

Chapter 2

The Concrete Richness of the Sensible

The full measure of Deleuze's contribution to the contemporary human sciences is still too remote for the reckoning. Commonly a Deleuzian thread may be observed, yet rarely is his "proper name" invoked (Deleuze and Guattari 1987: 37). Doubtless, the cause of this uneven reception lies in the provocations that abound in Deleuze's thought, both alone and in his collaborations with Felix Guattari, unsettling debates in diverse fields and opening up new problems for analysis (Alliez 2004: 105–107). Deleuze's influence is discernible in much recent innovation in the health and social sciences, including investigations of the body, movement and sensation (Massumi 2002); examinations of affect and emotion (Pile 2010); the social study of science and technology (Jensen and Rödje 2010); the proposal of 'non-representational' accounts of everyday life (Thrift 2007); and the study of health and human development (Fox 2011). Yet in each case Deleuze's contribution is elusive, sometimes acknowledged and sustained and other times evanescent and implied (Viveiros de Castro 2010). Unlike the more fulsome reception enjoyed by Foucault's work (Turner 2008), Deleuze's oeuvre presents something of a mystery for health and social scientists, full of promise and yet fraught with unfamiliar challenges. The present chapter explores some of these challenges in assessing the prospects of a minor science of health and illness modelled on Deleuze's idiosyncratic empiricism.

I am particularly interested in the kinds of research innovation that this minor science may entail. In addressing this question, I aim to confront what is arguably the most pervasive trend in the reception of Deleuze's ideas in the health and social sciences; namely, the selective appropriation of Deleuze's concepts and their redeployment as "tools" in the analysis of discrete social, cultural and health related problems (Buchanan 1997b: 482–484). While the co-option of Deleuze's work as a kind of conceptual 'tool-box' was famously endorsed by the thinker himself (Bouchard 1980: 208), the adoption of this technique in the health and social sciences has often had the perverse effect of limiting wider engagement with Deleuze's mature philosophy. While the deployment of concepts such as 'affect', 'assemblage', 'desire', 'becoming' and the 'body without organs' has opened up a range of innovative new lines of inquiry (Fox 2012: 63–69), this innovation has

largely been at the expense of clarifying what a distinctly Deleuzian health science might consist of. For a thinker who remained throughout his career committed to the realisation of a distinctive philosophical ‘system’, the habit of selectively applying concepts in the course of analyses often unrelated to themes that Deleuze himself considered arguably obscures the deeper and more systematic thrust of Deleuze’s project. Taken as a whole, Deleuze’s work furnishes a distinctive “ontology of the sensible”; a unique method or “pragmatics” capable of “determining the conditions of real experience” (Alliez 2004: 103–112). It is the argument of this chapter that the most effective means of characterising this method, and assessing its value in the renovation of health science inquiry, is to focus on what Deleuze meant by “transcendental empiricism”.

Of course, the challenge in clarifying Deleuze’s empiricism is that its character must be pieced together from the diverse treatments it receives throughout the thinker’s oeuvre. Nowhere is this method plainly characterised – at least in a way that might be familiar to health or social scientists – with Deleuze’s varying accounts of transcendental empiricism as often allusive and discordant, as they are instructive (Hayden 1995: 283–285). It is also true that existing commentaries on Deleuze’s empiricism tend to emphasise the speculative metaphysics that underpin his method (Bryant 2008). In sketching the key features of Deleuze’s metaphysics, most commentators ignore the *empirical implications* of Deleuze’s thought and the novel methods this work might avail for the interrogation of ‘real experience’. Given such oversights, I will focus here on the *methodological promise* of transcendental empiricism. In setting this course, I aim to follow Deleuze’s lead in the conduct of philosophical commentary. In *Difference and Repetition*, Deleuze (1994: xxi) argues that “a commentary should act as a veritable double, and bear the maximal modification appropriate to a double”. Bearing in mind comments Deleuze (1995: 136) offers elsewhere regarding the role of concepts in the pragmatic work of philosophy, Deleuze’s remark in the preface to *Difference and Repetition* has been taken to suggest that the reception of his thought should emphasise the deployment of concepts in the articulation of novel problems, rather than the hermeneutic task of deciphering what such concepts might mean or represent (see Smith 2010: 58–59).

The exposition of Deleuze’s empiricism offered below must, therefore, be understood in relation to the distinctive problem I have set for myself. In attempting to determine how Deleuze’s empiricism may be more *systematically adapted* to the analysis of health and illness, I am primarily interested in identifying the key concepts that comprise this empiricism, and the most methodologically sound means of deploying them. Given Deleuze’s exhortations regarding the differential relations that compose concepts, I also want to problematise the practice noted above of selectively deploying individual concepts with little regard for the specific concept-problem-assemblage from which they are drawn. As such, I will treat Deleuze’s empiricism as a *discrete methodology*, capable of inspiring research designs more sensitive to “what we are doing” (Deleuze 1991: 133). This, I wager, is an empiricism capable of leading the health sciences more deeply into the “concrete richness of the sensible” (Deleuze and Parnet 1987: 54); into “real

experience” in all its complexity. There are significant efforts underway in various cognate disciplines to achieve this intimacy (see Bonta 2009; De Landa 2006; Dewsbury 2011; Manning 2009; Pile 2010), much of which draws explicitly from Deleuze's writings. The present chapter adds to this innovation by fleshing out the characteristic features of Deleuze's empiricism, and then indicating how this empiricism may be mobilised in the design of novel studies of health.

More directly, Deleuze's empiricism furnishes three operant concepts – relation, affect and event – useful for the analysis of health and illness. Each of these concepts explicates the ‘pre-individual singularities’ central to Deleuze's account of (human) life, and the habits, experiences, practices and beliefs these singularities express. Privileging the analysis of relations, affects and events may offend critics who find in Deleuze's writings a “flat ontology” opposed to all metaphysical hierarchies (De Landa 2002: 153). Certainly, my approach risks de-emphasising concepts like sensation, difference and the virtual that have a key place in Deleuze's metaphysics. However, I would stress that when considered in relation to the problem at hand, the elevation of relations, affects and events affords a means of clarifying the methodological significance of Deleuze's thought, and its relevance for research innovation in the health and social sciences. It is further the case that these three concepts provide an effective orientation to the conceptual plenitude of a transcendental empiricism (Baugh 1992: 137–141). The development of my argument will first require a brief sketch of the reception of Deleuze's ideas in the health and social sciences. The purpose of this review is twofold; first it is important that I canvas the various debates Deleuze's work has provoked in the health and social sciences as a prelude to a more thoroughgoing assessment of the ways Deleuze's empiricism may be further applied in these fields. This review should, in turn, provide a fuller genealogy of the three primary problems upon which the book is based (see Chap. 1). Following this review, I will outline the broad scope of Deleuze's empiricism, before turning to a longer discussion of relations, affects and events. Rather than offer a comprehensive exegetical summary of these concepts, I propose to identify *select methodological principles* for the analysis of relations, affects and events in discrete milieus. The chapter will close with a brief discussion of how Deleuze's methods may be further adopted across the health and social sciences as a way of introducing the analysis to follow in the two case studies.

2.1 Deleuze's Reception in the Health and Social Sciences

Deleuze's reception in the health and social sciences has generally featured as part of a broader engagement with the philosophers, ideas and problems associated with the poststructuralist turn in continental philosophy (Jensen and Rødje 2010). This intellectual context is significant in that Deleuze's work is often considered in relation to thinkers like Foucault, Derrida, Bourdieu, Lyotard, Virilio and Baudrillard, with whom Deleuze no doubt shares certain ontological and

epistemological commitments. This includes the rejection of all ontological ‘essences’ such as the ‘subject’, ‘life’, ‘being’, ‘gender’ and ‘identity’, and an interest in the workings of power, language, discourse and desire (see Williams 2005 for a review). Perhaps the key feature of all poststructuralist philosophies is the refusal to posit the ‘subject’ as a necessary condition for philosophical reflection (Colwell 1997: 18). Neither ‘self’, ‘subjectivity’, ‘consciousness’, ‘mind’ nor ‘reason’ can provide a stable foundation for thought, nor should they be regarded as ‘transcendental’ entities somehow removed from the world of interaction, language and practice (Deleuze 2001). Like Foucault and Derrida, Deleuze is interested in the ways the subject is *produced in thought and practice*, and the broader consequences of this production for philosophy and politics. Unlike Foucault and Derrida though, Deleuze’s writings have not inspired the work of commentary and exegesis necessary to fashion a “Deleuze effect” in the health and social sciences (Brown 2010). Although this is beginning to change, the translational work required to establish how Deleuze’s ideas may be more comprehensively applied in these fields has yet to advance very far (Jensen and Rödje 2010). Indeed, it is fair to say that the nuances of Deleuze’s philosophy are often overlooked in the health and social sciences in favour of a more generic set of arguments held to be common to all poststructuralist thinkers (see Mansfield 2000).

This is not true of course of all scholars in the health and social sciences. In the social sciences in particular, Deleuze’s work has been routinely cited in the search for novel tools to guide research innovation (Brown 2010). In social and human geography for example, Deleuze’s work has been central to the development of “non-representational theory” (Thrift 2007), and the corresponding attempt to yield a more pragmatic and relational understanding of place, scale, boundedness, belonging, movement, experience, territory and dwelling (see Anderson and Harrison 2010; Marston et al. 2005). Ben Anderson, Paul Harrison, Sallie Marston, Nigel Thrift and John Dewsbury, among others, have adopted key Deleuzian concepts such as affect, event, becoming and assemblage in an effort to explain the relational coproduction of places, subjects and contexts. This work rejects the *a priori* supposition of territories and populations, spaces and bodies, which then interact in the course of experience and habitation (Harrison 2000: 501–506). In contrast, geographers aligned with non-representational theory have taken up Deleuze’s work in the hope of deriving more productive ontological suppositions to ground their research. Subsequent studies have tended to focus on processes of *production or emergence*, like those associated with place-making and the experience of belonging or attachment to place (Thrift 1999). Other scholars have focused on the topologies of place expressed in practices of mobility and movement (Cresswell 2010). Further interest has been expressed in the experience of “affective atmospheres” and their role in ‘figuring’ the array of activities, practices and/or interactions permissible within space (Anderson 2009). Others have explored the de/territorialisation of (human) life and the transmission of properties, qualities, affects and capacities between bodies and spaces (Jones 2009). These studies makes selective use of Deleuze’s ideas in an attempt to free geography from a materialist

ontology in favour of a more affective or 'vitalist' rendering of the topologies of place, self and world (see Dewsbury 2011; Thrift 2007 for a review).

Deleuze's distinctive reworkings of affect and intensity have also been central to the reception of his ideas in educational settings. Scholars in education and related disciplines have been drawn to Deleuze's work in an effort to anticipate the establishment of what are often called 'affective pedagogies' (Semetsky 2004, 2010; Hickey-Moody 2007; Probyn 2004; Zembylas 2007). This scholarship conceives of education and learning as intensive processes of affective and material production, in which forces, sensations and intensities are transmitted between bodies in ways that transform their distinctive capacities. In this respect, learning must not be reduced to a linear cognitive process whereby knowledge is simply transferred from one competent body to another in the process of acquiring such competencies. Rather, learning needs to be reconceived as a dynamic, intensive and rhizomatic *practice*, in which bodies are folded into and out of discrete assemblages of signs, affects, technologies, subjects and ideas. Learning is less cognitive than affective in this sense, insofar as bodies learn as their capacities for affecting and being affected are transformed by the array of entities they encounter.

Anna Hickey-Moody (2009) has developed these kinds of arguments in a series of studies of the ways discrete pedagogical modalities work to transform the materiality of bodies, signs and texts. Noting important differences in the affective and pedagogical effects of literature, sound and movement, and the ways each are positioned as distinctive learning modalities, Hickey-Moody goes on to explore novel affective strategies for transforming 'bodies of learning' in discrete communities of practice. Michalinos Zembylas (2007) pursues a similar course in his analysis of 'emotional intelligence' and 'emotion management' in education settings. Zembylas (2007: 19–20) shares with Hickey-Moody (2009), Probyn (2004) and Semetsky (2010) an interest in reconceptualising teaching and learning as practices or technologies for the production of "intensities" that connect and reconnect bodies in novel ways; to other human bodies, to bodies of practice, to ideas, to forces, to "lines of flight" and so on. Bogue (2004: 330–234) takes a slightly different view in presenting teaching and learning as an "apprenticeship in signs". This approach draws from Deleuze's book on Proust to present a model of learning based on the exposition of formal and informal signs, including non-linguistic or non-discursive signs such as memories, images, visual and aesthetic production, micro-perceptions, imagination and desires.

Similar intellectual concerns have inspired interest in Deleuze's work among sociologists and anthropologists, as well as scholars in cultural studies, media and communication studies (see Brown 2010; De Landa 2006; Fuglsang and Sørensen 2006; Jensen and Rødje 2010; Massumi 2002). Sociologists and anthropologists have tended to regard Deleuze's oeuvre as one resource among many furnished in contemporary poststructuralist debates. This is especially apparent in recent sociologies of the body, in which Deleuze's work has been read in relation to Foucault's and Bourdieu's writings, in particular, typically in an effort to escape the essentialism of the body and the antinomies of structure and agency (see Bogard 1998; Fox 2012 for a review). Scott Lash (1984), Ian Buchanan (1997b), Nick Fox (2012),

Bryan Turner (2008), Peta Malins (2004), Lisa Blackman and Mike Featherstone (2010), among others, have found much of interest in Deleuze's account of a (posthuman) body assembled in the folding and refolding of matter, life, signs, objects, technologies, habits and events. In refiguring (human) life in terms of the assemblage, Deleuze's work has assisted sociologists and anthropologists to trace the myriad activities by which the body differs from itself in relation to the varied affects, events and encounters it experiences. The body loses any sense of orderly identity in this treatment, replaced by a system of disjunctive becomings whereby bodies are forever assembled anew as novel objects, affects and forces are folded within them, just as others are lost to the assemblage as its relations unfold (Hughes 2011: 1–5). Conceiving of the body in this way effectively distributes the body within and among the myriad objects, structures and agencies that constitute a social territory, field or 'context' (see Duff 2007). This is a body between structure and agency reducible to neither yet clearly assembled out of elements of each. It also follows that the various 'segmentations' (Deleuze and Parnet 1987) or 'dividing practices' (Foucault 1983) by which bodies are conventionally distinguished – such as gender, sex, race, class, age, occupation and/or ability – should themselves be regarded as effects of this folding or assembling of bodies, and not as essential characteristics of a natural or transcendental body/subject (Bains 2002; Fox 2012).

The idea of a body assembled in a panoply of material and force relations has held special appeal for scholars in science and technology studies (STS), and for successive generations of feminist thinkers. The theoretical and epistemological innovations associated with STS – and with actor-network-theory more directly – are heavily indebted to Deleuze's ontological investments, even if this debt is only occasionally acknowledged (see Albertson and Diken 2006: 240; Jensen and Rödje 2010: 1–2). Nonetheless, STS relies on the key Deleuzian contention of a body assembled in its relations with the objects and technologies that dominate its social milieu (Law 2009). Sociologists, anthropologists and historians have been particularly drawn to the ways STS marshals this characterisation to describe the production and transformation of 'actors' in discrete networks of objects, actants, processes and associations. Further inspiration has been drawn from Deleuze's treatment of the body's de/territorialisations and the ways technologies 'reterritorialise' the body's component parts, advancing their (nonhuman) becomings. Examples include the hand made "prehensile" as it is reterritorialised by object-tools that it may "brandish or propel"; or the way the stirrup modifies the material, social and affective relations "amalgamating" human and horse, transforming the related technologies of travel, conquest and war-craft (Deleuze and Parnet 1987: 104–105). Recent sociologies of the body are thus indebted to Deleuze's *historicisation* of technology, and his conviction that the tool is a "variable machine assemblage" which effects a "certain relationship of vicinity with man, animals and things" (Deleuze and Parnet 1987: 104). Drawing on this insight, scholars of science and technology have taken the tool to be central to the ongoing transmission of action, and the wider distribution of agency between bodies (see Latour 2005: 46–50).

STS, however, follows Deleuze in radically opening the category of the actor to include humans as well as objects, tools, plans, logics and processes (Latour 2005: 64–70). The principle of absolute symmetry that underscores this move might appear to dismiss the distinctive agentic capacities of *human* actors (Sismondo 2010: 89–90), even though the intention is to extend agency beyond humans to better account for the actions and capacities that nonhuman entities exhibit. STS scholars John Law (2009), Bruno Latour (2005) and Annemarie Mol (2002) have drawn from Deleuze's account of bodies and assemblages to reject the notion that actors possess innate capacities, which are then realised or expressed in particular situations. In fine Deleuzian fashion, these authors stress that action is the product of specific network associations that spatially and temporally link one actor with another (Latour 2005: 206–208). This position is further reliant on Deleuze's (1992) reading of Spinoza and his conviction that the greater the array of relations a body is able to maintain, the greater the array of actions, capacities or affects that body will be capable of (Bell 2009: 4–5). It follows that agency, as STS scholars understand it, is a function of the slow development of network relations such that each actor's agentic capacities differ according to the character of these relations (Latour 2005). Consistent with Deleuze's ethological conception of bodies, research in STS confirms the function of affects and relations as conduits or mechanisms for the production, distribution and utilisation of agency (see also Armstrong 1997: 44–48). Successive waves of STS scholars have developed these themes in detailed empirical studies of settings and problems as diverse as urban drug use (Vitellone 2010); the experience of place and social inclusion (Duff 2011); ethnographies of scientific practice (Law 2004); the organisation of 'for profit' enterprises (Lee and Hassard 1999); and the embedding of information and communication technologies in contemporary social and political life (Avgerou et al. 2004). All bear the trace of Deleuze's conceptual invention, even if scholars like Annemarie Mol, Bruno Latour and John Law have emerged as far more successful social scientists.

The account of bodies, tools and assemblages derived from Deleuze's work and pressed into the service of a novel sociology of science and technology has also inspired feminist critics of science, including Isabelle Stengers (2011), Karen Barad (2007), Jane Bennett (2010) and Donna Haraway (1997). All have contributed important accounts of the gendered character of technology utilisation, and the work technologies 'perform' in the production and reproduction of sexual difference. Beyond the study of science and technology, a number of feminist thinkers have adopted Deleuze's ideas in an attempt to counter the politics of sexual identity (see Colebrook and Buchanan 2000). Claire Colebrook (2002), Rosi Braidotti (1994), Elizabeth Grosz (2005), Moira Gatens (2000), Donna Haraway (1997) and Paola Marrati (2006) have found productive resources in Deleuze's thought for the project of advancing feminist thinking in the absence of a recognisable, self-identical subject. Borrowing from Deleuze and Guattari's (1987) discussion of nomadology, Rosi Braidotti (1994) for example, develops the idea of the nomad in relation to the more specific problem of gendered and sexual difference. Braidotti suggests that the practice of 'becoming other' that lies at the heart of all attempts to

disrupt configurations of sex and gender may be further facilitated by the practice of what she calls a ‘nomadic ethics’. This is an ethics of nomadic wanderings beyond the established dictates of sexual identity, reassembling bodies, technologies, habits, affects and texts in ways that transform identity, reaffirm difference and destabilize sex and gender. Elizabeth Grosz (1994) has long shared Braidotti’s interest in developing a novel ‘post-identity’ ethics beyond ‘sex’ and ‘gender’. In a sustained engagement with the work of Deleuze and Guattari, Grosz (2008: ix) has sought to develop an ontology of sexual difference capable of accounting for the composition of “matter, force, nature, and the real”, and the subsequent development of a novel “politics of difference”. Endorsing Deleuze’s commitment to the *indeterminacy* of difference, Grosz (2011) proposes a model for thinking through the experience of sex and gender, without at the same time reifying the differences that punctuate this experience in the preservation of essential sexual categories. Such a gesture clears the way for an ethics of becoming that retains an *ontology* of difference in its attempts to destabilize sex and gender, and so ‘reconfigure’ bodies and subjects.

Elsewhere, Moira Gatens (2000), Claire Colebrook (2002) and Paolo Marrati (2006) have conceived of this kind of ‘politico-ethical’ activity in explicitly affective and aesthetic terms. Each of these thinkers presents the politics of sexual difference as a dynamic intervention into the *ethological composition* of bodies and subjectivities, designed in every instance to transform the ways bodies may affect and be affected by the bodies/subjects/worlds they encounter (Gatens 2000: 71–72). This approach further dispenses with the dualisms that sustain identity politics (such as heterosexual/homosexual, male/female and man/woman), arguing instead for a “politics of becoming” counter to the “politics of production” that sustains “bi-sexed organisation” (Marrati 2006: 321). Escaping these “dualistic machines” requires an active and experimental ethics capable of transforming sexual identities in the elaboration of novel forms of (human) life (Marrati 2006: 321–322; Gatens 2000: 70–72; Colebrook 2002: 9–14). Ethics, so conceived, is ethological insofar as it is concerned with the composition of bodies and affects, practices and encounters, and with the ways each may be transformed in the interests of increasing a body’s power of acting. Binary identities like male/female and gay/straight limit a body’s power of acting by regulating the field of affects and encounters such a body may legitimately experience. “Overcoding” a body in this way limits its capacity to affect (or be affected by) particular kinds of bodies and encounters (Deleuze and Guattari 1987: 8–9). An affective politics of difference, along the lines endorsed by Braidotti, Grosz, Gatens, Colebrook and Marrati, challenges this overcoding by opening bodies up to a “process of contagion” that radically increases the differential elements at work within them (Marrati 2006: 321). The politics of difference that emerges in this reading of Deleuze’s work is central to his enduring appeal among contemporary feminist thinkers (see Grosz 2008: 2–4). It is also critical to the wider reception of his thought in anthropology, political science, history, gender studies, geography, cultural studies and sociology. In each instance, Deleuze has provided tools for thinking afresh, revitalising old debates and opening up new lines of inquiry.

Within the health sciences themselves however, Deleuze's impact is more difficult to assess. It is only in the last 10–15 years that scholars have sought to develop Deleuze's ideas in the analysis of discrete health problems. This engagement has largely taken place in the sociology of health and illness, cultural studies, medical geography, disability studies and medical anthropology (Fox 2012: 63–75). Much of this work has assessed the philosophical significance of Deleuze's ideas, rather than addressing the practical and empirical implications of his thought for scholars working in health related disciplines. Indeed, early engagement with Deleuze's work exhibited a decidedly exegetical focus as scholars sought to position Deleuze's thought in novel contexts (see Fox 1993). More recently, this translational work has given way to a more concerted effort to 'think with' Deleuze in the investigation of select health problems. This is especially evident in the sociology of health and illness, where scholars have explored the implications of Deleuze's work for analysis of the lived experience of health and the design of novel health care interventions. Marc Roberts (2005), Dean Mitchell (1996), Anna Hickey-Moody (2009), Peta Malins (2004), John Fitzgerald (1997), Nick Fox (2011), Ian Tucker (2010), Petra Kupperts and James Overboe (2009), among others, have developed Deleuze's ideas in the study of varied health problems including addiction; the provision of health care for people recovering from mental illness; the adoption of 'enhancement technologies' such as cosmetic surgery; the experience of intellectual disability; the emergence of a logic of health care 'consumers'; and the treatment of people living with HIV/AIDS.

I offer a more extensive review of the adoption of Deleuze's thought in the contemporary health sciences in Chap. 3 where my goal will be to identify how and where Deleuze's methods may be further developed in these fields. Yet before I introduce these methods it should prove useful to briefly summarise the major intellectual contributions elaborated in the literature reviewed above. As I noted in the introduction to this chapter, the purpose of this summary is twofold. First, it should clarify the objects, methods and analytics of a minor science of health and illness. Second, it ought to afford a more explicit genealogy of the three problems identified in the Preface and again in Chap. 1 as justifications for this minor science, thus anticipating the empirical analysis to follow in the two case studies.

Central to the research reviewed above is the sympathetic endorsement of Deleuze's rejection of all dualisms, structures, identities and essences, and the subsequent development of a logic of relations, multiplicities or *assemblages* (see Bonta 2009; Fox 2012; Patton 2000; Rajchman 2000; Smith 2012). Reviewing the application of this logic in the contemporary social sciences, Marcus and Saka (2006: 102–104) argue that the assemblage has generally been mobilised to replace the more traditional notion of social structure. In contrast to the putative rigidities of structure, and the reifications of social context, the idea of the assemblage emphasises processes of emergence, heterogeneity, instability and flux. Whereas structure is typically understood to be resistant to change, the assemblage foregrounds the ways "heterogeneous elements" are organised in the formation of social, symbolic, economic and political "scaffolding" that "orders" interaction, 'meaning' and practice (Marcus and Saka 2006: 102). This suggests that the objects of social

science inquiry cannot be regarded as static entities bearing some invariant essence, but must instead be examined in the context of their contingent becoming.

A commitment to this ‘relational logic’ is a feature of most engagements with Deleuze’s work in the health and social sciences, including those studies reviewed above. Across these studies, the idea of the assemblage provides a means of suspending traditional ontological categories – such as ‘subject’, ‘identity’, ‘essence’, ‘experience’, ‘object’ and ‘world’ – to permit more refined analyses of the relations, affects and events by which these categories are assembled. “Assemblage thinking” thus provides the basis for a novel methodology of great promise for scholars right across the health and social sciences (Anderson et al. 2012; Brown 2010; De Landa 2006; Viveiros de Castro 2010). *This suggests, finally, that the assemblage ought to be the principal focus of any attempt to establish a Deleuzian health science.* What’s more, the research reviewed above provides a range of insights regarding the primary research problems such a science should concern itself with. First, recent appropriations of Deleuze’s thought in the health and social sciences suggest the importance of abandoning the differentiation of subjects and objects, humans and nonhumans, body and society in favour of a ‘symmetrical’ ontology capable of explaining the manner of these entities production and convergence. All bodies are composed in an assemblage of matter, technology, affect and force, such that to somehow untangle these entities and their effects is not only empirically taxing but also ontologically unreliable (De Landa 2006: 47–50). Such is the primary epistemological claim, incidentally, of actor-network theory (Latour 2005). Like actor-network theory, Deleuze’s empiricism suggests the folly of abstracting (human) life from the web of affects, relations and events in which it is enmeshed. It follows that there can be no reasonable epistemological differentiation of subjects and objects, bodies and contexts, with any such distinction remaining an artefact of thought and not a reliable property of the “given” (Deleuze 2001: 25–27).

This suggests, more directly, the importance of studying the means of the assemblage’s formation in the conduct of a Deleuzian health science. If the need to overturn the dualities of subject and object, the human and the nonhuman, is the first great methodological investment of such a science, then the second pertains to the merits of considering the divergent actors, entities, bodies, affects, forces and signs active in assemblages of health. As the discussion of Deleuze’s empiricism below will make plain, the work of identifying and assessing the constituent features of the assemblage is itself an empirical task. While this task invites some innovation in the characterisation of the empirical, it lends itself nonetheless to routine social science inquiry. As I argued in Chap. 1, the notion of the social and structural determinants of health presents a useful test of this claim. Rather than present social and political factors, like educational disadvantage, poverty and income inequality, as *brute structural determinants* of health in any given setting, a more Deleuzian account suggests focusing instead on identifying the various assemblages by which these outcomes are enacted or expressed. The case studies presented in Chaps. 4 and 5 will flesh this argument out, although the point for now is that the various entities at work in assemblages of health can each be identified by

way of the effects they generate (and the concrete relations they establish) between diverse bodies. The work of ‘distal’ structural actors like policy, taxation arrangements, income distribution, racism and stigma may, for example, be traced in individual settings via the effects they engender in bodies. This argument is very close to Bruno Latour’s (2005: 1–6) description of actor-network-theory and its “tracings” of the effects of the “social” in local networks. Whatever the source, the point is not to posit some distal cast of structural actors which somehow mediates health outcomes in discrete settings. The properly empirical task is to document the array of bodies, technologies, affects and events ‘involved’ in local assemblages of health, and the work each does to either promote or diminish health. This suggests that health ought to be regarded as a *property of the assemblage* and not of any one individual body.

Furnishing an appropriately Deleuzian conceptualisation of health is thus the third principal research task indicated in the literature reviewed above. If the body cannot feasibly be removed from its context or environment – such that health must instead be regarded as a property of the assemblages in which bodies are expressed – then the problem of defining health becomes at once more complicated, but also potentially more productive (Fox 2011: 434–436). In the previous chapter I argued that the primary reason the health sciences have so far resisted providing a substantive definition of health is that these sciences are generally more interested in illness. Attempts to establish a positive definition of health mostly end up eliding capacity, function, empowerment or, more notoriously, wellbeing (Arnold and Breen 2006). Thinking of health in terms of the assemblage suggests the need to include a wider array of actors, objects, bodies and processes in this evaluation. I also suggested in Chap. 1 that health may profitably be defined in normative terms as a lived transition in a body’s perfection, or its power of acting. Although I barely hinted at the complex status of such a body, thinking now in terms of the assemblage indicates the importance of regarding a body’s power of acting as the function of innumerable bodies, both human and nonhuman, acting together. I should also reiterate the argument made earlier that only Deleuze can provide the conceptual tools necessary for the *empirical investigation* of these kinds of claims. It is important that I properly characterise Deleuze’s empiricism before assessing its methodological promise.

2.2 The Challenge of a *Transcendental* Empiricism

Late in his career, Deleuze (Deleuze and Parnet 1987: vii) offered the following simple account of his intellectual project: “I have always felt that I am an empiricist, that is, a pluralist”. This enigmatic remark betrays the complexity of Deleuze’s thought, his interests and preoccupations, even as it highlights the characteristic thrust of his immanent philosophy. Deleuze proposes a decidedly inventive empiricism, deeply antagonistic to the foundational assumptions of traditional empirical inquiry. Empiricism is normally understood as a theory of the

relationship between experience, sense impressions and knowledge, in which all knowledge is said to derive from sense impressions without recourse to *a priori* ideas (Audi 1995). While Deleuze (1991) endorses this rejection of *a priori* or innate ideas, he takes issue with the empiricist supposition of a natural ‘subject’ of experience. For Deleuze (1991, 1994), the subject of empiricism stands itself as an innate idea in that this subject ostensibly comes to experience ‘fully formed’ and then constructs ideas on the basis of this experience. This might explain the generation of knowledge, ideas and understanding, yet it fails to account for the character of subjectivity itself, its formation and orientations. What’s more, traditional empiricisms impute an organisation to the subject – a systematic ordering of capacities – without explaining how this organisation emerges. Deleuze (1991: 89) argues that this leaves the subject of empiricism forever outside experience; the custodian of the ideas, impressions and knowledge derived from experience without itself being the product of these experiences. In countering the transcendental foundations of all idealist and rationalist epistemologies, empiricism merely shifts this transcendental ground, leaving the mystery of subjectivity intact. Deleuze’s own response to this epistemological aporia involves the search for a “superior empiricism” (Baugh 1992).

Subjectivity should, in this respect, be understood as the distinctive problem for which a *transcendental* empiricism serves as a provisional solution (Boundas 1994: 113–115). This “higher” empiricism affords “a new conception of subjectivity” (Rajchman 2000: 9), alert to the mechanisms of the subject’s *formation* within a “transcendental field” (Deleuze 2001: 25–27). Buchanan (1997b: 484–485) adds that “the problem of the subject’s formation” must remain central to any attempt to fashion a Deleuzian social science. This is not to suggest that subjectivity is the only problem to which Deleuze’s empiricism is drawn, but rather that his empiricism entails a thoroughgoing *reconceptualization of the subject* and its emergent ontology. Subjectivity is indeed a problem for Deleuze insofar as it is typically treated as a necessary abstraction in the work of securing reliable foundations for metaphysical and ontological inquiry. Deleuze insists that far from explaining the world, the abstract “must itself be explained” (Deleuze and Parnet 1987: vii–x); particularly an abstraction as entrenched as subjectivity (Bell 2009). However, in problematising the subject, transcendental empiricism does not ‘abandon’ or ‘eliminate’ subjectivity, but rather seeks to account for its emergence from within the “flux of the sensible” (Deleuze 1991: 87). And it does this, I would argue, in conceptualising *relations, affects and events* in very specific ways, always emphasising their collocation in assemblages of matter and force (see De Landa 2006: 47–50; Grosz 2011). The importance of relations in the development of a transcendental empiricism is surely uncontroversial given the explicit treatment of this concept in Deleuze’s own accounts of his method (see Deleuze and Parnet 1987: 55–59). Deleuze is concerned, most directly, with the *externality* of relations; with the distinctive ontological status of relations separate from the *relata* or terms that relations conjoin (Rajchman 2000). Deleuze (2001) notes that few empiricists have granted such ontological security to relations, preferring the more secure foundations of substances, things and worlds. Yet in privileging the analysis of relations,

Deleuze foregrounds the importance of events and affects, in that a relation is always a product of an encounter, understood as the event that contains the encounter and the affects that encounters produce (see Buchanan 1997b: 490–491). Indeed, relations *presuppose* an encounter between subjects, bodies and worlds, and the affective modulations these encounters inspire.

To privilege relations in the characterisation of transcendental empiricism is thus to highlight the event of the encounter that relations instantiate, and the affective becomings that these encounters support (Deleuze and Guattari 1987: 283–285). Put another way, relations always produce affective responses in the various human and nonhuman bodies subject to the event of their encounter. This arguably explains why Deleuze and Parnet (1987: 54–66) are so careful to emphasise the significance of relations, affects and events in the discussion of empiricism in their *Dialogues*. The interrogation of relations, affects and events ought, for these reasons, to be central to any assessment of Deleuze’s empiricism. Further consideration of these concepts will also clarify Deleuze’s account of (human) life, and his treatment of the formal properties of the assemblage. With these goals in mind, my analysis of Deleuze’s empiricism will proceed in three related sections: the first will explore Deleuze’s reading of Hume and his account of relations, belief and practice. The second section will consider Deleuze’s reading of Spinoza and the problem of affects and encounters, while the third will review Deleuze’s treatment of the event and its implications for a theory of the subject, touching on Deleuze’s reading of Whitehead. The final sections will draw these accounts together in describing how the key methodological features of Deleuze’s empiricism may be applied in the study of health and illness. Throughout, the goal will be to establish a novel methodology for the interrogation of assemblages of health and the varying subjectivities they sustain.

2.2.1 *What Is a Relation?*

Deleuze’s most important study of relations and relationality is furnished in his reading of the Scottish philosopher David Hume. This analysis also provides a series of revealing insights into Deleuze’s conception of subjectivity. Deleuze (1991) finds in Hume a means of explaining the *emergence* of subjectivity within the flux of contingent experience, what Hume calls the “given”. What is ‘given’ in experience is “the flux of the sensible, a collection of impressions and images, or a set of perceptions ... the totality of that which appears” (Deleuze 1991: 87). However, this flux cannot explain the subject, because subjectivity should be understood as a “synthesis” of these “impressions and images” rather than their source. As such, the proper question for philosophy is “how is the subject constituted in the given?” (Deleuze 1991: 87). How, in other words, does the distinctive ontological bearing of subjectivity emerge from the collection of impressions, images and perceptions that comprise the ‘sensible’? Deleuze’s analysis takes on a uniquely transcendental element as he begins to inquire after the ways a subject

constituted in the given is able to *transcend* the given. Deleuze insists upon this transcendental element in order to account for change and invention. For without the capacity to transcend the given the subject is trapped in repetition, in the pre-determined structures of the 'real'. Indeed, denying the subject's capacity to manipulate, modify or transcend the given amounts to a "denigration of the richness and diversity of the life of the world" (Hayden 1995: 285). To clarify matters then, Deleuze's approach is empirical in that it seeks to explain the immanent constitution of subjectivity, impressions, experience and sensations without recourse to *a priori* ideas (see Colwell 1997: 18–20). Yet it is also transcendental in its attempt to map the ways subjects strive to transcend the given and "affirm more than they know" (Boundas 1991: 15). Deleuze (1991: 87) describes this idea of a subject constituted in the given but also able to transcend the given, as the "absolute essence of empiricism". He adds that it was Hume who discovered this transcendental aspect in his affirmation of the externality of relations.

The problem of relations arises in Hume's discussion of the subject and the more specific issue of how the mind acquires a nature. Hume argues that the flux of sensation cannot account for the structures of mind, given the arbitrary character of experience. Experience has no meaning in and of itself, and so nothing in the stream of consciousness is capable of forming the knowledge, ideas and understanding necessary for the emergence of subjectivity. As a disjunctive collection of perceptions and sense impressions, the mind does not "have a nature" and it is "not yet a subject" (Deleuze 1991: 22–24). For Hume, the concatenation of impressions present in experience only takes on the systematic guise of subjectivity as a result of the manifold *affections of the imagination*. Imagination serves to collect impressions in such a way that the ideas, sensations and impressions derived from experience affect one another in various ways, lending a certain vividness to these impressions. Affects "give the mind its qualities" consistent with what Hume calls the "principles of association" (Deleuze 1991: 24–26). These principles affect the imagination by ordering the diverse impressions present in the mind into more systematic relations of *contiguity, resemblance and causality*. In regulating the mind's "easy passage from one idea to another", the principles of association impose "constancy on the imagination" such that ideas are linked or related to one another in reliable and consistent ways (Deleuze 1991: 25). These principles produce relations between different sense impressions and affect different elements in the mind: contiguity affects the mind's senses; resemblance regulates the transitions of the imagination; and causality affects the mind's sense of time in the assessment of cause and effect.

More specifically, the senses present impressions in the mind that are contiguous in both a temporal and affective sense, such that sense-objects take on diverse sensory and ontological identities on the basis of the proximity (or contiguity) of these impressions. Resemblance proceeds by way of reflection and analogy, in that every impression "calls up" another impression, either from memory or from contemporaneous perception, to clarify the nature and affective tone of the initial impression (Deleuze 1991: 25). Causality is the most significant of the principles of association because the impression of cause and effect, and its confirmation in

experience, serves as the foundation for all purposive action, understood as the capacity to make plans and to form beliefs about the world (Deleuze 2001: 39–41). Taken together, the principles of association “elect, choose, designate and invite certain impressions of sensation among others; and having done this, constitute impressions of reflection in connection with these elected impressions” (Deleuze 1991: 113). The selection of impressions and their subsequent organisation in the repose of reflection subsequently “provides the subject with its necessary form” (Deleuze 1991: 104). In this way, the principles of association give rise to the defining characteristic of subjectivity; the capacity to form relations between sense impressions in the course of directed reflection. Subjectivity is an *emergent property* of such relations, an “impression of reflection and nothing else” (Deleuze 1991: 113).

Critically, however, the relations conceived in the mind according to the principles of association remain forever “external to their terms” (Deleuze 1991: 99). The importance of the externality of relations in Deleuze’s reading of Hume cannot be overstated, serving ultimately to resolve one of empiricism’s most enduring theoretical impasses. If all knowledge is said to derive from the given of experience, then how is one to account for change and invention? If all that exists is already given to the subject, then all that exists is effectively reduced to stasis. The assertion of the externality of relations reintroduces invention and dynamism into this epistemological gridlock, revealing the ways subjects invent or create relations between impressions in making sense of the world. Deleuze’s argument relies on the differentiation of two broad categories of impressions in the mind; “the impressions or ideas of terms, and the impressions or ideas of relations” (Deleuze 2004: 163). Most empiricists have contested the significance of the latter, if not denied them altogether, and yet for Deleuze the capacity to form relations between disparate impressions stands as the characteristic achievement of subjectivity. For Deleuze, as for Hume, relations are in no way *determined* by their terms, by the sense-objects or impressions that relations effectively conjoin. To argue that relations are determined by their relata is to argue that these terms contain within themselves the universe of potential associations to which they might be put. This places relations and their terms within an “organic unity” (Hayden 1995: 285), effectively foreclosing difference and the creation of novel relations between disparate impressions. Indeed, if relations are determined by their terms “there is nothing to distinguish the term from the relation” (Hayden 1995: 285) and the ontological significance of relations is lost.

Deleuze (1991: 101) insists that relations bear their own unique ontological status for the simple reason that “ideas do not account for the nature of the operations that we perform on them and especially of the relations that we establish among them”. This explains the emergence of novel relations (and novel understandings of these relations) in that the externality of relations ensures that sense-objects may be associated in unpredictable ways. It follows that the formation of relations between diverse sense-impressions, and the new forms of understanding that these relations support, is an innately creative process insofar as relations are always *made or invented* rather than discovered (Deleuze and Parnet 1987: 55–56). Subjectivity ought, therefore, to be understood as the capacity to take the sense

impressions derived from experience and combine them in novel ways in the creation of new understandings. The creation of novel understandings (what Hume calls belief) is the transcendental component of Deleuze's empiricism. It clarifies how a subject constituted in the given is able, through the practice of sense-making, to transcend the given. This process calls attention to the importance of belief, habit and invention in Hume's account of the practical constitution of subjectivity (Deleuze 1991: 115).

In recasting subjectivity in terms of belief and invention, Hume emphasises the role of practice, habit and creativity in the production of knowledge. This move leads Deleuze (1991) to stress subjectivity's dual provenance in relations of ideas and impressions, and of practice and invention. Such processes begin with the development of relations in and between sense-impressions and their slow reification in habits. This also highlights the "circumstances, actions and passions" (Deleuze 1991: 130) which give rise to impressions, and the actions by which relations are forged between these impressions. This, for Deleuze (1991), is the very definition of habit; the insistent regularity with which the mind travels predictably from one idea to another. Yet the regularity of practice and relations, and their manifestation in habit, also permits the formation of durable beliefs about the world. What is interesting for Hume is not the extent to which beliefs may withstand objective verification, but that they support so much purposive action. Belief describes the means by which one "infer(s) one part of nature from another which is not given" (Deleuze 1991: 86). It determines one's capacity to "transcend experience and to transfer the past to the future" (Deleuze 1991: 71). Each of these capacities – to draw inferences about the world that exceed our experience of it, and to use our experience to make predictions about the future – are indispensable, almost by definition, for the planning of purposive action, from the incidental to the transformative. Beliefs are always contingent, in this sense, in that subjects form beliefs for a "specific, practical purpose, determined by a need, interest or passion" (Goodchild 1996: 14). Beliefs emerge in response to particular circumstances and hold for so long as they support action and/or understanding in relation to these circumstances. This is why Deleuze (1991: 86) regards the formation of relations, habits and beliefs to be innately creative processes, for each reveals the "dual power of subjectivity: to believe and to invent".

The model of subjectivity that emerges in Deleuze's reading of Hume inaugurates his broader effort to establish a "superior" or transcendental empiricism. The subject of such an empiricism remains a *process of differentiation* rather than an *a priori* ground or foundation (Buchanan 1997b). This is a subject of relations and beliefs, embedded in practice and habit, not a form awaiting its content. It is, more importantly, a subject of knowledge, ideas and beliefs, constituted in the nexus of associations that characterises all relations, all reflection and all imagination. Nonetheless, the emphasis on ideas, impressions and relations reveals a shortcoming in Deleuze's reading of Hume, in that it is not entirely clear what role embodiment plays in the accretions of subjectivity. For all the discussion of habit and practice, Deleuze's reworking of Hume's empiricism appears to present subjectivity as an emergent effect of mind, and the organisation of sensations and

impressions in particular. Even the practice of habit appears to refer to the habit of associating particular impressions or ideas in the mind, and the way these relations give rise to coherent beliefs about the world. The body here stands as a mere container for the senses, with all the real work of subjectivity taking place elsewhere. Yet in Deleuze's mature philosophy one finds a compelling account of subjectivity conceived both in the relational connections of the mind *and* in the practical and affective relations of the body (Boundas 1994; Colwell 1997). In his collaborations with Felix Guattari and Claire Parnet, for example, Deleuze builds on his earlier study of relations to clarify both the corporeal dimensions of the subject, as well as the formal properties of the assemblage. This work presents subjectivity as an assemblage (or "non-homogenous set") of diverse relations of "sympathy, symbiosis" (Deleuze and Parnet 1987: 52–54). Sympathy is subsequently described as a process of "assembling" that establishes "agreements of convenience between bodies of all kinds . . . physical, biological, psychic, social, verbal" (Deleuze and Parnet 1987: 54). Subjectivity is thus construed as an assemblage composed in relations of sympathy between bodies, both human and nonhuman. This notion of a body assembled or composed in its relations receives further elaboration in Deleuze's reading of Baruch Spinoza, adding a properly corporeal dimension to his transcendental empiricism.

2.2.2 *What Is an Affect?*

The significance of Spinoza's legacy in the articulation of Deleuze's philosophy is almost without parallel (see Grosz 2011; Hardt 1993). Deleuze (1992: 11) regarded Spinoza as the "prince of philosophers" for his unyielding commitment to the creation of a "plane of immanence" to express both his ethics and his philosophy. All that exists in the world is, for Spinoza, a series of modifications (or modes) of an immanent substance expressed in a distinctive attribute or set of attributes (Friedman 1978: 67–75). This substance (or world) – and the infinite modes and attributes that are its expressions – remains immanent to itself as it were, free of any transcendental condition such as God, truth or soul (Deleuze 1988a). This plane of immanence serves, for Deleuze, as an important philosophical template for the development of a "superior empiricism". It provides, in particular, a means of escaping the transcendental hold of consciousness, reason, morality and justice (Buchanan 1997b: 494). Eschewing all such transcendental motifs, Deleuze (1988a) adopts Spinoza's account of the immanent constitution of 'experience', 'being' and 'embodiment' in order to rethink subjectivity, the body, relations and ethics. Deleuze (1988a: 17) ground this effort in Spinoza's unique model of philosophy; *a philosophy of the body*, of encounters and relations, ideas and affects, ethics and ethology.

For Deleuze (1992: 257), Spinoza utterly transforms philosophy in asking not what a body is, but rather "what can a body do?" This displacement enables Spinoza to recast the analysis of experience, corporeality and ontology in radical ways

(Marrati 2006). Rather than conceiving of individuals in organic terms according to a taxonomy of species or genera – such that one might conclude that all members of a species share some fundamental homology – Spinoza is concerned with the distinctiveness of *individual bodies* and the manifold affects and relations that comprise their characteristic structure. Hence, to ask what a body can do is to ask what particular relations a body is capable of “composing” with other bodies, both human and nonhuman. It is to ask what particular affects determine that body in its capacity to affect and be affected by other bodies (Deleuze 1992: 254–257). This approach defines individual bodies in terms of their “capacities” rather than their “functions” (Buchanan 1997a: 75), drawing attention to the differences that distinguish one body from another, even those of the same species. By way of example, Deleuze (1988a: 124) notes that in terms of affects and relations, a draft horse has more in common with an ox than a racehorse; “this is because the racehorse and the (draft) horse do not have the same affects nor the same capacity for being affected”. This classification of individual bodies or animals according to their distinctive affects and relations is called “ethology” (see Deleuze 1988a: 125).

More directly, ethology is the “study of the relations of speed and slowness, of the capacities for affecting and being affected that characterise each thing. For each thing these relations and capacities have an amplitude, thresholds (maximum and minimum) and variations or transformations that are peculiar to them” (Deleuze 1988a: 125). The ethology advanced in Spinoza’s *Ethics* provides a compelling model for Deleuze’s investigations of subjectivity, the body and experience. Following Spinoza, Deleuze (1992: 201–204) notes that individual bodies are composed of an “indefinite” number of “extensive parts” connected in various “characteristic relations”. The “complex body” is “permanently open to its surroundings” (Gatens 2000: 61) in that the extensive parts that make up the complex body are constantly entering into differential relations with other ‘simple’ bodies. Spinoza provides the example of the digestive system to characterise the way the body enters into relations with other bodies – in this instance particular foodstuffs – that are then “decomposed” or digested according to the work of simple bodies (the mouth, the oesophagus, the stomach) subsumed within the body proper. The complex body necessarily enters into relations with myriad simple bodies in order to preserve those associations which “maintain the individual in its existence” (Gatens 2000: 62).

The extensive parts that make up the complex body routinely pass through relations of ‘composition’ and ‘decomposition’ as certain parts of this complex body are lost while others are added. These parts are themselves organised in *kinetic* relations of “motion and rest, of slowness and speed” (Deleuze 1988a: 123). These relations determine the distinctive manner in which the body’s extensive parts are connected or composed. They are also unique to each body and so determine its individuality or identity. Yet this individuality extends to the unique combination of affects and sensations that inhabit individual bodies. Spinoza observed that the body is characterised by *dynamic* capacities to affect and be affected by other bodies, both complex and simple. Affects are an emergent effect of the body’s

manifold encounters, with each encounter transforming the nature of the body's characteristic relations, and hence its manifest capacities (Deleuze 1992: 217). Relations between bodies are, in this way, "inseparable from the capacity to be affected" (Deleuze 1992: 218). Given the dynamic character of these relations (and the encounters which support them) the body's "capacity to be affected does not remain fixed at all times and from all viewpoints" (Deleuze 1992: 222). Determined in each instance anew by its relations and its affects, the body is defined by its 'continuous variations', its becoming other from itself, rather than its continuities (Deleuze 1978: np).

It is for this reason that Deleuze insists that we do not know what a body can do, because we cannot know in advance what distinctive affects and relations a complex body might become capable of. The range of affective capacities that determine the individuality of the body is itself the product of the "very great number" of relations that compose that body (Deleuze 1992: 218). It follows, moreover, that all complex bodies differ from one another by a matter of degrees according to their capacities to affect and be affected by other bodies, and by their capacities to enter into relations both simple and complex with these bodies. This produces a "new conception of the embodied individual" whereby the analysis of affects and relations displaces the study of structure and functions (Deleuze 1992: 257). This new conception also requires that one consider individual bodies in terms of their "power of acting", where this power stands as *an index* of the body's capacity to enter into diverse relations and experience diverse affects (Deleuze 1992: 256). Such power grows as a body becomes more capable of entering into novel relations with other bodies, and thus more capable of affecting and being affected by other bodies. As Spinoza (cited in Deleuze 1992: 256–257) concludes, a body may be considered more capable or more powerful than another, when it might be said of that body that it is "more capable than others of doing many things at once, or being acted on in many ways at once, (and) its mind is more capable of perceiving many things at once. . . more capable of understanding distinctly". This suggests, moreover, that the body's "power of action (is) the same as (its) capacity to be affected" (Deleuze 1992: 225). It naturally follows of course, that the obverse is also true in terms of the body's relative loss of power.

This finally reveals something of the *nature* of affect in terms of its transitions and effects. Spinoza understands affect as a modulation or quantum of a body's power of action; or its capacity to affect the diverse bodies, both human and nonhuman, that it encounters. This power determines a body's capacity to affect the world, to manipulate the circumstances or conditions of its environment, and to shape the behaviour and/or actions of other bodies. Affects distinguish how far a body's power extends into the world as it strives to "organise its encounters" (Deleuze 1992: 261). Spinoza employs two distinctive definitions of affect in an attempt to capture the diverse character of these encounters. Drawing on semantic distinctions available in Latin – *affectio* and *affectus* – Spinoza notes that affect describes both the particular state of a body at any specific moment, as well as its passage or transition from one affective state to another, and thus from one quantum of power to another. And so "*affectio* refers to a state of the affected body and

implies the presence of the affecting body, whereas the *affectus* refers to the passage from one state to another, taking into account the correlative variations of the affecting bodies” (Deleuze 1988a: 49). In each instance, the states and transitions that affects produce in the body are accompanied by ideas or impressions in the mind, which indicate the character or quality of these corporeal shifts (Deleuze 1992: 220). This is one aspect of Spinoza’s *parallelism*; the doctrine that the “order of actions and passions of our body is, by nature, at one with the order of actions and passions of the mind” (Spinoza cited in Deleuze 1992: 256). This parallelism applies to affect no less than any other of the mind/body’s various activities or processes (see Lloyd 2001: 44–45).

Experienced at once in the body and in the mind, *affectio* captures something of the lived experience of affect as feeling or emotion in describing the ways encounters produce affects that are typically understood as temporal feeling states. Spinoza’s real innovation however, lies in the introduction of the notion of *affectus* and the argument that affects involve both a particular feeling state and a transition in the body’s power or capacities. Affect is more than a feeling or an emotion; it is also a potential for action, a dispositional orientation to the world. In each sense (*affectio* and *affectus*), affects are inevitable by-products of encounters in the world, in that every encounter transforms the body’s affective capacities. Spinoza argues that two kinds of encounters – and the affects they give rise to – must be distinguished (Deleuze 1992: 239). First, Spinoza describes encounters in which diverse bodies, human and nonhuman, meet in such a way that the characteristic relations of each body combine in ways that enhance or otherwise facilitate the power of acting of each body. These encounters are good or useful for each body in that they ‘agree’ with each body’s essence or ‘nature’, thus producing the affects of joy. In experiencing joy, the body quite literally takes on new extensive parts that enhance its power or range of actions in the world. Joy is intensely useful in this regard.

Naturally, the body also experiences encounters that involve a diminution in its power of acting and so produce the affects of sadness. These encounters involve combinations of bodies and their attendant parts and relations that serve to undermine, decompose or even destroy one or another of the constituent relations that define each body. Deleuze variously draws the example of a poison or an unwelcome social interaction to illustrate this kind of ‘bad’ encounter. A poison is any substance that when ingested or “encountered” by the body serves to disrupt or even destroy one or another of that body’s characteristic or “essential” relations (Deleuze 1988a: 22). Arsenic, for example, works to decompose the characteristic relations of the blood leading in acute instances to organ failure (another disruption of the body’s characteristic relations) and death (Marks 1998). Though obviously less extreme, an encounter with an enemy or disliked social acquaintance works similarly to disrupt or decompose the body’s relations in that it involves a diminution or immobilising of these extensive parts. This tends to diminish a body’s power of acting in its own right, yet it also entails a very distinctive *occupation* of this power. Every bad encounter entails a “concentration” of the body’s power of action in an attempt to “invest the trace” of the offending body and so “reject” or expel that

body (Deleuze 1978: np). Such ‘investment’ leaves one not only affected by sadness, but also immobilised in one’s forces in that all of this power is caught up in the attempt to be rid of the affects associated with the unwelcome encounter. This is the reason why Spinoza argues that encounters tend to involve a shift in a body’s “perfection” or “force of existing” in that good encounters involve the transfer of power from the affecting body to the affected body and so invest that body with joy and an increase in its power of acting, while “bad” encounters involve a decrease in the power of the affected body and so invest that body with sadness (Deleuze 1988a: 50). Good encounters take a body closer to its maximum power of acting and closer to perfection in its force of existence. The effort to increase one’s good encounters and the array of joyful affects generated therein, while also attempting to minimise one’s bad encounters with their debilitating sorrows, is the cornerstone of Spinoza’s ethics.

Deleuze’s study of Spinoza thus builds on his earlier reading of Hume in the ongoing refinement of a superior empiricism. No doubt, the subject and subjectivity disappear from Deleuze’s reading of Spinoza, even if the characteristic concerns that frame these questions do not. In place of the study of subjectivity common to his earlier work on Hume, Deleuze favours the more explicitly Spinozist theme of the body and its encounters. This approach insists that “we know nothing about a body until we know what it can do . . . what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body” (Deleuze and Guattari 1987: 257). The problem of subjectivity is thus transformed into a problem of the body and its affects, relations and encounters. Organised in kinetic and dynamic relations, the body emerges as an *assemblage* of diverse simple bodies connected in extensive parts and composed in recursive encounters. The body, in this way, attains an individuality that is also a characteristic subjectivity. This is an embodied subjectivity, a situated subjectivity that is always, already a multiplicity or assemblage. And so, to Hume’s account of the accretions of subjectivity in the association of ideas and relations, reflection and belief, Deleuze adds Spinoza’s assessment of the ethological composition of the body in its affects and relations. This is a subject of connections and relations in the mind and of affects and relations in the flesh, all constituted in the manifold encounters of immanent experience. Such a formulation finally hints at the significance of the *event of the encounter* in Deleuze’s ontology, opening up a further dimension to a transcendental empiricism.

2.2.3 *What Is an Event?*

Deleuze’s account of the event serves primarily to clarify the vexed status of ‘immanence’ and the ‘virtual’ in the development of a transcendental empiricism (Marks 1998; Shaviro 2009). Consistent with his treatment of relations and affects, Deleuze’s notion of the event elucidates the ‘pre-individual singularities’ that compose bodies, subjects and things on specific planes or territories. This, perhaps,

is the meaning of Deleuze's (2001: 31) gnomic observation that "a life contains only virtuals. It is made up of virtualities, events, singularities". Later in the same essay, Deleuze adds that "events or singularities give to the plane all their virtuality, just as the plane of immanence gives virtual events their full reality". As such, the "immanent event is actualized in a state of things. . . an object and a subject to which it attributes itself" (Deleuze 2001: 31). Despite their abstruseness, these passages capture the key dimensions of Deleuze's understanding of the event, while alluding to the intellectual lineage of his thinking. In gesturing to the way events are "actualized" in specific 'states of things', Deleuze acknowledges the debt his thinking owes to the Stoics and their distinction between events understood as the 'things that happen' to material bodies, expressed in a particular state of affairs, and the incorporeal transformations, or singularities, that accompany the 'pure event' (Patton 2006: 110–112). As Deleuze (1993: 79–82) notes elsewhere, an event "does not just mean that 'a man has been run over'" or that "a concert is being performed tonight". Events also generate discrete *incorporeal* transformations among the bodies assembled therein. An example Deleuze returns to often concerns the incorporeal transformations 'incarnated' in the sentencing of an individual at the culmination of a criminal trial, whereby the accused is transformed into a convict in a "pure, instantaneous act or incorporeal attribute" (Deleuze and Guattari 1987: 80). The trial, as an event, involves both the specific states of affairs observable in the comingling of bodies within and outside the courtroom, and the *incorporeal transformations* rendered in such bodies by the event of the trial and its attendant judgements (see Marks 1998).

This incorporeal dimension is central to Deleuze's assertion of the ontological primacy of events over essences or substances. Indeed, the incorporeal transformations rendered in the event betray the transitive character of all states of affairs, bodies, substances and entities (see Williams 2008). All bodies (human and nonhuman) are forever becoming, or differing from themselves, according to the events they experience, without ever settling into the ontological security of the substantive. The world is thus comprised of "happenings rather than things, verbs rather than nouns, processes rather than substances" such that becoming ought to be construed as the "deepest dimension of being" (Shaviri 2009: 16–17). It follows, for example, that events don't happen to individual subjects, or put another way, it is not the subject that experiences the event, but rather it is the event that produces the effects of subjectivation in terms of the intensive and extensive individuations all events unleash (see Patton 2006; Robinson 2009). One of the most significant examples of the individuations immanent to the event concerns perception, understood in relation to the diverse perspectives, or points of view, that each event instantiates (Rolli 2009). Deleuze argues that it is wrong to assume that there exists an enduring subject who comes to the event and then gleans a sense or perspective on it. The event, more accurately, releases 'micro-perceptions' (affects and becomings) which enter into relations with bodies in ways that *produce perception* in the comingling of affects and percepts in the event (Deleuze and Guattari 1987: 252–254). Consistent with Deleuze's reading of Hume, perception, established as a point of view onto the event, is composed in innumerable micro-perceptions,

intensities and impressions that coalesce in the production of subjectivity, “an impression of reflection and nothing else” (Deleuze 1991: 113, also Rolli 2009: 28–36). Constituted in relations of reflection, it is proper to assert that each event redoubles these processes of reflection such that each event enacts or promotes a *moment of subjectivation* that differs from itself in its repetition (or ‘synthesis’) from one event to another. The event is “intensive” in this respect. Its “genetic elements” concern the pre-individual singularities or intensities that enable the subjectivation of bodies in the event (Rolli 2009: 29). This is what Deleuze means by the ‘pure event’. The pure event is nothing but a series of intensive processes (‘magnitudes’ or ‘singularities’) by which affects, percepts, sensations and qualities circulate on a given plane. These intensive qualities are actualised in the event in a series of “extensive” properties, or “persistent objects” (subjects, bodies and spaces), which give the event a recognisable identity as a discrete state of affairs (Rolli 2009: 28–29).

“Sense” provides a further illustration of the transition from the intensive to the extensive within the event. Deleuze’s account of sense emphasises the processes or mechanisms by which events generate, produce or express sense, understood as a distinctive form of “significance” or “the way in which meaning matters or makes things matter” (Williams 2008: 3). Deleuze (1990) returns to the Stoic philosophers in order to explain the *production* of sense, noting that the Stoics were the first to reject defining sense purely as an effect of the various representations of events generated in language. For the Stoics, as for Deleuze, the sense or *meaning* of the event is irreducible to the various statements and propositions which purport to express this meaning. Propositions are merely the means by which events are ‘actualised’ in a specific state of affairs. Yet the pure event always exceeds its actualisations insofar as events are always too intensive, too “aliquid”, for the full array of haecceities (affects, percepts, gestures, signs) assembled therein to be captured in the various propositions taken to describe the event (Deleuze 1990: 16–19). Indeed, statements invariably select certain of these haecceities, actualising them in language and thus prefiguring the array of meanings that might reasonably be ascribed to events. Deleuze rejects all representational or denotative accounts of sense for missing the *illocutionary force* of the propositions by which these representations are conveyed. Deleuze (1990: 19) argues instead that sense subsists in the *expressed* of the proposition, understood as “an incorporeal, complex and irreducible entity, at the surface of things, a pure event”. The moment of expression conveys the movement from the intensive, ‘pure event’ and its haecceities, affects and percepts, to the realisation of an extensive state of affairs to which all propositions properly refer. Deleuze (1990: 21–22) thus concludes that while “sense does not exist outside the proposition which expresses it”, sense nonetheless remains “the attribute of the thing or state of affairs”. Sense is always in the world, both intensive and extensive.

Deleuze’s analysis of the relationship between bodies, things, events and sense is further elaborated in his reading of Whitehead. Deleuze’s (1993) brief discussion of Whitehead is especially useful for teasing out the implications of “event-thinking” (Fraser 2006) for the wider renovation of subjectivity inaugurated in the search for a

transcendental empiricism. Following Whitehead, Deleuze's discussion of the event clarifies the means by which bodies and subjects are incarnated or transformed in relations of becoming according to the specific events they participate in. Whitehead regarded events and becomings as ontologically prior to being, such that the world, subjectivity, experience and nature ought to be reconceived in terms of processes rather than substances (Shaviro 2009: 17). As I have noted, events are always prior to the subjects, objects and entities that experience them, with the event providing the mechanism or process of the subject's becoming. Deleuze (1993: 79) goes on to identify four components or conditions of the event in Whitehead's work; "extensions, intensities, individuals or prehensions, and, finally, eternal objects or 'ingressions'".

'Extension' concerns the variety of extended 'series' that compose individual events, linking them one to another in a potentially infinite chain of antecedent incidents and precursors. Events are, in this sense, never determinate or self-contained in that events always unfold or extend in a series of spatial and temporal movements reaching back into a recursive past and forward into a future shaped by the event's "activity" (Shaviro 2009). James Williams (nd: 4) cites by way of example an injury leading to the contraction of tetanus and ultimately death, asking "where are we to situate the event" described in this scenario. Is the event instantiated in the moment of the original injury? Does it extend forward to the subsequent tetanus infection and the moment of death? What of the prior "refusal of an immunisation booster injection", or the events which led to the "deep fear of needles" that inspired such refusal (Williams nd: 4)? The point is that the spatial and temporal boundaries of an event can never be fixed, given the complexity of the relations that comprise each event and the consequences they unleash. Deleuze (1993: 77), for this reason, describes the event as "an infinite series that contains neither a final term nor a limit". While this contention may risk trapping all of life in one vast, interconnected web of events, without distinction or separation, Deleuze (1993: 80) insists that events have unique "intensive" features that distinguish individual series of events. Intensive features include "height, intensity, timbre of a sound, a tint, a value, a saturation of colour" that are unique to their distinctive actualisation in events. By way of example, Deleuze (1993: 80) reflects on the particular features apprehended in the experience of a concert, such as the "inner qualities" associated with the score, instruments, performers and audience response. These qualities are unique to the moment of their creation, even though they inevitably refer to other series, other events, such as the composition of the score, the training of performers, or the history of the venue.

Attention to the unique, intensive features of the event underscores Deleuze's (1993: 77–79) treatment of the third 'condition' of the event; "the individual". The 'intensive' properties of events are always unique inasmuch as they are new or unprecedented. The event may for this reason be described as a process or mechanism for the production of novelty. Deleuze, following Whitehead, understands novelty to be innately creative and individualising in that events always assemble, mobilise or contain entities, bodies and subjects in ways that render each as *distinctive kinds of individuals* in the moment of their expression in the event.

Such a process turns on Whitehead's notion of prehension. Whitehead's neologism reflects his wider interest in exploring how entities, objects and subjects encounter or affect one another in ways that exceed conscious perception (Shaviro 2009). Perception is, in fact, a very specialised and sophisticated form of prehension, although Whitehead is as interested in the ways stones, plants, stars and animals experience prehensions. All events involve a "nexus" (or convergence) of prehensions, reflecting the array of entities present in the event, and the ways these entities prehend one another. Given that this 'nexus of prehensions' is unique to each event, it follows that the individual, as a distinctive "concrecence" or assemblage of prehensions, is also unique to each event (Deleuze 1993: 77–79). It may be said, therefore, that individuals, whether human or nonhuman, differ from event to event as their prehensions differ, sometimes in subtle, imperceptible ways, sometimes in more profound and significant ways (Shaviro 2009: 28–32). This transformation ensures the distinctiveness of individual events as events take on meaning for the entities so assembled consistent with the unique prehensions they experience in these events.

Whitehead argues further that all events involve the incarnation (or actualisation) of specific "eternal objects" such as colours, sounds, sensations, figures, feelings and abstractions (Deleuze 1993: 79). Eternal objects like red, a circle, musical notes, the sensation of hardness, anger or love exist for Whitehead as "potentialities" that exceed (or outlive) their realisation in particular events (or "actual occasions"). This means that the colour red, for example, may never be exhausted, may never cease to exist, even if, in some unhappy circumstance, all actualisations of red were somehow to disappear. Anger too ought to be regarded as a distinctive, intensive quality that differs from its extensive actualisation in individual bodies. Eternal objects thus help to give individual events a distinctiveness, a definiteness, that serves to further distinguish one series of events from another. Such objects are indispensable features of the event even if they remain incorporeal, ideal or immaterial, "real without being actual" (Deleuze 1988b: 96). Perhaps health too might be regarded as an eternal object that endures at some remove from the individual actualisations (or expressions) of health in individual circumstances. I will develop this idea in later chapters in discussing how the manifold haecceities (affects, bodies, perfects, signs) at play within the event may be manipulated (or counter-actualised) in the work of composing or expressing a distinctive assemblage of health.

2.3 On the Uses of a Transcendental Empiricism

Addressing the utility of empiricism in one of his final essays, Deleuze (2001) described transcendental empiricism as an affirmative exploration of the immanent plenitude of "life" and the swarming multiplicities (the affects and sensations) that invest this life. Life for Deleuze (2001: 29–32) is defined by the relations and associations that are its characteristic modes of composition and becoming. Life is a

process, a force of differential and intensive relations, rather than an essence or identity. As such, I have sought throughout this chapter to locate relations and relationality at the epistemological and ontological centre of Deleuze's empiricism. For this is an empiricism that entails "thinking with AND, instead of thinking IS, instead of thinking for IS" (Deleuze and Parnet 1987: 57). Deleuze's empiricism establishes a mode of thinking that eschews the thought or interrogation of static being (the "what is" of life), in favour of a thought of the conjunctive becomings of the *assemblage*. Assemblages ensnare all of life in a web of relations, linking living beings with one another and with the nonhuman entities that populate the territorial "milieus" of this life (Deleuze and Guattari 1987: 313). Affects, relations and events ensure the "openness" of the assemblage to the irruption of new associations that "qualitatively" transform that assemblage's "dynamic nature" (Massumi 2002: 224). Assemblages like life, an individual, a subject, an idea, a concept, are composed in and of relations, and the events, affects and sensations that relations draw together.

It is for these reasons, moreover, that the intensive "intersections" (Jensen and Rødje 2010) that describe the conceptualisation of relations, affects and events within Deleuze's empiricism must be emphasised in any attempt to use or apply his methods. Transcendental empiricism is itself an intensive multiplicity inasmuch as it is the *force of the convergence of concepts within this multiplicity* that accounts for its pragmatic, ontological and epistemological impact. Isolating and removing concepts from this multiplicity greatly reduces their impact, limiting the creative force of individual concepts while eliminating the synergistic insights that follow from the interaction of concepts like relation, affect and event. This is why I have criticised the practice of selectively abstracting concepts from Deleuze's thought, and then redeploying them in the service of novel empirical inquiry. While this approach has no doubt provided a palatable entrée to Deleuze's philosophy among scholars otherwise wary of his appeal, much of the force of Deleuze's concepts is lost in this way. The concepts that comprise transcendental empiricism are bound one to the other in a system of intensive, differential relations (Deleuze 1994: 129–138). Each concept affects, and is affected by, other concepts immanent to this system in the production of thought. Concepts emerge on a plane of immanence (the 'image of thought'); they act together in dissonance and in sympathy, producing the effects of thought, the movement of thinking/living/affecting enacted in the *encounter* with thought (de Beistegui 2010: 5–18). The adoption of Deleuze's concepts thus requires "relating each concept to variables that explain its mutations" (Deleuze 1995: 31), rather than rigid adherence to a definitional logic or the simple application of a rule or theorem. Deleuze's concepts cannot be treated as 'ready-made' tools for empirical inquiry. Each must be assessed in relation to other concepts in Deleuze's system, both to grasp their heterogenetic character (their 'continuous variations') and to extract the maximum ontological and methodological force of their 'acting together'.

The application of Deleuze's empiricism to problems in the health and social sciences must acknowledge this relational quality if the full measure of Deleuze's innovation is to be realised. To this end, it is critical that the assemblage be regarded

as both the *proper object and the preferred method* of a minor science of health. It is important that I briefly clarify this methodological point before considering how Deleuze's empiricism may be applied in the renovation of health science research. Deleuze's empiricism necessarily "proceeds to a direct exposition of concepts" (Rajchman 2000: 21) in order to develop a series of openings into (or engagements with) the "conditions of real experience" (Alliez 2004: 112). The methods and concepts necessary to explore these conditions must invariably shift and evolve as the contours of 'real experience' shift and evolve (Rajchman 2000: 21–23). This is another of the reasons why Deleuze's concepts are routinely characterised in terms of their 'heterogenesis' given that the constituent parts that make up concepts are necessarily assembled with the problem/contexts to which they are drawn. Hence, concepts are defined by the work they do in particular contexts, in relation to particular problems, rather than by their logical consistency (Massumi 2010: 10–12). It follows that transcendental empiricism ought to be understood as an intensive multiplicity *that emerges in the event of thought's encounter with the sensible*, with real experience. What's more, each concept immanent to this encounter inevitably affects each other concept within a "method assemblage" as their relations proliferate (Law 2004: 83–85). Deleuze's empiricism is fashioned after the assemblage because the 'real experience' it is concerned to explicate can only be understood in terms of the assemblage. Just as the objects of empirical inquiry are assembled, so too must methods equal to this assemblage be pieced together from varied sources.

As such, the 'thinking together' of relations, affects and events attempted in this chapter provides both a methodological model for investigating assemblages of health, as well as an empirical explanation for how such assemblages are composed, constructed and maintained. Deleuze's empiricism thus establishes both *explanans* and *explanandum* in its treatment of the conditions of real experience. This suggests, more directly, that assemblages of health are composed in distinctive events, affects and relations, whereby diverse elements converge and resonate in the experience of health. It follows that health may reasonably be construed as the product of qualitative relations of force, affect and becoming, "actualised" in events and 'states of affairs' and composed on planes or territories. It is worth briefly noting the manner of this 'actualisation' before examining how assemblages produce qualities or identities like health. Buchanan (2000: 120) argues that assemblages are created in two distinct operations "that logically succeed one another but in actual fact take place simultaneously". The first operation entails an "autonomous process of selection", a "grouping together" of heterogeneous elements. The second involves the "consolidation" of this selection and the "actualization of the potential" effected in the connections and flows created between these consolidated elements (Buchanan 2000: 120–121). The actualization of potential – understood as the release of affect, energy/matter or force in the grouping together of flows/elements – explains the active and autonomous character of assemblages. It also explains why assemblages of health should not be understood as a composite of forces that may somehow be disassembled to reveal each constituent element. On the contrary, assemblages are "intensive multiplicities" insofar as each assembled

element is transformed in its relations with other elements such that it no longer makes sense to speak of constituent parts (Deleuze and Parnet 1987: 132). The key is to grasp how each element connects with others in a “constellation of singularities and traits, deducted from the flow” of interactions and processes in life (Deleuze and Guattari 1987: 406).

It is for this reason somewhat misleading to distinguish the constitutive properties of assemblages of health in terms of individual relations, affects and events, for each assemblage is composed in intensive conjunctions that are only intelligible in terms of their assembling or “putting together” (Wise 2005: 77). The active power of assemblages lies, moreover, in the *force* of these events, relations and affects. To understand this power one must consider how events necessarily entail encounters between heterogeneous elements, which combine in intensive relations that generate divergent affects marked by a transition in the perfection or power of acting of each of the elements so assembled. Caroline Williams (2010: 249) provides a useful summary of the relationality that sustains all assemblages of health when she notes that the “relation is literally a ‘taking in hand’, a production of something that did not exist before and which, through the process of relation, becomes an aspect of that thing’s existence”. Elements are not folded into some pre-existent entity, in other words, but rather contribute their affective and relational force to the ongoing modification of an assemblage of health in the event of their encounters with it. I want to close this chapter with an assessment of how this logic may be applied in ways that do justice to the “heterogenetic” character of the assemblage. This should also provide a better sense of the methodological promise of Deleuze’s empiricism in preparation for the analyses to follow in the two case studies. Anticipating the content of these case studies, I will focus on the character and experience of (human) life and the manner of its expression in an assemblage of health (or illness).

2.4 Towards a ‘Minor Science’ of Health

Despite widespread engagement with poststructuralist critiques of a naturalised *a priori* subject, most empirical studies in the health and social sciences still endorse traditional ontological assumptions about human life (see Fox 2002; Moore and Fraser 2006; Lupton 1999). As a result, these sciences appear caught between a nostalgic affection for positivism with its assurances of a stable ‘objective’ reality, and various iterations of constructivism with their bewilderingly “messy” accounts of scientific discourses acting on (or modifying) the realities they supposedly merely describe (see Law 2004: 2–10). This leaves the ‘subject’ of health caught between its traditional ontological securities and the ‘decentring’ of discourse, power and knowledge common to all poststructuralisms (Foucault 1983). Charting a course between these familiar antinomies, Deleuze’s empiricism provides a compelling methodological template for the reorientation of studies of health and illness, and the more specific investigation of the production of healthy and ill

subjects. In particular, transcendental empiricism provides a means of interrogating the nonhuman, social and structural dimensions of health, and the ways social and structural forces mediate the production of assemblages of health and illness in discrete settings (Fox 2012). Deleuze's empiricism satisfies this goal by indicating how relations, affects and events may serve as the *focus* of empirical research (see also Brown 2010).

Taken together, the analysis of relations, affects and events establishes a pragmatic ontology of subjects, bodies and worlds, of the assemblages that compose them and the diverse becomings by which they are transformed. This logic arguably presents something of a breakthrough in recent attempts to *operationalize* the 'posthuman' subject in empirical research. Hence, to conceive of transcendental empiricism as a methodology that might be applied to diverse problems in the study of health and illness, is to logically prioritise the analysis of the relations, affects and events that express (human) life, however provisionally. The task calls for analysis of the varied extensive parts or simple bodies that make up an assemblage of health. This should, in turn, present some basis for determining the mechanisms (the events, affects and relations) of a body's becoming well or ill, bearing in mind that this body is always, already an assemblage of diverse simple bodies, human and nonhuman. Such an approach suggests the importance of investigating the *ethological composition* of bodies and subjects in order to identify the specific relations, affects and events that enable joyous (or healthy) encounters between bodies, and those that precipitate sad (or unhealthy) relations. Ethology proposes a means of distinguishing between elements, forces or relations that promote the power of acting of a given assemblage of health, and those which decompose or frustrate this power. Extending Deleuze's ethology to include that particular set of relations, affects and events that support a body's health and wellbeing suggests grounds for a *novel empirical study* of health and development that in the next chapter will be called a 'developmental ethology'.

Developmental ethology treats the lived experience of health and illness as a complex of affective and relational transitions within the various assemblages which express human life. This logic can be applied to the study of any event, or set of encounters, by which the health and wellbeing of a particular assemblage is mediated. Following Bruno Latour's (2005) lead, it is arguable that no specific *a priori* criteria are needed to delimit specific 'health-related' events; rather one should 'follow the actors' in assessing the specific relations, affects and events that actors themselves nominate (or reveal) in the process of becoming healthy. Such ambition gestures towards a renewed *empiricism of the body* and its milieus such that the character of health may be refined along with the affects and relations that express it. Health should, in this sense, be understood as a particular modulation of (human) life, produced in an assemblage of relations, affects and events. Deleuze's empiricism provides a means of interrogating this assemblage, rejecting any *a priori* notion of a naturally healthy body. In proposing an "expanded empirical field" (Massumi 2002: 235) for the study of health and illness, Deleuze's work affords a basis for eliciting *positive accounts* of health, highlighting the specific affects, events and relations by which health may be sustained or promoted in 'real experience'.

This expanded empirical field should also enable novel explorations of the (nonhuman) social and structural determinants of health and health inequalities. I noted in the previous chapter that the social and structural dimensions of health were first described in research conducted in the 1970s indicating sharp differences in health outcomes between poorer groups and those with higher social and economic status (Marmot 2005). Subsequent studies have revealed the role of various social, structural and political factors in the production of these health inequalities. As a result of this research, it is now routinely accepted that health is a function not merely of individual biology, or the expression of genetic variance, but of diverse social and political contexts, comprising divergent structural forces, as well (Green and Labonte 2008). Among the most significant structural factors identified thus far are poverty and income inequality; differentials in educational attainment and/or employment security; access to essential services like health care, transport and income support; as well as ‘cultural’ factors associated with help seeking behaviour, health literacy, and health related beliefs, attitudes and practices (Gorin and Arnold 2006). These factors have each been shown to mediate (or act on) health outcomes, leading to calls for comprehensive public health interventions targeting the social determinants in an effort to improve health outcomes among disadvantaged groups.

Less clear however, are the specific mechanisms by which structures (or contexts) actually mediate health outcomes. In promoting the figure of the assemblage, and by describing the means of the assemblage’s composition or emergence, transcendental empiricism provides a means of exploring these mechanisms in the articulation of a novel causal analytics. Yet the first task in any reassessment of the social determinants of health ought to entail the replacement of the notion of context with that of the assemblage. I should think that the notion of ‘determinants’ will have to go too if the problem of causality is to be properly interrogated. As Deleuze would have it, nothing is *determined* in life, for the events, affects and relations which define it are never closed and rarely linear. It follows that there are no distal factors in the experience of health and contexts are never structural or remote. Entities, bodies, structures or forces participate in health by entering into an assemblage; if they are not involved in this assemblage they cannot be said to affect the health that it expressed or performed in it. There is, as such, no sense distinguishing health problems from their social contexts, for surely the goal of analysis is to properly characterise these problems in terms of the bodies or forces which produce them.

Starting with the relations, affects and events which comprise the assemblage, Deleuze’s empiricism establishes a means of tracing the connections by which social processes (bodies and actors) shape the experience of health and illness. Relation by relation, affect by affect, event by event, transcendental empiricism should allow for the documentation of processes that materially impact the health status of individuals and groups, including that bundle of relations, affects and events that constitute ‘the social’, as well as the more immediate relations typical of ‘local’ interactions. Each domain is critical to the production and maintenance of assemblages of health and illness, indicating the array of human and nonhuman

entities active in the expression of health. The properly empirical task is to investigate a given assemblage to demonstrate how it is composed, and the specific causal mechanisms by which social and/or structural processes enter into it. Social and structural actors must by definition leave a relational and affective trail by which their ingress within the assemblage may be documented. Following this trail will, however, require switching focus from subjects, bodies, structures and contexts to the assemblage proper. Such a move may also yield novel strategies for transforming the range of social and structural factors at work in these assemblages in the interests of promoting health conceived as a property of the entire assemblage. Such at least is the promise of a Deleuzian health science.

Realising this promise will require the articulation of new problems, new challenges and new directions for thought. I would conclude that the most compelling of these directions is Deleuze's exhortation to expose human life to more of its *nonhuman* becomings (Grosz 2011: 26–39). Such a task suggests grounds for significant innovation in the health and social sciences, yet it is also profoundly disruptive of the basic epistemological and methodological assumptions that govern most contemporary research in these fields (Brown 2010). The most important of these disruptions involves the displacement of the subject and meaning-making from the centre of empirical inquiry (Fox 2011: 435–438). In making this point I am not suggesting dispensing altogether with the study of subjectivity and/or hermeneutics in the human sciences. Rather, I wish to propose an alternative set of methodological techniques for the analysis of health and human life. As Deleuze (1994) has so powerfully shown, the subject cannot stand as an ontological and epistemological foundation for empirical inquiry. The subject must itself be explained.

As it stands, the health and social sciences rely far too heavily on a static, obdurate account of subjectivity, even though the 'subject' of health is increasingly regarded as a function of deeper, more elusive social, discursive and relational processes (Mansfield 2000). This settlement introduces great confusion to the study of health and illness, for it is rarely clear what the most appropriate unit of empirical analysis should be (Latour 2005: 27–30). Should one focus on individuals and groups, their experiences, practices and beliefs, or should one explore the mechanisms by which individuals and groups are 'formed', such as discourse, power and socialisation? Is the subject the foundation of theoretical and empirical understanding, or the very abstraction that the human sciences must explain? Even those approaches which ostensibly tackle each side of this dyadic puzzle almost inevitably emphasise one side at the expense of the other (Law 2004: 68–69). Deleuze's empiricism provides a way out of this bind, emphasising the analysis of relations, affects and events in the work of explaining human life and the assemblages in which it is expressed. The task now, to anticipate the work of the next three chapters, is to mobilise Deleuze's conceptual inventions in the design of novel empirical studies of health and illness.

Much remains to be done in the development of this inquiry, yet the discussion here provides some indication of the rudiments of a Deleuzian approach to the study of health and illness. In what may be regarded as a provisional research program for

a minor science of health and illness, I should like to recall the various research goals identified earlier in this chapter following the review of existing Deleuzian inspired research in the health and social sciences. First, I stressed the importance of eschewing the subject/object, human/nonhuman and body/society dyads. In their place should stand the figure of the assemblage and the analysis of relations, affects and events required to describe it. Studies of the assemblage's formation, and the actors, entities, bodies, affects, forces and signs active therein, ought to serve as the second research priority for a minor science of health and illness. Determining how health may itself be conceptualised in terms of the assemblage, and the spaces, forces, affects, signs, relations and events by which it is expressed, should stand as the third principal research priority for such a science. Methodologies alert to these three challenges are beginning to emerge in science and technology studies (Latour 2005), psychology (Brown and Stenner 2009), anthropology (Jensen and Rødje 2010), geography (Anderson and Harrison 2010) and sociology (Fox 2012). While the prospect of a Deleuzian health science may seem remote, 'lines of flight' are everywhere apparent in contemporary health and social science research. The next three chapters pursue the most significant of these lines in an attempt to lead the health sciences back to the 'real experience' of (human) life in all its plenitude.

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