my right hand arm. I have relatively more strength in my legs; I can walk in a high zimmer frame with a carer walking behind me. But I don’t see well, only the outline of things.

So, Hallvard says his life fell to pieces. But what is it that falls apart and gets decomposed? The body gets a prominent position in Hallvard’s account. But what position?

The easiest and most readily available interpretation of what goes on here is that Hallvard himself locates the injury and breakdown in his own body – as loss and lack of bodily functions which are assumed to be naturally given in the organism. His brain stem was injured, he was paralysed, lost his speech and most of his vision. The reasons, and relations between these losses, Hallvard expands, are that the lower region of the brain, the brain stem, is injured; that the signals from the brain are blocked and cannot reach, and thus control, other parts of the body; and or that there are muscular injuries, calcifications, etc., which hinder control of organs of movement, speech, or other functions. In relating what happened to him in this way, Hallvard can be understood as taking up the medical discourse that, according to Michel Foucault, is constitutive of illness and disability as a condition of and in the
individualized – discrete, bounded and naturally ordered – body (Foucault 1963/1976). This is, however, a discourse that circulates much further, into health care education and practice, public health care policies, but also social science, the media, and people’s understanding and experiences of their own bodies. It is a discourse that is almost ubiquitous, and so readily available to articulate and speak for us whenever we are called to account for our bodily adversities.

But my suggestion is that although a medical discourse is certainly at work and enacted in various ways in Hallvard’s case, it is neither all that goes on nor the most interesting thing. Indeed, we should bear in mind that this medical discourse is just as readily available to read for us as to speak for us. When we go more carefully into Hallvard’s situation and story, we will see that the body is also treated and understood in more complex ways. Hallvard’s story does indeed focus upon the body, and the decomposition of the body, but it is a body in relation, involved in interaction and practices, that is at the centre of this story of breakdown, not a body divorced and isolated from its everyday context.

What I want to insist, then, is that centralizing embodiment and embodying in practice is not only an analytical approach and academic interpretation that I add, and offer, from the outside. It is also the approach of Hallvard and his father. It is also at work in practices in which Hallvard is involved. It is even articulated, made verbal and so discursive, in a modest and under-recognized way, in stories such as those quoted earlier and the ones to follow. My aim is to extract this ‘body theory’ from the complexity of everyday practices so that it can be articulated, appreciated and explored. My claim is that it has potential to teach us about alternatives to naturalizing and essentializing discourses of human embodiment, subjectivity and ability.

Decomposition of practice – and bodies as practice

Here is another excerpt from my data. This is Hallvard’s father speaking about how they learned to communicate again after the accident:

I remember very well the first time I heard Hallvard make his sound, a weak a-sound. Three months after his accident. I was sitting at his bedside in hospital. I told him that I was going to read the alphabet out aloud, and asked him to make that sound when I arrived at the right letter. I would take note of it on a piece of paper in order not to forget it. We sat like that till we had built words and sentences, and in that way we forged a way of communicating. It was laborious and time-consuming, so Hallvard also spent hours and days and weeks lying in his bed, sweating and making an incredible effort to shape the right sounds and learn to spell the letters: ‘a-b-c-d-e-f’. It was terribly hard work only to make the jaws function, to be able to move them and control their movement. Not to speak of the tongue! ... Only after a stay in a rehabilitation hospital outside Oslo, more than a year and a half after the accident, things started to get better. Then Hallvard finally got speech therapy, and made some progress. An audio-pedagogue from the local hospital visited him in Oslo to learn how they worked. She massaged the paralysed skin of his face, on the inside as well as the outside, to resuscitate and revitalize it, and reduce the paralysis. And she did exercises with him to make the jaws, the tongue and the muscles in and around the mouth work.

I have three points to make here. The first is about the body, and bodily capacities and competencies, as emerging in practices that literally matter and become embodied.

After the accident Hallvard was no longer able to speak. And neither was he able to communicate in any alternative ways. He became silent, and this silence
indisputably had a material base. It was an effect of a bodily decomposition, involving paralysis of body parts, organs and muscles – but also atrophying of muscles and functions due to paralysis and thus non-use. Having a voice, being able to speak, is dependent upon a long series of bodily organs and muscles, but also of their practice. Among the vital organs contributing to the ability to speak are lungs, stomach, throat, voice box, head, cheeks, jaw, lips, tongue, and numerous muscles, for instance in the mouth and tongue, which need to be continuously maintained and exercised in order to produce sound and speech. Speaking and communicating is very much a material, bodily practice. Without practice, one can have no legible speech. Bodily decomposition is thus very much a matter of decomposition of practice.

However, speech was not the only function or competence that was lost due to decomposition of practice. After two months Hallvard was transferred from the regional hospital to a local hospital. Here no efforts were made to rehabilitate or even maintain his remaining capacities. There was only limited speech therapy. The physiotherapy disappeared and he developed calcifications in his hips, legs and arms which later required a series of operations. The practices in the local hospital did not activate his body but disabled him further. Non-use, non-practice, of the body literally decomposed it. It led to atrophy and loss of functions and abilities. Practices, just like bodies, matter. They become embodied.

This brings me to my second point about ability and disability. A body becomes an able body through the enabling material practices it is involved in. Equally, a body becomes a disabled body through the disabling material practices in which it is involved. Hallvard’s father’s home-made communication system introduced an enabling arrangement. But as long as it was so laborious and time-consuming that it was not used in the hospital, all Hallvard could do was to work on his body. To exercise in order to try to control the movement at least of body parts involved in speech. But this was in vain. At least for a long time.

What we see here then is a different ‘body theory’ at work. The medical discourse treats the able body as a naturally given order of functions and competencies, while the disabled body is taken to be an almost equally given disorder, lacking such natural functions and competencies. But what Hallvard and his father are involved in here, and what Hallvard’s father also articulates in the previous extract, suggests that this is not how it works. Instead, the body is emerging, learning and developing competencies through practices. It is what it does. Or it becomes what it does.

My third point is as follows. Hallvard’s father’s story also shows that what comes to make part of and get included in body practices is not set in stone. The boundaries to such practices also vary and change. For instance, speech and communication imply a series of organs, muscles, exercises, competences, artifacts, actors – which may extend far beyond the human partners. The extended list of elements and actors which made up the home-made communication system his father invented included, among other things, his father, the alphabet, paper, pencil, time, and patience – in addition to Hallvard, his ears and hearing, his sound and all the bodily organs, muscles and practices involved in producing that sound. For him to eventually learn to spell letters and build words, a further list of actors and elements were needed: a speech therapist, a rehabilitation hospital, an audiopedagogue, the therapies etc. All of these actors and elements were necessary for communication and speech to take place. For these practices to become possible, they all had to interact. On the one hand, the practices brought these different elements and actors together, they associated them – on the other they also grew out of them.
Bodies, bodily competencies and bodily practices are thus relational or collective in a wide sense – and rely upon specific arrangements to secure their emergence. What a body is is always dependent upon a certain set-up that allows it to be, to become, whatever it is. And in this way, that configures and shapes its functions, competencies or abilities. Most bodies are fairly standardized, and become enabled through standardized arrangements, including, for instance, standardized physical environments. These conditions of possibility that enable bodies therefore tend to become rather transparent and disappear from view. They do, however, become visible and critical once there are non-standardized bodies in need of alternative arrangements.

Decomposition of subjectivity

What about the subject then? If the body is not given, is not one fixed thing, discretely bounded with a set of natural functions and competences, but a result of the material practices in which it is involved, how then to conceive of subjectivity?3 What does Hallvard’s case teach us about this?

The extracts from Hallvard’s story we have seen so far suggest that subjectivity – at least partly, or provisionally – is indeed decomposed together with the body. During the first eight weeks there was a broken body and no subject. Hallvard was in a coma, unconscious and so he was gone, not there, or at least provisionally suspended. When he woke up, he was still only partially there, waking up but then disconnecting again, for several more weeks. For another four weeks, there was no need, or perhaps also no way, for Hallvard to hook into the actions and communications working upon him and around him; until the day when suddenly he made a sound. This seems, according to Hallvard’s own words, to be what granted him back his suspended subjectivity. Hallvard himself identifies this sound as his first sign of life. A sign of life, that must mean, of something more and other than physical, vegetative, existence; of a subjectivity that is a consciousness, a will or a need to communicate, to know, to relate to and act upon the situation. Simply waking up did not seem to qualify for ‘life’ or subject status.

However, one might assume that Hallvard still was attributed subjectivity by others during his first period in hospital. Notwithstanding Hallvard’s claim that there was no sign of life until he made his sound after three months, he also remembers being there, awake, incapable of hooking into the action and communication around him. Carers, family and friends might also have assumed that there was an inner life; a dream life or, in Goffman’s terms, an ‘inner theatre’, where imagined dramas and conversations were played out with imagined others, even if this would not be seen from the outside (Goffman 1959/1971).

Hallvard’s father can be seen as expressing and articulating such a view. I recall his words: ‘The problem’, he said, ‘has been, and still is, the physical impairments. Memory and cognitive functions, even communication, could be retrieved relatively easily’. In this diagnosis, Hallvard’s father can be read to delineate the injury and decomposition to the body. Interestingly enough, cognitive functions, and even communication, which are (at least in a medical discourse) usually associated with brain activity, are not included in the physical here. I read this statement as working to establish a boundary between body and mind in order to rescue the mind and so the subjectivity from decomposition as well.4
But the boundary Hallvard’s father is careful to draw also signals that there is a troublesome relationship between body and subject. Is subjectivity reducible to the body – or is it other and different from the biological?

It is my contention that the subject in Hallvard’s story remains more closely connected with, and radically dependent upon, the body or some other form of material mediation, but also action and interaction, than in the father’s version. As such, the subject becomes more precarious and fragile, but also more open to different and changing forms of embodiment, not to mention relations with embodiment. As Akrich and Pasveer (2004) have shown for a different context, ‘embodied subjectivity’ does not imply fixation in a given, bounded body. For Hallvard, eye movement and the ‘a’-sound was all there was to express and exercise subjectivity. For almost two years, he had no other way of linking up with the flows of action and communication around him. It was precarious, but it worked: it offered him a way of taking up a position and participating in communication but also to attract attention and initiate or interrupt action.

But Hallvard’s story also suggests that the subjectivity that was granted back to him when he made his sound was new, different, and painful to accept. As the son of the editor in chief of the local newspaper, president of the sixth-form in secondary school, a student of business and management, on leave to fulfil his duty to the country by entering the military, he was, and identified as, a man of intellect, fluency and public spirit. After the accident, he experienced a degradation, a decomposition of position and subjectivity. Not least, he must have experienced a loss of manhood, or masculinity. In the introduction to his essay ‘Afterthoughts’ he put it this way: ‘But then it turned out that I had some more years of struggle ahead’. When I probed into what he meant, he answered:

I had not experienced the debasement of not being capable of anything but lying like a piece of meat in that bed, having to be washed and cared for by others... To be washed, but also lying like a corpse in bed, not being able to get up and out, to run, to go on a trip on the motorbike, to go out with mates and friends... Not to speak of being able to make myself understood. In the first period, I had lots of friends visiting... I remember how desperately I wished I could communicate. They were chatting away and had no problems making themselves understood. Whereas I could not even say ‘yes’ or ‘no’. I only had this small sound. And I had eye movement. I think they could interpret whether I was signalling a yes or a no... But I was so envious of them, because it was so easy for them to speak!

This suggests that Hallvard did not recognize himself in the subjectivity he was now attributed with. Having to let others care for and clean his body was like being displaced into the position of a dependent child. Being unable to communicate, making himself understood, speaking with fluency, expressing his emotions and articulating his thoughts lucidly and precisely, was like being seen as incompetent and in need of translation. None of which fitted with the earlier set of subjectivities he had had access to, and the agencies, competencies, and identities he had been attributed.

But while Hallvard emphasizes the dependency of subjectivity upon the body, he doesn’t reduce it to body or biology and see it simply as being swept along in the undertow when the body was decomposed. Instead, Hallvard again focuses upon the activities and interactions in which he was – or was no longer – involved, and which enabled and afforded positions of subjectivity. The crucial thing was to be, or not to be, able to get up and out, to run, to go on a trip on the motorbike. Or to be able to
make himself understood, to communicate. Again, Hallvard locates subjectivity in practices and interactions, in the same way as he did with the body. He makes subjectivity a question about access to positions in interaction and material practices in which both agency and subjective capacities become possible in the first instance.

Practices, then, are productive. Of bodies, of subjectivities, of agencies – and, as we will shortly see, of collectives too. But this also means that when practices collapse, then a lot more than bodies collapse.

**Decomposition of and disconnection from collectives**

The following is another quote from Hallvard:

> But after half a year in the local hospital, a more permanent solution had to be found. It was decided that I should move to an institution for people with physical handicaps. This was located outside the nearest bigger city, some two hours drive away from home. This institution offered services such as physical training and physiotherapy, but no speech therapy or any other alternative communication therapies.

Hallvard does not have very good memories from this time. He takes a deep breath:

> ... I lived in this place for 13 months without being able to make myself understood, and without any speech therapy. In this period, there was almost no life. It was almost like death. ... Only my mum and dad could understand me when I tried to spell the letters, or took the time to spell out the alphabet so I could stop them with my sound and build words in that way. And they could only come and see me at weekends.

There is one crucial thing that is at stake in an accident that has not yet been touched upon. This is the collective, or rather the collectives, that these practices and bodies, agencies, and subjectivities belong in.

As Callon and Rabeharisoa (2004) in their studies of everyday support and care for people living with muscular dystrophies argue, practices both bring together a collective – and bear upon it. That is, a practice constitutes and activates a collective, and yet at the same time the practice also rests upon the collective in order to take place. So when Hallvard was discharged from hospital after three months and moved to an institution in which there was almost no life at all, this ‘death’ was also due to the disconnection from, or decomposition of, the collectives that used to carry him.

As mentioned, Hallvard was a student of economics before the accident. He took a break from his studies in order to do his military service. When he was home for a leave, he met up with his old mates or went to see them on his bike – as on that day in September 1984. All of these practices in which Hallvard was enrolled, constituted their own collectives, enacted specific bodies, structured subject positions, and channelled and distributed agency in specific ways. Taking part in such different practices and collectives meant that Hallvard was multiply and complexly constituted. He was moved into and between a series of subject positions, attributed different forms of agency, diversely embodied and granted masculinity.

After the accident, Hallvard was no longer part of these practices and collectives. He was disconnected – and decomposed. The specific arrangements which worked to make him a soldier, a student and a motorbiker respectively didn’t hold together any longer. The collective constituted by motorbiking, however, continued to include Hallvard in its practices, at least for some time to come. Part of the practice was just transferred to the hospital, and to visits to Hallvard’s bedside. So even if
agencies, competences and voice were radically shifted and redistributed away from Hallvard – he could obviously not go for a ride with them and he had problems communicating – he was still included as a mate. But when Hallvard was moved from the local hospital to an institution some hours away, even this practice was decomposed. Hallvard was disconnected from yet another collective. In practice he was no longer part of any practice-collective – at least not in which he was made subject and actor. The only one left was constituted by his family, by the practices making a family, which continued to include him even if this required that his parents travel and stay away from home every weekend in order to visit him.

In the institution, it seems that Hallvard was displaced to a situation and position where he was almost completely decomposed, disconnected and silenced – first by being physically transferred to an institution far away from the collectives he used to be part of, and secondly by not having access to any new practices that involved and enacted him as an actor and a subject. Instead, all the agency was distributed away from him. It was going elsewhere. Hallvard was progressively being decomposed, till there was almost nothing left – and almost no life.

The notion of ‘collective’ here allows us to trace the collective yet materially heterogeneous character of social realities, and to take into account the role of materials, of different kinds, including bodies, in the structuring of social life and practices. As developed by Callon and Rabeharisoa (2004) it designates an ordered, and ordering, arrangement of actors, objects, bodies, technologies, routines, procedures, competences, identities and boundaries, which make the conditions of possibility of a particular practice.6 As we have seen, agency is being channelled and distributed within this collective that is activated and constituted by a particular practice. It is also within this collective that bodies, and their capacities and boundaries, emerge and take shape. And in this same process, particular positions and so also subjectivities are constituted and enacted.

Mobilizing the notion of collective, then, opens up the question of the extension, boundaries and composition of the collective, as well as the distributions of agency and positions in it, for investigation. One may trace how boundaries are drawn and redrawn, and the collective composed and recomposed. Perhaps even decomposed. And one can follow the flows of agency and movements through positions. But if there is flow, then it is possible to explore these flows more closely. And it is to this that I will turn next.

Recomposition and contingency

In the previous sections I have pressed the point about decomposition to its limits. I have produced an account about a set of collectives, practices and subjectivities that are progressively breaking down, and where the flow and distribution of agency is going only one way: away from Hallvard. He is progressively disconnected, displaced and decomposed, till there is almost nothing left but a broken body.

However, at this point, it is time to trace and follow the flows of agency in these processes still more carefully. Because there is not only decomposition and loss – even if Hallvard stresses that it was almost like death, almost no life. There is still a vital, living body – and a vital consciousness. It is not the case that any practice ceases and dissolves. Rather, agency arises, flows, is distributed, redistributed and shifted between as well as within practices and collectives. Hallvard became part of new practices and collectives.
It started right at the scene of the accident. An ambulance helicopter was called for, and took him to the regional hospital. Right away, then, agency is distributed away from Hallvard’s body, onto a rescue team and then the regional hospital’s Accident and Emergency department. These locations of action constitute, and are constituted by, their own collectives, centred around the management of disease. As Moreira (2004) argues, there is a contract involved in such situations that delegates agency, autonomy and authority to represent from the injured or ill person becoming patient to the medical collective.

I do not have much data on what happened in the regional hospital, but what can be assumed is that since Hallvard was in coma, the action and communication around, over and upon his body was mostly distributed to other parts of the collective – such as monitoring instruments, intravenous drugs, medical technologies of many kinds, doctors, nurses, physiotherapists, parents, or still other actors – and that Hallvard’s body was attributed only a passive role in contributing to healing itself.

Hallvard was then transferred to the local hospital. Now Hallvard had woken up, and become aware that there was this flow of action and communication over and upon his body: that he was treated and monitored, washed and fed, moved around, sat up and put down again, talked to and about by others, without much chance to talk back and do anything himself except signalling reactions by way of eye movement. He had become aware that agency, initiative and competencies were distributed away from him onto the collective of the hospital ward. Until the day when he made his sound, and his father set up a communication system for them. Even though it was slow, this system allowed Hallvard to build his own words and sentences. But most of the action and communication around Hallvard bypassed this. It was too slow. However, the small sound he had made shifted the balance and the distributions again. At least some subjectivity and agency was granted back to him. He could have a say, however simple, and be made a subject, an actor, a partner. It allowed him to hook into the flows of action and communication in the ward.

But as we have seen, when Hallvard was moved, it was to an institution for people with physical disabilities with its own set of routines and practices. Agency and voice were shifted and redistributed again. There was no speech therapy or technical aids for communication. No one had time to sit down and use the system of communication his father had set up. His friends could no longer visit and even his parents could only come at weekends. Hallvard was distributed back into silence and passivity.

Hallvard’s father struggled for all he was worth to improve the situation. In the end, after 13 months, Hallvard was transferred to Sunnaas Rehabilitation Hospital outside Oslo. This marked another important shift: ‘In Sunnaas, everything turned to the better. I learned to spell all the letters except “g” and “k”. I made progress with my speech, and started building words out of letters’. The practices and collectives of which he became part now were geared towards rehabilitating him and so turning him into a subject and actor again. Within three months Hallvard had become much better at speaking, and returned home with a programme for further physical training and communication. Back in his local community, he spent the first months in hospital again, but this time resources were provided to implement measures suggested in his rehabilitation programme. Hallvard got speech training, physiotherapy, and a sports teacher came and trained with him as well. He went through a series of operations to remove the calcifications of the legs, from the time when he had no
physical training, and to straighten out his left hand arm. The training showed results, and upon a shorter return to Sunnaas they were surprised by the progress – both in communication and movement; a further shift in the distributions and attributions of agency and subjectivity. They did not, however, last very long. After his second stay in Sunnaas, Hallvard was confronted with a choice between moving into a nursing home in his home town or going back to the institution for people with physical disabilities. He was shocked and appalled. To him, it didn’t seem like an option at all. He moved back to the institution with its minimal offer of services, and lived there for another eight months. His parents visited every weekend, and were of immense support, but then they were exhausted. And so Hallvard had no other choice but to accept moving into the nursing home.

All of this shows how Hallvard was moved through and between different locations in the public system of health care. Each was constituted by and constituted different practices and collectives. Each made different bodies, subjectivities and distributions of agency. It shows how the flows of agency are moving, shifted, distributed, and redistributed. It reveals the contingent character of practices and collectives, and their actors, bodies and subjectivities. So we see how the practices and collectives Hallvard was involved in at the time of the accident were not only decomposed, but also recomposed and replaced by new ones.

We also see how the idea of one great break or disruption, moving one from one given state of condition, that of ability, to another, equally given, state of condition, namely that of disability, is only tenable from a distance, and does not hold water when we move closer to practice. Instead there are (specific, contingent and continuous) decompositions and recompositions.

**Prosthetic embodiment and recomposition**

To move us back to the role of the body and embodiment in these processes of decomposition and recomposition of collectives, practices and subjectivities, I want to return to Hallvard’s essay ‘Afterthought’. How did this come about, and what is its role?

The third time Hallvard visited Sunnaas Rehabilitation Hospital, he was confronted with the question of whether he would like to have things written and learn to use a computer. They had a computer system based on Morse code which would allow Hallvard to use the computer without being able to use the keyboard. Hallvard started to learn Morse code. But then there was the question of a switch-system, of a way for Hallvard to give the input signals in Morse code. First they tried a switch that was worked by blowing and sucking in a pipe line. Sucking made a short and blowing made a long signal. It worked for a while, but the accumulation of spit blocked the pipe altogether. Then they made a plastic box, in which they attached one switch in the top and another in the bottom, and which they placed on the armrest of the wheelchair. When Hallvard’s arm was placed in the box, he could operate the computer by moving his arm up and down. Pressing the button in the top made a long signal, pressing the button in the bottom made a short signal. They also provided Hallvard with a voice-based programme used by blind or vision-impaired people that gave him feedback on what he had written by reading it out aloud:

I still use this system... However the Morse code is complicated, so I only use the computer to write on it, not in direct communication. It is too slow, it takes up to five
signals only to write one letter. To make a capital letter, even more signals are needed, and for a space, I have to make four signals. But I have written many things in this way – various contributions to debates in the local newspaper, and the essay about the time after my accident. Of 15 closely written pages, some 52,000 signals!

What this suggests is that the computer, and Hallvard’s interest in having things written down, recomposed the collective yet again. The nursing home was a given – there was no other option. But in this situation, the computer opened up some new possibilities. In fact, by posing a series of questions, it opened up the composition and ordering of the collective. These included: What (additional) elements and actors should be included, or excluded? What agencies, competences, practices and boundaries are desirable? At what cost? How should they be distributed, or delegated, within the collective? What kind of embodiments, subjectivities, interactions and separations would the alternative arrangements make for?

The arguments in favour of introducing the computer were that it would allow Hallvard to write – and to write on his own. And so that it represented an opportunity to become more independent: that is, less dependent on other people to write for him and to translate for him when speaking. It would also allow him to articulate himself more fluently, intelligibly, precisely, and elegantly. To do this, he would have to learn Morse code, and how to work the computer. It also required a particular tailor-made set-up, a careful arrangement of elements including: the computer, the programme translating Morse code into letters, the plastic box, the switches, learning the Morse code by heart, carers to turn the computer on, and to correct the position of his arm, and the voice-based programme that gave him feedback.

But what also becomes evident is that this reassembly of material elements and actors produced not only a new agency, with the ability to communicate through writing and at a distance, but also a new and able body, and a set of new subjectivities. By attaching himself to a machine, Hallvard became able to write. By writing, he could do more on his own; he could detach himself from the routines and collective of the nursing home and also take more part in social and civic life outside. He was able to argue and debate in the local press about politics, and ideas of a good life. He was able to act as a citizen, to be public spirited. These performances placed Hallvard in a series of new positions: suddenly, for certain purposes, he was autonomous, rational and verbally fluent. He found himself in positions enacting subjectivities that had long been closed to him.

But his attachment to the computer, and the writing, took him into further locations and positions, for instance with his essay. This is not only an autobiographical story, but also a spiritual testimony. His voice was transported in this testimony across huge distances, circulating through a network of protestant churches. Hallvard would visit these congregations with a friend, and bear witness to what had happened to him, and his religious revival. The friend would then read aloud parts of his essay. Sometimes his friend would go alone and read from his essay. The latter was literally a witness, a testimony, Hallvard’s representative that travelled around and spoke for him.

The autobiographical essay thus works as a form of prosthesis both to his voice and to his subjectivity. Indeed, it articulates his subjectivity. The essay tells a story of how this life turned, shifted, developed and changed again. But in so doing, the narrative builds not only a shifting, but singular and continuous life. Unifying a
heterogeneous composition of subjectivities, it helps to build ‘the subject’ in the
singular, lending it a stable and more durable material form. This form of
embodiment goes beyond the individualized, bounded body that is taken to be
‘natural’. It acts as a straightforward prosthetic embodiment, an extension which
supports the capacities of the body. But it also does more: the essay makes it possible
to articulate and enact a subjectivity that is also different from and goes beyond the
bounded, physical body. It is linked with this body but is not reducible to it.

Human embodiment, then, is much more open and widely distributed and
delegated than is commonly imagined. And it is not co-incident with what we usually
take to be the natural or biological body.

Conclusion
In this article I have used Hallvard’s case to unpack what is implied in the
disruption caused by a road traffic accident, and to explore and rethink the role of
the body and embodiment for disability as well as ability. I have introduced the
terms ‘decomposition’ and ‘recomposition’ in order to get around and avoid being
appropriated by the individualizing ‘organicism’ of the medical model and still stay
true to the body and its role in the enabling and disabling of life after an accident.
The main argument is that a road traffic accident is better conceived as the starting
point of a series of contingent shifts and dynamic recompositions than as a single
radical break and breakdown in people’s lives, subjectivities and biographies.
Without denying pain and suffering, decomposition, lack and loss are still not all
there is. People are decomposed and recomposed, disabled and enabled, in shifting
and complex ways.

Further, this process of embodying and mattering is precarious, ongoing, never
final – and pretty open. Bodies are neither a-historically nor biologically given, stable
nor closed, but acquire their shape, capacities and boundaries in specific material
practices and interactions. Material practices differ from place to place, from
circumstance to circumstance, and are both contingent and dynamically recomposed.
This means that what is made possible and enacted in practices also differs and is
precarious, contingent and dynamically recomposed.

This again opens up possibilities for constructive interaction and exchange with
medical practices, including rehabilitation medicine. It makes it possible both to assess
critically and to appreciate particular practices in which people become disabled or
enabled, moved into or out of silences, distributed into passivity or activity. Medicine
is not one discourse, larger than life, but many situated, different ways of knowing and
intervening in the body. Embodiments, and the practices in which they emerge, can
and must be critically assessed, appreciated and engaged with on the basis of what they
make possible and normative, for whom, and with what consequences – in the
particular and situated rather than in the general and abstract.

Finally, an effort to reclaim and rethink the body along these lines not only serves
disability studies and rehabilitation medicine well, but contributes with central
insights to any attempt a ‘more general’ re-conceptualization of body, agency and
subjectivity in social and cultural theory. This is because inquiries into embodiment,
agency and subjectivity through the lens of disability also open up ability, as enabled
or disabled, relying on particular conditions of possibility.
Notes

1. The article builds on a study of life after road traffic accidents conducted in Norway in the period 1996–2003, and is published as Road traffic accidents: The ordering of subjects, bodies and disability (Moser 2003). The approach to sources and methods for collecting data was pluralist. Although interviews were my main source, I also collected a range of other materials, including texts, videos, and photos given to me by interviewees. In addition, I used the interview situation as a site for fieldwork. The data have been disguised to protect confidentiality.

Although I rely upon people injured in traffic accidents and their communication of what becoming disabled implies, the intention is not primarily to give voice to their subjective experiences and stories, or to analyse these (as) narratives. Rather, drawing on post-structuralist resources, and in particular the material semiotic approach, I see these stories and experiences as already configured and shaped, but also contributing to building particular versions of subjectivity, embodiment and disability. It is these specific forms of ordering of reality that I am after. My concerns are thus primarily theoretical and analytical, but still grounded in empirical studies. Accordingly, the stories that are told are selected because they are indicative of particular aspects of the process of recomposition and embodying that I want to explore and have found at work in the data, and not because they are typical of the research subjects and their stories, let alone representative of the ‘population’ of disabled people.

2. The idea that gender, but also disability, is performative, a matter of doing rather than having, is developed in different bodies of work, including ethnomethodological, interactionist and cultural studies traditions (Garfinkel 1967; Goffman 1959/1971; West and Zimmerman 1987; Butler 1991, 1993). The move from performativity to enactment is undertaken in order to avoid the strategic and humanist baggage in a notion such as performance, where it is usually assumed that there is a strategic human subject at the centre of/behind/in control of the action. See Mol (2002) and Moser (2006).

3. I adopt the notion of ‘subjectivity’ in its semiotic and post-structuralist usage, as referring to a location of consciousness, knowing, thinking, or feeling. I use the term ‘subjectivities’ in the plural to emphasize, first, that subject positions are always configured in particular ways, and, second, that a subject position is not something one has, occupies or is structured into, once and for all, but rather a set of differently structured positions one moves between and is moved through, more or less fluidly. Whenever I refer to ‘the subject’ in the singular, this refers to a position that draws together, unifies and hides a more complex set of subjective capacities.

4. This boundary between parts of the body, between the brain and the rest, is familiar. It underlies the dualism between body and mind, and so the ideal of disembodied mind, which is often seen to prefigure how we conceive of bodies as well as subjectivity in ‘modern western culture’. The boundary performed, the devaluation of the body, the idea of disembodied mind, its role for the figure of the ‘modest witness’ on which academic work has become based, and its alternatives, have all been thoroughly discussed and criticized in feminist work. For two different and very influential versions of this, see Jaggar and Bordo (1989) and Haraway (1997).

5. I have explored the relations and interferences between disability, gender and class elsewhere, in Moser (2006).

6. In line with the material semiotic approach, this notion is intended to capture the collective, yet materially heterogeneous, character of social realities, and so also to avoid the usual a priori distinctions between human and non-human, and nature and society. Similarly, it avoids the equally taken-for-granted distinction between individual and society. In this framework, the individual, including the individual human, and the agency and actions that are usually attributed to him, are all treated as collective enactments or emergencies. See also Callon and Law (1997) and Moreira (2004).

7. For a similar argument on the uses of autobiographies in another context, see Moser and Law (1999). And for an exploration of the enactment of complex cyborg-subjectivities through the use of photos, other images and computer technologies, see Moser (2000). For related explorations of ‘biographical disruption’ in the wake of traumatic illness and impairment see also Thomas (2007) and Seymor (1998).
References

Akrich, M., and B. Pasveer. 2004. Embodiment and disembodiment in childbirth narratives. 
*Body and Society* 10, nos 2–3: 63–84.

Asdal, K., B. Brenna, and I. Moser, eds. 2007. Technoscience: The politics of interventions. 
Oslo, Norsay: Oslo Academic Press.

Barad, K. 2003. Posthumanist performativity: Toward an understanding of how matter comes 
to matter. *Signs: Journal of Women in Culture and Society* 28, no. 3: 801–31.

Barnes, C. 1997. A legacy of oppression: A history of disability in western culture. In *Disability 
Studies: Past, present and future*, ed. L. Barnton and M. Oliver. Leeds, UK: The Disability 
Press.

Berg, M., and A. Mol, eds. 1998. *Differences in medicine: Unravelling practices, techniques and 
Bodies*. Durham, NC: Duke University Press.

Butler, J. 1990. Gender trouble. Feminism and the subversion of identity. London: Routledge.

Butler, J. 1993. *Bodies that matter. On the discursive limits to sex*. London: Routledge.

Callon, M., and J. Law. 1997. After the individual in society: Lessons in collectivity from 
science, technology and society. *Canadian Journal of Sociology* 22, no. 2: 165–82.

Callon, M., and V. Rabeharisoa. 2004. Articulating bodies: The case of muscular dystrophies. 
Unpublished manuscript, CSI, Ecole des Mines, Paris.

Diedrich, L. 2005. Introduction: Genealogies of disability. *Cultural Studies* 19, no. 6: 649–66.

Foucault, M. 1976/1963. The birth of the clinic: An archeology of medical perception. Repr. 
London: Tavistock.

Foucault, M. 1979. *Discipline and punish: The birth of the prison*. Harmondsworth, UK: 
Penguin.

Foucault, M. 1981. *An introduction*. Vol. 1 of *The history of sexuality*. Harmondsworth, UK: 
Penguin.

Foucault, M. 1998. Michel Foucault. Aesthetics, method and epistemology. *Essential works of 
Foucault 1954–84*. Vol. 1. Ed. J. D. Faubion. New York: The New Press.

Galis, V. 2006. From shrieks to technical reports: Technology, disability and political processes in 
building Athens’ metro. No. 374 of *Linköping studies in arts and science*. Linköping, Sweden: 
Linköping University.

Garfinkel, H. 1967. *Studies in ethnomethodology*. Englewood Cliffs, NJ: Prentice Hall.

Goffman, E. 1959/1971. The presentation of self in everyday life. Harmondsworth, UK: 
Penguin.

Goggin, G., and Ch. Newell. 2003. *Digital disability: The social construction of disability in new 
media*. Lanham, MD: Rowman and Littlefield.

Haraway, D. 1991. Simians, cyborgs and women: The reinvention of nature. London: Free 
Association Books.

Haraway, D. 1997. Modest witness@second millenium. *FemaleMan meets OncoMouse: 
Feminism and technoscience*. New York and London: Routledge.

Haraway, D. 2003. The companion species manifesto: Dogs, people and significant otherness. 
Chicago, IL: Prickly Press.

Hughes, B., and P. Paterson. 1995. The social model of disability and the disappearing body: 
Towards a sociology of impairment. *Disability and Society* 12, no. 3: 325–40.

Jaggar, A., and S. Bordo. 1989. Gender/body/knowledge. Feminist reconstructions of being and 
knowing. New Brunswick, NJ: Rutgers University Press.

Latour, B. 2004. Why has critique run out of steam? From matters of fact to matters of 
concern. *Critical Inquiry* 30: 225–48.

Law, J. 1994. *Organizing modernity*. Oxford, UK: Blackwell.

Law, J. 2008. Actor-network theory and after. In *The new Blackwell companion to social theory*, 
3rd ed., ed. B. Turner, 141–68. Oxford, UK: Blackwell.

Law, J., and V. Singleton. 2000. Performing technology’s stories: On social constructivism, 
performance, and performativity. *Technology and Culture* 41, no. 4: 765–75.

McNeil, M. 2008. *Feminist cultural studies of science and technology*. London: Routledge.

Mol, A. 2002. *The body multiple: Ontology in medical practice*. Durham, NC: Duke University 
Press.

Mol, A., and J. Law. 2004. Situated bodies and distributed selves: Enacting hypolycyaemia. 
*Body and Society* 10, nos 2–3: 43–62.
Moreira, T. 2004. Self, agency and the surgical collective: Detachment. *Sociology of Health and Illness* 26, no. 1: 32–49.

Moser, I. 2000. Against normalisation: Subverting norms of ability and disability. *Science as Culture* 9, no. 2: 201–40.

Moser, I. 2003. *Road traffic accidents: The ordering of subjects, bodies and disability*. Oslo, Norway: Oslo Academic Press.

Moser, I. 2006. Sociotechnical practice and difference: On the interferences between disability, gender and class. *Science, Technology and Human Values* 31, no. 5: 1–28.

Moser, I. 2008. Making Alzheimer’s disease matter: Enacting, interfering, doing politics of nature. *Geoforum* 39, no. 1: 98–110.

Moser, I., and J. Law. 1999. Good passages, bad passages. In *Actor network theory and after*, ed. J. Law and J. Hassard, 196–219. Oxford and Keele: Blackwell and the Sociological Review.

Oliver, M. 1996. *Understanding disability: From theory to practice*. Basingstoke, UK: Macmillan.

Seymor, W. 1998. *Remaking the body: Rehabilitation and change*. London: Routledge.

Shakespeare, T. 2006. *Disability rights and wrongs*. London: Routledge.

Shildrick, M. 2002. *Embodying the monster: Encounters with the vulnerable self*. London: Sage.

Singleton, V. 2007. Training and resuscitating healthy citizens in the English New Public Health – normativities in process. In *Technoscience: The politics of interventions*, ed. K. Asdal, B. Brenna, and I. Moser, 221–48. Oslo, Norway: Oslo Academic Press.

Struhkamp, R. 2004. *Dealing with disability. Inquiries into a clinical craft*. PhD diss., University of Twente.

Struhkamp, R. 2005. Wordless pain. Dealing with suffering in physical rehabilitation. *Cultural Studies* 19, no. 6: 701–18.

Thomas, C. 2007. *Sociologies of disability and illness*. Basingstoke, UK: Palgrave.

Tremain, S. 2005. *Foucault and the government of disability*. Ann Arbor, MI: University of Michigan Press.

West, C., and D. H. Zimmerman. 1987. Doing gender. *Gender & Society* 1, no. 2: 125–51.

Winance, M. 2007. Being normally different? Changes to normalization processes: From alignment to work on the norm. *Disability and Society* 22, no. 6: 625–38.