



# Haptic geographies: ethnography, haptic knowledges and sensuous dispositions

Mark Paterson\*

School of Geography, Archaeology and Earth Resources, University of Exeter, Rennes Drive, Exeter EX4 4RJ, UK

**Abstract:** This paper is the first overview of the treatment of haptic knowledges in geography, responding to bodily sensations and responses that arise through the embodied researcher. After Crang's (2003) article on 'touchy-feely' methods identifies the dearth of actual touching and embodied feeling in research methods, this article does three things. First, it clarifies the terminology, which is derived from a number of disciplines. Second, it summarizes developments in sensuous ethnographies within cultural geography and anthropology. Third, it suggests pathways to new research on 'sensuous dispositions' and non-representational theory. We thereby see just how 'touchy-feely' qualitative methods have, or might, become.

**Key words:** ethnography, haptic, phenomenology, senses, touch.

## **I Introduction: 'touchy-feely' methods?**

When there has been much discussion about the significance of the body, how do we write meaningfully about those everyday embodied experiences of touching and feeling, conjunctions of sensation and emotion that cannot arise without the physicality of the body? And, further, what about forms of touching irreducible to mere skin contact, that involve feeling the body in movement and action? We effortlessly recognize sensations that seem to arise from within the body during activities like dancing or riding a rollercoaster, but one difficulty lies in communicating these bodily feelings and haptic sensations. Language is lacking, terms desert us, and such instantly recognizable

experiences become barely articulated, or articulated barely. This problem is compounded by the emphasis on visibility and visual metaphors in western culture, and the fragmented way that bodily touching and feeling is discussed in different disciplines. What are the implications for fieldwork if embodied experience is involved in the research process? My own research has encountered this frustration twice, once involving a novel technological device (Paterson, 2006a), and again while investigating experiences of Reiki massage (Paterson, 2005a). In both cases, getting to grips with unusual bodily sensations and subsequently attempting to articulate them revealed both epistemological and methodological difficulties.

---

\*Email: [m.w.d.paterson@exeter.ac.uk](mailto:m.w.d.paterson@exeter.ac.uk)

While the idea of haptic geographies has been mooted sporadically and unsystematically (eg, Rodaway, 1994), this paper pulls together some recent strands from across the social sciences into a more coherent characterization of the haptic, and provides the first sustained investigation of some implications for research methods. Crang's (2003) report on new qualitative methods in this journal, subtitled 'Touchy, feely, look-see?', invokes research in contemporary discourses concerning the body and new ways of feeling in fieldwork. Fundamentally he asks 'whether methods often derided for being somehow soft and 'touchy-feely' have in fact been rather limited in touching and feeling' (p. 494). Surveying a series of textbook approaches, including the newly reaffirmed visualistic bias of Rose's visual methods, in a key section he turns to 'performative and haptic approaches' (pp. 498–500). Regarding recent research on the cultures and history of fieldwork, he says, 'we get glimpses of geography as embodied work, as corporeal performances and cultures of doing geography in different places from research to fieldclass' (p. 499). But he also correctly identifies a major lacuna in terms of reflexively learning through the bodily sensations and responses that occur inevitably as part of the embodied experiences of the researcher within different spatial contexts. It concerns, to use his phraseology, 'haptic knowledges' (p. 499). The purpose of this article is therefore to attend to this lacuna, to identify research that addresses the generation of haptic knowledges in the process of research and fieldwork, to summarize some of the notable developments in this area since the appearance of Crang's article, and thereby to see just how 'touchy-feely' qualitative methods have – or might – become. By clarifying these 'haptic knowledges' and their part within the reflexive processes of knowledge production we depart from any connotations of woolly-minded vagueness that 'touchy-feely' might suggest, and offer a more clearly defined and robust programme for thinking

about the role of haptic knowledges in empirical research.

There are three main components of this task. First, the section 'Haptic knowledges' outlines the notion of the haptic as a problematic deriving from early psychology's attempt to characterize internal bodily sensations as distinct from the usual model of the five senses, and attempts to standardize the terminology for future clarification. Second, the section 'Returning to our senses in fieldwork' identifies a more general 'return to the senses' within social research, most notably within anthropology, architecture, cultural history and sociology, rethinking the positioned processes of research through the senses and in so doing problematizing traditional Graeco-Roman hierarchies of the senses that privilege vision and consider touch and taste as bestial and base. This section considers the significance of the under-examined somatic or internal bodily senses in fieldwork raised in the previous section, the main example here being walking. Third, and equally pertinent to social and cultural geography, the last section on 'sensuous dispositions' traces the recent departure from discourses of embodiment towards more complexly layered investigations into new ways of feeling that arise through the technologies, disciplines and practices of late modernity, and which seek alternative ways of writing and expressing these, such as non-representational theory (eg, Thrift, 1997; 2007). But, as Lorimer (2005: 84) identifies, there are also 'sensuous dispositions' or new sensibilities at work here. The paper will therefore consider work on this topic in geography and related disciplines, pointing in conclusion to notable methodological and epistemological implications for such work.

## II 'Haptic knowledges'

Conducting ethnographic fieldwork in Scotland's mountains, Lund makes the immediate yet accurate claim that 'touch, as one of the five senses, has so far been under

examined in the ethnographic context', and she seeks to rectify this by thinking how the sense of touch is involved with 'how the body moves in different contexts' (Lund, 2005: 28). In other words, like Ingold's (2004) literal grounding of perception through the feet as a muscular consciousness, Lund identifies that 'touch' is not reducible to tactility or tactile sensation alone, and that immediate bodily experience combines other sensations distributed throughout the body, felt as muscular tensions, movements and balance, along with sensitivity to temperature and pain. All these sometimes uncomfortable tactile, muscular and balance sensations are indubitably present in a variety of embodied activities and contexts such as running, swimming or walking within urban or rural settings, as readers will recognize. These sensations I collectively term 'somatic sensations' (Paterson, 2007), underexplored bodily sensations that take place within what perceptual psychology terms the larger 'haptic system' (eg, Gibson, 1966). As this paper unfolds, these and associated terms from a variety of disciplines will be clarified, to refine further what we mean by 'haptic knowledges'.

Although the word 'haptic' derives from the Greek *haptesthai* meaning 'of, or pertaining to, touch' (*Oxford English Dictionary*, second edition), the kind of touch implied extends beyond straightforward skin contact, that is, cutaneous touch. Confusion persists in the terminology as a result of the diversity of disciplinary approaches, so an opportunity for clarification presents itself here. Even cutaneous skin sensations are irreducible simply to pressure on the skin, as it includes returns from various receptors in the skin that deal with pressure (mechanoreceptors), temperature (thermoreceptors) and pain (nociceptors). Beyond immediate skin contact the term 'haptic' is therefore applied more extensively to include internally felt bodily sensations. This has been formalized most comprehensibly by Gibson (1966: 97ff) as the 'haptic system'. What Sherrington in 1947 termed 'interoception' (in Fowler, 2003: 1505), or

what Boring *et al.* (1948) term 'somesthesia', refers to a set of inwardly felt bodily sensations distinct from the culturally sedimented model of the five senses formulated since Aristotle (1984; 1986). Such sensations are difficult to resolve as distinct perceptions, evidenced by the fact that western medicine, psychology and social science has only relatively recently acknowledged them within the lexicon and there remains little consensus on the terminology. Recent cross-cultural anthropology (eg, Classen, 1993; 1997; Geurts, 2002; Howes, 2003) certainly explores this area, and analysis of linguistic constructions and everyday phraseology reveals an awareness of these sensations in diverse pre-industrial cultures, discussed in the following section. Rather than the inward/outward distinction assumed by the terms 'interoception' and 'exteroception' (preferred by Gibson, 1962; 1966), however, I prefer the collective term 'somatic senses' as it acknowledges the multiplicity and the interaction between different internally felt and outwardly orientated senses. Mountcastle (2005: 2) for example notes that 'somatic sensibility' and 'somesthesia' are equivalent terms, and so the different somatic senses collectively help constitute the underexplored background feelings of embodiment, the self-perception of inner bodily states. The somatic senses generally work synergistically as part of the 'haptic system', as Gibson elsewhere (especially 1966: 97ff) terms it, which includes kinaesthesia (the sense of movement), proprioception (felt muscular position) and the vestibular system (sense of balance; see also Reed and Jones, 1979). More generally, and with apologies for the masculine pronoun:

The haptic system ... is an apparatus by which the individual gets information about both his [*sic*] environment and his body. He feels an object relative to the body and the body relative to an object. It is the perceptual system by which animals and men are *literally* in touch with the environment. (Gibson, 1966: 98, original emphasis)

Clearly there is a distinction between the notion of the 'haptic' and that of 'touch' for Gibson, whereby the usual notion of touch as cutaneous (skin) contact is enlarged to include a range of internally felt bodily states which functions as part of a larger haptic perceptual system. For the sake of clarification, a brief breakdown of the components of the haptic system follows.

### *1 Kinaesthesia – the sense of movement*

As part of the haptic system, Gibson (1966: 111ff) writes of kinesthesia (kinaesthesia) as the perception of the body's movement not as a distinct, individuated sense but as cutting across several perceptual systems. Identified originally in western medicine by Charles Bell in 1826, kinaesthesia was initially confused with proprioception as a kind of generalized muscle sense, according to Boring *et al.* (1948: 525ff). They are distinct, yet both involve a sense of felt embodiment accomplished through sense-returns from receptors distributed throughout the body, in physiology termed 're-afferent feedback' (Gibson, 1966: 111). Kinaesthesia is a sense of movement that utilizes a range of nerve information, including that of muscular tension and balance. Husserl (1970) writes about kinaesthesia as a background to embodied experience (discussed further in Paterson, 2007: 27–35). Usually working in conjunction, kinaesthesia and proprioception are invoked in areas such as dance research, performance studies and anthropology where, for example, Downey (2005) writes on martial arts and Capoeira, and Ram (2005) on learning to dance. For Downey (2005) kinaesthesia is employed in anticipating, learning and performing complex dance or martial arts moves. If kinaesthesia does not straightforwardly correspond to particular sensors or receptors in the muscles, then it is no single sense but works as a synergetic conjunction or nexus of visceral sensation and exterior perception. For Ram (2005), embodying her and her daughter's 'Indianness' through traditional dance and tastes in film is likened to the

'phantom limb' phenomenon that Merleau-Ponty (1992) discusses, a form of phantom sensation of cultural memory. This lies interestingly at the interface between the Bourdieu-type way in which practices become 'embodied', which Geurts (2002) also employs, and the more phenomenological analysis of interoception that Merleau-Ponty offers, especially in terms of 'the spatiality of one's body and motility' (Merleau-Ponty, 1992: 112ff).

### *2 Proprioception – the sense of bodily position*

The study of proprioception, like that of kinaesthesia, is similarly historically dispersed and intermittent, having been identified originally by Sherrington in 1906 (1947). Proprioception is a perceptual system based on the sensory returns from nerve endings in the muscles, so that as part of one's embodiment the position of the body and limbs are felt. Koffka's (1935) Gestalt psychology led to empirically investigating a sense of the 'vertical', for example, and while what he called the 'framework' of space is a *perception*, as Gibson (1968) details, the 'accompanying awareness of the axis of the body is a *proprioception*' (his emphasis). Compared with a grounded spatial framework, then, the axis of the body is literally 'felt' as upright or tilted, and limbs and their movement are distinguished in reference to this fixed framework. Later this becomes significant for Merleau-Ponty, as he acknowledges the influence of empirical findings from Gestalt psychologists. The medical writer Leder clarifies the phenomenon:

proprioception traces out a completed sense of my surface body, allowing me to adjust every limb, every muscle, in appropriate motoric response to tasks. Though visually this sense is subliminal, I can close my eyes and proprioceptively hone in on the position, the level of tension and relaxation, in any region of the muscular body. (Leder, 1990: 42)

Like other forms of interoception, proprioception as a perceptual subsystem relies not

simply on the returns of particular receptors (in this case proprioceptors) in the muscles and skin, but functions as a nexus of sensations from a variety of sensors throughout the body that provide a sense of the body's and limbs' felt position in space as a series of subjectively felt muscular tensions, and therefore feedback as to bodily posture and equilibrium (Gibson, 1966: 34). In a completely darkened room, for example, one's body is felt as upright, or one's arms sensed as outstretched, as a result of proprioception.

### 3 *The vestibular system – the sense of balance*

Deriving from the 'vestibule' area of the inner ear, the vestibular system connects up information picked up from weighted hair cells in the cochlea, triggered by movements of fluid within three semicircular canals orientated roughly along the three spatial axes. These are the horizontal, anterior and posterior canals which pick up turning movements and bodily orientation, and lateral movement is picked up through the otoliths, which sense linear accelerations (Lackner and DiZio, 2005: 117). Rather than a distinct 'sense' itself, bodily inertia or change of bodily orientation or direction is picked up through this system, and feeds directly into the other somatic senses. To characterize it simply as balance neglects the complexity of its functions, dealing with inertia and momentum and actively correlating with other distributed sense-returns. That is, information from the vestibular system of semicircular canals, cochlea and otoliths collectively helps constitute a sense of 'bodily postural equilibrium', as Gibson (1966: 67) puts it, sensitive to changes in orientation and self-produced movement, and is therefore indissociable from the other somatic senses. Furthermore, feedback from the vestibular system directly influences the eye muscles and this is known as the vestibular-ocular reflex (Lackner and DiZio, 2005: 119ff). Were this not the case then sudden head movements, movements of the eyeballs or acts such as running or

turning would make the visual perception of the world unclear, distorted or chaotic. In other words, without this reflex a fixed point in space could not be tracked. Ballet dancers in particular must track a fixed point in space when they go 'on point', pirouetting on tiptoe without falling down. The technique is to visually locate a fixed object such as a clock, and continually maintain eye contact with it while spinning (as the ballerina Deborah Bull explains in the BBC documentary 'The dancer's body', 2002').

After this brief excursus into the physiology of the haptic system, the lesson here is simple. While there are clearly specialized receptors for exteroceptive senses such as sight and audition, there is no such one-to-one correlation between receptors and organs for the somatic senses. This applies similarly to 'touch' which is itself a combination of data primarily from receptors responding to pressure (mechanoreceptors), temperature (thermoreceptors) and pain (nociceptors), as we have seen. The somatic senses provide re-afferent feedback from receptors distributed not just cutaneously but throughout the body, and the self-perception of inner bodily states is often indistinct or confused (see, for example, Leder, 1990; 2005: 336ff on visceral perception). Indeed, Leder's *The absent body* (1990) still provides a useful template for a phenomenologically informed investigation of the somatic senses. The spatial experience of easily discernible cutaneous (skin-based) tactile sensation is contrasted with the imprecision of internally felt sensations. Yet cases of dysfunction of the somatic senses are extremely rare. This is just as well, for loss of proprioception when it does occur as part of a progressive neurological condition can lead to surreal results whereby, if not visually monitoring arms or legs, they go 'astray', and the subject must learn to walk again from scratch by painstakingly and attentively watching and coordinating each movement, as Cole (1995) details in a fascinating case study. Case studies of dysfunction

in these somatic senses may therefore reveal insights into the background of generic everyday, embodied spatial experience, and this trend of thinking is a mainstay of phenomenological psychology, particularly in Straus (1966) and Merleau-Ponty (1992). Van den Berg (1952) usefully summarizes treatments of movement and kinaesthesia within the phenomenological tradition, placing lesser-known figures like Straus and Marcel alongside the more prominent figures of Husserl, Sartre and Merleau-Ponty. More generally, while studies examine somatic phenomena predominantly from a medical, psychological and physiological perspective, the first-person experiential perspective that Leder (1990) proffers has periodically been addressed ethnographically. But earlier encounters with bodily senses and memory do occur within the tradition of humanistic geography, addressed in a section below.

### III Returning to our senses in fieldwork: the visual and the visceral

The recognition of the importance of haptics in everyday embodiment also signals an ability to use the body 'as an instrument of research' (Cragg, 2003) or as a 'tool to gain insights into research subjects and their geographies' (Longhurst *et al.*, 2008). In geography this is beginning to be addressed as it coincides with an emergent body of work in the social sciences that engages directly with the senses. This is unsurprising because 'our first and foremost, most immediate and intimately *felt* geography is the body, the site of emotional experience and expression *par excellence*' (Davidson and Milligan in Longhurst *et al.*, 2008: 210). On the one hand, re-establishing interest in our senses and sensibilities is seemingly obvious, symptomatic of the repatriation and revalidation of earlier prohibitions against sensual pleasures and delights in western cultural history. We are familiar with the persistence of the centrality of vision, and Jay's (1994) philosophical and historical engagement with this topic and his

coining of the word 'ocularcentrism', as 'the scopic regime of modernity', providing some philosophical context in which to address this visualistic bias. On the other hand, especially since Classen's *Worlds of sense* (1993), Paul Stoller's *Sensuous scholarship* (1997) and Ingold's *The perception of the environment* (2000), the increasing interest in anthropology and cultural history has started to signify something novel in the way the humanities and social sciences approach, categorize, describe and represent sensory experiences, and is attentive to cultural variations in the construction of sensory hierarchies (see for example Csordas, 1993; Classen, 1997; Stoller, 1997). Much of this work, like Jay (1994), bemoans the emphasis on visuality in western industrialized cultures, but pursues this assumption empirically through a range of ethnographic methods. A more recent wave of sensuous scholarship, exemplified by Law (2001), Geurts (2002), Howes (2003), Bull and Back (2003), Drobnick (2006) and Paterson (2007; 2009), instead attempt to reassert the validity of non-visual experiences of space and place.<sup>2</sup> Likewise, the journal *The Senses and Society*, started in 2006, has an equally interdisciplinary take on the sensorium and sensuous scholarship.

The sensorium, 'the subject's way of coordinating all the body's perceptual and proprioceptive signals as well as the changing sensory envelope of the self' (Jones, 2007: 8), is continually shifting and culturally variable. It varies according to a society's rules or prescriptions as well as technological mediation and physical environment. This undoubtedly affects not only the reflexivity of the embodied ethnographer in their fieldwork, but also inflects the interpretation of particular linguistic constructions such as idioms or proverbs, folk psychologies and the governance of gait, posture or Mauss' (1992) 'techniques of the body'. Therefore the regulation and disciplining of sensory hierarchies also potentially reveals power relations and Stoller (2004: 820) suggests that 'sensuous descriptions improve not only the clarity and

force of ethnographic representations but also the analysis of power relations-in-the-world'. As such, the acknowledgement that sensuous ethnographies do indeed potentially signify something 'new' offers up innovative possibilities of thinking, writing and reflecting on what has hitherto been ignored. As ever, what is closest or most obvious to us is revealed to be most distant. Yet the potential reach for these new sensory scholarships, ethnographies and engagements is far, and work in areas such as consumption and retail psychology has similarly pursued this trend (eg, Howes, 2005; Paterson, 2005b; Roe, 2006).<sup>3</sup> Engaging with sensuous scholarship can therefore reveal insights both etic and emic, challenging the sensory assumptions of both researcher and researched, and in an academic climate that gestures towards the 'more-than-representational' (eg, Lorimer, 2005) must find innovative ways to evoke or transcribe those underrepresented, unproblematized realms of everyday, embodied sensory experience. While such methods will directly be addressed towards the end of this paper, we must first ask: what exactly *is* sensuous scholarship? And what novel techniques in fieldwork does it encourage?

### *1 Sensuous ethnography and social knowledge*

To consider the way the Songhay people of Nigeria sense and structure their world, to use Stoller's (1997) classic ethnography, is not simply to map or translate series of sensations on individual bodies, but potentially to open up the researcher's body to accommodate a whole new sensory and cosmic semiology, and to make that body radically porous. Stoller himself defines sensuous ethnography thus:

Sensuous ethnography, of course, creates a set of instabilities for the ethnographer. To accept sensuousness in scholarship is to eject the conceit of control in which mind and body, self and other are considered separate. It is indeed a humbling experience to recognize, likewise Songhay sorcerers and griots [storytellers],

that we do not consume sorcery, history or knowledge; rather it is history, sorcery and knowledge that consume us. To accept sensuousness is, like the Songhay spirit medium or Sufi Saint, to lend one's body the world and accept its complexities, tastes, structures, and smells. (Stoller, 1997: xvii)

So, while the immediacy of sensory experience is one factor explored in this section, a further intriguing implication is that 'social knowledge' can be derived by 'openly and modestly foregrounding local sensibilities', as he claims elsewhere (Stoller, 2004: 822). From the language of administrators in Niger, Stoller points towards a 'sensuous politics of postcolonial Africa' (p. 824) through a somewhat poetic or idiosyncratic transposition of sensory qualities and impressions onto the characteristics of the state, such as the 'corpulent' wealth, or the 'hardness' and 'softness' of the occupying colonial forces, a literal texture of power. A recurring phrase of the French postcolonial administrators and commentators is tellingly that of the *guerre intestin*, or 'intestinal wars' (p. 825), for example, a phrase that expresses well the rumbling internal disquiet of the body politic during a series of insurrections under French colonial rule between 1898 and 1915.

Remaining in Africa, Geurts' (2002) monograph *Culture and the senses: bodily ways of knowing in an African community* is an example of sustained sensuous scholarship in the field, revealing evidence of long-term exposure to her chosen fieldwork with the Anlo-Ewe people of southeastern Ghana. On the face of it, Geurts follows Stoller's work in writing an in-depth ethnography that accounts for the missing senses. If the criticism of a visual bias in western cultures is a common refrain, then Geurts' prolonged fieldwork and language acquisition allows her to interact with a number of characters (not simply 'respondents', but a plethora of character sketches, biographies, tales from a number of dwellers in the city or the villages, drawn with vividness), and from this derive great insights into the bodily or somatic senses.

Indeed, as her research progresses and her language acquisition solidifies, the particular bodily senses of kinaesthesia (movement) and the vestibular sense (balance) figure prominently. What is most significant for Geurts is not the translation of sensory mappings onto Graeco-Roman traditions of the sensory hierarchy. Instead, her guiding task is to ‘understand an indigenous Anlo sensorium’ (p. 38) from an etic perspective. Through a variety of methods, including the analysis of idioms and proverbs, innumerable fragments of conversation with the people she encounters, and observations of movement and gait, she observes a more developed bodily vocabulary in Anlo-Ewe culture. In other words, as performed through language, posture, movement, infant development and education, the ‘internal’, bodily or somatic senses of kinaesthesia, proprioception and the vestibular system are more developed in the Anlo-Ewe sensorium. As Geurts herself acknowledges, so far this addresses Csordas’ (1993: 138) call for anthropology to question ‘somatic modes of attention’. However, whereas some anthropologists like Downey (2002; 2005) achieve this in the analysis of dance and movement predominantly through the psychological phenomenology of Merleau-Ponty, throwing up novel ways of approaching and writing movement and sensation, Geurts achieves this through Bourdieu’s notion of *habitus* and works to see how sensory schemas are, appropriating Csordas’ phrase, “‘performatively elaborated” ... in the habitus’ of the Anlo, since ‘sensory experiences are pivotal in the formation of identity and cultural difference’ (Geurts, 2002: 69).

The great strength of Geurts’ work lies in this connection between bodily senses and routine cultural practices, such as the sense of movement and its connection with character and moral sensibility. This finds its clearest and most succinct expression in her discussion of *seselelame*. Briefly, *seselelame* is translated as ‘feeling in the body’, or more literally as ‘feel-feel-at-flesh-inside’ (p. 41),

and encapsulates perfectly the renewed interest in the somatic senses. Since it figures in the language and performative elaborations of the Anlo, it functions as one of the keys to her project of understanding an indigenous sensorium. On the one hand, *seselelame* helpfully redirects attention back into the bodily interior and the set of somatic sensations that are more usually ignored in the Graeco-Roman sensorium. On the other hand, it is too conveniently deployed as a generic conceptual ‘master key’ for unlocking long-running philosophical problems that continue to impact upon the social sciences, such as mind-body dualism, to elide the division between ‘perception’ and ‘sensation’ (p. 41) and, later, to reunite sensation, emotion and disposition (p. 164). But theoretically her project is more evidently influenced by Bourdieu, employing a *habitus* that is ‘eminently sensuous’ (p. 243) and showing a two-fold process where, first, the sensory order is literally ‘embodied’ and, second, that sensory order contains categories that are valuable to a cultural group, thereby metaphorically becoming a larger ‘body’ of thought (p. 231).

## 2 *The social order and the sensory order*

Within anthropology, sensory studies of food and eating have long offered an accessible invitation to broaden the discussion from the supposed sensory immediacy of taste and smell to more metaphorical notions of ‘taste’, the reproduction of a sensorium that is particular to place, and the performance of ethnic and gendered identity within that place. Stoller’s (1989) classic conception of ‘bad sauce’ among the Songhay of Niger showed that taste, smell and the sensory aspects of food preparation and eating were a valid way of expressing cultural experience, being socially meaningful features of everyday life. This sentiment is neatly encapsulated within Law’s (2001) work on the recreation of ‘home’ through cooking and smell by Filipino immigrant workers in Hong Kong. Contrary to any assumption by readers here that sensuous fieldwork leads

only to a naïve, ahistoricized or depoliticized phenomenology, Law effectively explores ways to relate the smells, sounds and sights within specific regions of the city to larger patterns of migration and the effects on a locale of globalized workforces. Rather than limit her fieldwork to the recording of sensuous experiences, then, Law makes explicit connections with place-making, global-local contexts and some of the psychosocial conditions that characterize experiences of migration and displacement in late modernity. This view finds support in Howes' essay 'Hyperesthesia', subtitled 'The sensual logic of late capitalism' (Howes, 2005: 281–303), which offers a broad historical critique of the role of the senses in consumption. From the disavowal of the senses due to the brute forces of industrialization, Howes charts the increasing prominence of sensory stimulation in consumer capitalism, including a brief detour into a business fad that has presumably already run its course, that of Pine and Gilmore's 'experience economy' (p. 289ff). Classen's (2005) work on the alternative sensory hierarchies of three geographically diverse peoples that respectively prioritize smell (the Ongee of the Andaman Islands), heat (the Tzotzil of Mexico) and colour (the Desana of the Amazon) shows how the sensory order is simultaneously a social order and a cosmological order. Steven Feld's 'Places sensed, senses placed' (2005) invokes a 'sensuous epistemology' that focuses more on sound, hence his neologism of an 'acoustemology' (p. 184) that is always already synaesthetic. The relevance for geography is clear, invoking a sensuous ethnography to achieve, in his words, 'a social phenomenology and hermeneutics of senses of place' (p. 179). While Feld prioritizes the ear and acoustemology in his fieldwork, performing such a social phenomenology can certainly occur through other modalities and other means; utilizing experience of the senses as a gateway to the larger social order and to other senses, orders or conceptualizations

of place. Within geography, the work of Susan Smith and George Revill is particularly pertinent here (eg, Smith, 1994; 2000; Revill, 1998; 2005). However, the individuated origin of the actual experience of the senses that manifests through the body is a familiar trope within previous academic formulations of the connections between the senses and place. The next section further discusses one such phenomenologically informed area within human geography.

### 3 '*Sensitive theory*': *humanistic geography*

It is not coincidental that the textual turn so prevalent within the humanities and social sciences occurs after our fascination with embodiment fades. For the immediacy of sensory experience, the new engagements with the senses, and the new sensorium arising within particular structures of capitalism are being deliberately obscured. David Howes (2005: 1) is perhaps correct to remark on the 'sensorial poverty of contemporary theory'. Hence the title of his edited collection, *Empire of the senses*, being a necessary corrective to the 'empire of signs' (Serres and Latour, 1995: 132). Rather than being necessarily restrictive or overly specific to particular senses, charting the empire of the senses and its significance to geography may involve entwining multiple strands within social theory, including the aestheticization of everyday life, the cultural history of the formation of the sensorium (eg, Corbin, 1986; 2005), or the ethnographic (eg, Geurts, 2002; 2005; Feld, 2005). Such texts do in fact acknowledge the social, economic and political issues around the construction of the sensorium so that, as Classen (1998) elsewhere summarizes, the sensory order is always simultaneously a moral order and a social order. This is a corrective to the tendency to focus on the senses as individualistic sensation, the temptation of much sensory theory and phenomenology. Furthermore, it solidifies Howes' (2005) claim that this return to the senses is not

simply another fashionable stream of theory to add to our academic repertoire of colonialism, gender, embodiment or material culture, for example. Instead, the senses in their supposed immediacy are the medium through which such aspects are accessed or experienced. As Stoller indicates, the implications for fieldwork extend far outside the individual body in its academic isolation:

Bearing witness through sensuous ethnography, however, is more than an arcane epistemological practice that scholars pursue in academic isolation. Using sensuous ethnography to bear witness to the forms of social trauma, abuse, and repression ... has the potential to shock readers into newfound awareness, enabling them, following the insights of Antonin Artaud (1958), to think new thoughts or feel new feelings. (Stoller, 2004: 832)

However, some readers may be forgiven for assuming geographers have visited cognate territory before, in terms of humanistic geography (eg, Tuan, 1974; 1977; Porteous, 1985; 1986; Pocock, 1993). It is important to acknowledge that many of the issues and debates discussed so far were explicitly addressed within that tradition. Rather than reread such arguments in detail, its position in the geographical intervention between the senses and qualitative methods is inestimable and there are a wealth of productive connections between the humanistic tradition and more recent ethnographic methods (see Cloke *et al.* 2004: 169ff, for a discussion of this), and even relations between the humanistic tradition and non-representational theory (see Lorimer, 2007: 92–93). Humanistic geography's broad significance lay in approaches and methods that were critical of the prevalent positivist, behaviourist and quantitative axis of human geography at that time, and central to this is the return to experience as an object of inquiry. Reliance more on experiences of the senses, movement, rhythm and the *genius loci* (eg, the essays in Buttimer and Seamon, 1980) show a direct lineage from phenomenological methods,

while attempts to evoke, describe and engage with such experience allowed increasingly experimental textual investigations.

In particular, the experiential fieldwork of Rowles on gerontology and geography provides moving and affective ethnographic descriptions of the relations between elderly people's fading senses and bodily abilities, memory and their environmental context (Rowles, 1978; 1980). He describes his methodology as a form of creative dialogue, a process of mutual discovery, an 'immersion in participants' lifeworlds' or 'intersubjective encounter' (Rowles, 1980: 57). For his elderly subjects, geographical experience involved more than 'mere behavioristic locomotion through timeless Cartesian space'; instead, by drawing into proximity with them, Rowles discovered 'a fusion of implicit awareness, thought, and action, entailing holistic involvement within a 'lived space' – a lifeworld with temporal depth and meaning as well as spatial extent' (p. 61). After spending several months getting to know his elderly subjects, becoming increasingly immersed in their lifeworlds through casual conversation and listening and sharing their stories and observations, glimpses not only of how his respondents *see* the world but also how their bodies *feel* the world tentatively begin to occur. Particularly pertinent here are observations relating some of the physiological and psychological effects of aging and the impact upon their experience of the environment. In somewhat dispassionate terms, Rowles summarizes these effects: 'a propensity for collapse of the spinal column, reduced lung capacity, calcification of ligaments, reduced circulatory system capability, and sensory decrements in sight, hearing, taste, touch and smell. Each of these changes modifies the individual's experience of the physical environment' (p. 67). With such physiological effects, combined with information of the pain and limitations of scope communicated through snippets of conversation, asides, demonstrations of physical breathlessness and so on, the generic notion of 'lifeworld'

becomes modifiable, more specific to each respondent's muscular and mental particularities. Since physiological effects of aging obviously vary between bodies, as researchers we must similarly countermand the tendency to generalize. Rowles suggests that the task is not to *generalize*, then, but to *understand*: 'Understanding, it can be said, is the deeper level of awareness which arises from drawing close enough to a person to become a sympathetic participant within her lifeworld and to have her integrally involved in one's own' (p. 68).

While this intersubjective understanding of the physiological particularities of a respondent's lifeworld shows promise in considering the haptic knowledges of another, and how they alter over time, there are methodological limitations. Discussing one of his favourite elderly respondents, 'Marie', Rowles' faith in the 'authenticity' of representing such lifeworlds is naïve and misplaced when arguing that 'Descriptive understanding of Marie's involvement within the spaces and places of her life provides an authentic representation of the reality of growing old as experienced by one person dwelling within a specific spatio-temporal setting' (p. 68). Now, in constructing such 'sensitive theory' (p. 68), we would agree when Rowles argues it should be specific, tied to particular respondents and their experiences. But any claim to 'authenticity' in observations and descriptions of subjectively felt bodily impairments and sensory decrements is doomed to failure. Elsewhere Rowles acknowledges something like this when discussing the nature of the inductive process that participants and researcher pursue together, seeking 'consensual expression of their interpersonal knowing' that is subsequently edited by the researcher to produce 'descriptive vignettes' (Rowles, 1978: 187) that can be agreed upon. A further stage of inductive editing takes place when writing up results for academic presentation and publication, thinks Rowles; while the conclusions remain those of the researcher,

the researcher must become translator and seek 'to project an aura of authenticity'; the researcher 'is successful only insofar as [they] can effect a translation imparting the essence of the participant's subjective knowing as revealed in the interpersonal exchanges that transpired' (p. 187). The translation most suitable for the presentation of such 'sensitive theory' points towards a development of writing skills and style of expression, 'a subtle sensitivity of expression allowing the reader to identify with the experience and a detailed explication of the process through which conclusions were reached' (p. 188). Documenting this process between researcher and researched entails autobiographical presentation, using the first-person voice to 'directly communicate the researcher's role within the research experience' (p. 188). Certainly, when thinking of and writing about the haptic experience of others, it is inescapably mediated through the haptic experience of the researcher. Sensuously reflexive autobiographical presentation, especially given our earlier clarification of terminology, would acknowledge this.

The presence of such literature, along with the reappraisal of the haptic in Rodaway's (1994) work entitled *Sensuous geographies*, and more recently Hetherington's (2003) placing of touch in the constitution of visually impaired people's access to museums, indicates that within a larger timeframe some geographies have already been broadly, if unsystematically, 'haptic'. Correspondingly, a multiplicity of strands dealing with touch, sensuous ethnographies and sensuous geographies have been steadily percolating through work in anthropology, cultural history, and humanistic geography. Longhurst *et al.*'s (2008) attempt at 'using the body as a research tool' also draws attention to more prosaic and messy embodiment in tasting and eating, such that unwanted or undesirable bodily responses like involuntary gagging should not be left out of the written research account. In other words, the messy unpredictability of the body remains

significant if the totality of the body is used as a research tool. Similar concerns are directly addressed in a later section on pain. We now turn to detailed sensuous ethnographies and the evolution of appropriate methodologies potentially of relevance to geographers.

#### 4 *Pedestrian touch, grounded perception*

What Merleau-Ponty (1992: 253) identifies as 'a tactile perception of space' is a good starting point for an embodied ethnography of walking, thinking of our embodied everyday stance not as the separation of mind from body, head from feet, but as diverse strands of sense returns from limbs, viscera, sense organs and muscular movement that variously combine as an almost elastic sensory-spatial envelope, a sensorium in action. We can therefore posit something like a corporeal context based on what Merleau-Ponty (p. 110) terms a 'motor intentionality', that is, the reaching out towards other things. In conjunction with the classification of the haptic system earlier, phenomenology does provide some background for thinking through the haptic and the somatic:

The very fact that the way is paved to true vision through a phase of transition, and through a sort of touch effected by the eyes, would be incomprehensible unless there were a quasi-spatial tactile field, into which the first visual perceptions may be inserted. (Merleau-Ponty, 1992: 259)

Here Merleau-Ponty does not simplistically equate vision with touch, since 'touching is not seeing' (p. 260). But there seems to be an appreciation of the multiple interrelations and correspondences between the senses such that 'one can still touch with one's eyes', as Lund (2005: 30) puts it, an immediately graspable proposition that she deploys in her fieldwork. There remains a tendency among social scientists to take an early stage of one particular figure such as Merleau-Ponty as shorthand for 'phenomenology' in general, which simply fails to acknowledge the historical diversity and wildly differing

epistemological, aesthetic and ontological positions among its proponents. Let us now consider the significance of kinaesthesia and motor intentionality for thinking about 'grounded perception' through the example of walking.

Rather than the smells and sounds of places, the kinaesthetic performance of walking is simultaneously mundane, yet something that binds internally felt and externally orientated senses and which has consequently been of interest to anthropology and recent geography. Following on from Rowles' work on elderly bodies and mobility, discussed above, Edensor (2000) updates these themes, identifying the romantic-era desire to escape the city, which actively dulls the senses, through the activity of walking in the countryside so that, in walking, 'the walker returns to his senses' (Thoreau, in Edensor, 2000: 86). Ingold's earlier work largely concentrated on sight in *The perception of the environment* (Ingold, 2000), but subsequently he acknowledges that 'a more literally *grounded* approach to perception should help to restore touch to its proper place in the balance of the senses', since 'it is surely through our feet, in contact with the ground (albeit mediated by footwear), that we are most fundamentally and continually "in touch" with our surroundings' (Ingold, 2004: 330, original emphasis). By differentiating the most usual form of touching through the hands, 'manual touch', from the sensations that occur through the feet, he attempts to find the distinct properties of a 'pedestrian touch'. In line with our earlier discussion of the haptic system, Ingold not only asks of the role of the ear in maintaining balance, which we identified as the vestibular system, but also the intriguing possibility of hearing through the feet (p. 331).

Ingold's work, along with Lund (2005) and Macpherson (2009) in particular, shows an increasing interest in performing ethnographies of the somatic sensations within walking, Lund with mountaineers in Scotland and Macpherson with visually impaired

walkers in northern England. There is an auto-ethnographic component for Lund, as when she describes approaching a narrow path:

The act of balancing my body and all my various muscle tensions was no longer the centre of my attention; the tension between my body and the ground had evened out. My eyes still focused on the ground but with more ease. I did not need to stop to look around anymore. The shape of the ground allowed me to move with a more flexible posture. (Lund, 2005: 28)

Lund's description exhibits an increasing ease and fluidity through movement, no longer separating the cognitive precision of the head and visual acuity of the eyes from the clunky remainder of the body, the classic separation which Ingold (2004: 323) observes as characteristic of modernity, the tendency of sedentary perception. Instead, Lund wishes to reunite vision and touch through the kinaesthetic act of walking, and her ethnography, interviews and own autoethnographic descriptions aim to answer exactly how these modalities interact through the process of moving:

Walking is a bodily movement that not only connects the body to the ground but also includes different postures, speeds, rhythms. These shape the tactile interactions between the moving body and the ground, and play a fundamental part in how the surroundings are sensually experienced. (Lund, 2005: 28)

Just as Rowles managed in his research to extol the possibilities of 'intersubjective encounter' (Rowles, 1980: 57) through engaging with another person's lifeworld, comparable research has been conducted by walking and talking with congenitally blind respondents (born blind) as well as those with adventitious blindness (becoming blind after a period of sight). Macpherson found both blind groups equally forthcoming about their experiences of touching with the feet rather than the hands, correlating their haptic knowledge through the feet and

muscular feedback with their perception of the landscape. 'Bethan', for example, said:

[T]o gather my own impression of what the terrain is like, I get that through my own feet more than anything else, you know? ... Actually you can pick up a lot of information from your feet, and maybe because I used to see it helps piece together a picture of what the whole thing is like just from walking over it. (In Macpherson, 2009)

While the visual is indisputably prioritized historically in aesthetic conceptions of landscape, the 'picture' which Bethan herself invokes is decidedly irreducible to a visual 'image' or map. Instead, we can use such non-visual 'pictures' or somatic conceptions of space through the feet and hands in activities like walking as examples of haptic knowledges, and note their ability to expand the repertoire of ethnographies by employing a wider understanding and representation of somatic sensations and sensibilities. Now we consider further examples of sensuous, ethnographic investigations that exhibit potentially post-phenomenological approaches to embodied activities, approaches that are potentially conducive to think-ing about non-representational theory.

#### **IV Sensuous dispositions and non-representational theory**

With an expanded and clarified sensory terminology discussed at the beginning of this paper, researchers may start to articulate and describe the raft of somatic sensations as they relate to the expanded sensorium. In this spirit, reminding ourselves of Stoller's earlier position on sensuous ethnography as being outside the sphere of individualistic or academic isolation, where bearing witness to ethnographic events is 'to think new thoughts or feel new feelings' (Stoller, 2004: 832), something of the difficulty of articulating and representing previously unthought feelings and novel somatic sensations is now addressed. The following three examples are framed explicitly within the mode of the

non-representational, they testify to a certain ineffability and attempt to 'grasp' ongoing, embodied experiences in different ways. Most pertinently, what Lorimer (2005: 84) identified as 'sensuous dispositions', or new sensibilities within non-representational theory (see, for example, Thrift, 1997; 2000; 2007). Lorimer's (2005; 2007) series of papers in this journal offer an effective synoptic introduction to this emerging area. So I concentrate here on some concerns that cut across non-representational theory (NRT), renewed interest in the somatic senses within dance and performance, and the shifting of the sensorium through new techniques and technologies. Ethnographic methods have constantly been straining towards the rethinking and rewriting of embodiment, interaction, performance and affect, and consequently address the sensorium. As Thrift has written elsewhere, the alteration of the human sensorium through new technologies and techniques offers 'changes in the way in which the body "talks" and is addressed' (Thrift, 2004: 584). Such changes entail a shifting register of experience that is manifested through new techniques of the body and performance (for example, pilates, massage, the Five Rhythms™ – see, for example, McCormack, 2002) and new technologies (the human-computer interface, 'haptics' – see, for example, Paterson 2006a; 2007; 2008) that require new means of interrogation that are sympathetic to the alterability of sensuous dispositions and somatic sensations. Since non-representational theory does not proffer any single methodology, it propagates instead a raft of creative approaches and techniques, rethinking the usefulness and purpose of empirical investigations through what Dewsberry *et al.* (2002: 440) term a 'resolute experimentalism' in the 'taking-place of the empirical', the folding of theory into the practices of fieldwork (p. 239). Certainly, following Thrift's phraseology, listening to how bodies 'talk' and 'are addressed' within different contexts and through various

technologies places different emphases on the practice of conducting fieldwork. Undoubtedly, in-depth ethnographic fieldwork has – and does – address the taken-for-granted, the felt unsaid, and sometimes the ineffable or tacit knowledges that emerge through encounters with people, as we saw with Rowles (1978; 1980).

In contrast to our earlier exposition of Gibson's haptic system and the phenomenological interest in kinaesthetic embodiment as a form of anticipative motor intentionality, at this juncture we can firmly differentiate *sensations* (that is, information routed via distributed nerves and sense-system clusters) from *sensuous dispositions* (the sociohistorical construction of the sensorium, its reproduction over time and its alteration through contexts and technologies). This distinction highlights the importance not only of the immediacy of conscious sensation and cutaneous contact, then, but also the historically sedimented bodily dispositions and patterns of haptic experience that become habituated over time. What follows then is a sample of geographical work that directly addresses the shifting, multiple, mutable sensorium within different fieldwork settings, variously dealing with spaces of immediacy, proximity and distance: first, the feeling of nudity on the beach with concomitant sensations of warmth on the skin, feeling at ease with an alternative bodily comportment; second, to rethink the notion of touch as pertaining not only to presence and proximity, through the experiences of some visually impaired visitors to a museum; and, third, we revisit the embodied practice of walking in order to reflect on a more affective phenomenology of bodies and landscape. These three cases decentre previous notions of haptic knowledge from the earlier discussion of the psychology of perception, allowing far greater affective bearing upon such knowledges, shifting the focus from individualistic introspection to more current social and cultural concerns, and widening the scope of previous discussions of grounded perception.

*1 The sensuous envelope of skin*

Obrador-Pons (2007) uses the term 'haptic geographies' to explore sensations and feelings of nudity on the beach, limiting the experience of the naked body neither to skin contact, the visualistic bias of the 'gaze', nor to mere representation. Following Jay (1994) he suggests not only an alternative 'scopic regime' in fact, but 'a different order of the sensual' so that he is interested instead 'in the production of feelings and sensual dispositions' (Obrador-Pons, 2007: 124–25). Following Radley's (1995) work on the 'elusory body', he wishes to engage in empirical work that contests the usual discursive constructions of the body, attempting to re-engage with 'an elusory and affectual body open to the world that feels and senses' (Obrador-Pons, 2007: 125). Nudity as an inevitably embodied yet deeply countercultural practice (in the context of late modernity in the west, at least) is therefore concerned not only with sensations but with 'the cultivation of sensibilities' and, following Thrift, in being naked on the beach the 'capacity of the body-subject to create non-denotative meaning through its senses, movements and tasks, as well as its ability to dwell in particular spaces and things' (p. 128) is of interest. Seen optimistically, nudity allows a heightened series of sensations, for example the gentle caress of warm sun on skin. But what of that bane of British people abroad, the excruciating pain of sunburn? Or the sense of shame that goes below the blush of the skin, the embarrassment that can be described as making one's skin crawl? Obrador-Pons' interviewees attempted to refer outside the realm of immediate cutaneous experience, but had difficulty articulating these feelings with any precision (p. 130). Thus, while his research is a valiant attempt to refine the notion of 'haptic geographies' after Rodaway's (1994: 41ff) initial coinage, his own research is hampered by conceptual and methodological issues as he tries to grasp towards understanding the co-implication of skin, touch, feeling and sensuous dispositions

through traditional interview methods. In fact this underlines the poverty not only of the somatosensory imagination but also of articulating sensuous dispositions. So how better to 'grasp' such feelings and dispositions? As McCormack writes in reference to the experience of kinaesthesia, the difficulty lies in capturing the intensities of what is 'often below the cognitive threshold of representational awareness that defines what is admitted into serious research' (McCormack, 2002: 470) – the seemingly irresolvable paradox of finding a means to articulate such experience without limiting it to mere representation, without establishing yet another lexicon, nor returning to the embodied subjectivity that is the starting point for the phenomenological project.

Our common conception of a cutaneous subject conveniently enveloped (limited) by skin has no neuropsychological basis whatsoever, as we have argued. In terms of sensation, there is no simple inside and outside. The distribution of nerves throughout the body elides any neat distinction between interoception and exteroception in the ongoing nature of somatic experiences, and consequently troubles the notion of the haptic as clearly delimited within an individuated body. The ongoing and multifarious nature of tangible interactions with the world open up the haptic beyond cutaneous sensation (prosaic tactility), beyond the subjectively coherent felt interaction of dispersed sensory systems (Gibson's haptic system), to include sensuous dispositions that exceed anything we might posit as a subjectively felt body-space with a distinct interiority and exteriority. This must be borne in mind when we consider the remaining examples of this section: first, acts of touching material objects that collapse subject-object and inside-outside distinctions, and then perceiving and interacting with landscape as an aesthetic (feeling) body. In both cases, we can posit, as Merleau-Ponty (2000: 133) puts it, 'becoming a tangible being' as a form of 'muscular consciousness' (Bachelard, in Ingold, 2004: 333)

that problematizes our intuitive or prephenomenological conception of a felt bodily interior and exterior.

## 2 Proximal and distal touch

Haptic knowledges are particularly significant in thinking about spatial experiences of the blind and visually impaired. Obviously the non-visual mode of routine wayfinding and navigation involves spatializing the non-visual senses. This is explored in some psychology and geography research (eg, Butler and Bowlby, 1997; Paterson, 2006b; 2006c). Yet the types of tactility assumed are often underdeveloped, and insufficient attention is paid to detailed somatic processes or haptic knowledges in discussions concerning spatial encounters. One exception was Macpherson (2009), as we saw, bringing her body almost empathetically to accompany her fellow walkers, then to reflect on her own and her respondents' kinaesthetic experiences. From Hetherington's (2002; 2003) research on visually impaired visitors to museums, one aspect in particular that emerges from interview data includes the contention that place and touch can be understood as 'proximal nonrepresentational forms of knowledge' (Hetherington, 2003: 1938), acknowledging the difficulty of theorizing tactile experience in the blind and visually impaired. Hetherington is discontent with Gibson's explanations either in terms of haptic subsystems (Gibson, 1968, as discussed above) or his familiar notion of 'affordances' (Gibson, 1986), since both remain centred on individuated embodied experience and are therefore 'sociologically weak' (Hetherington, 2003: 1938). Instead, Hetherington sees tactility as a 'performative' rather than 'representational' form of knowledge since it is more proximal, opening out tactility from this 'centred (humanist) subject' (p. 1934). The historical emphasis on sight and the optic solidifies perceptual 'self'/'other' boundaries between 'my' body and others based on visual feedback and clearly identifiable visual representations, and entails 'distal' rather than 'proximal' knowledges. Therefore the troubling of sight

and the understanding of the interaction between remaining senses alters the available perceptual feedback, significantly modifying our experiences of place. To de-emphasize the optic and the centrality of sight in favour of reasserting the haptic is to validate other forms of knowledge, and while we remember the popular expression 'seeing is believing', a forgotten corollary is 'but feeling's the truth', as Thomas Fuller reminds us in *Gnomologia* (Fuller, 1732: 174; see also Bronner, 1982: 352, on haptic culture). For sighted and non-sighted alike, this opening out of tactility effectively asks 'how geographical knowledge might understand place as a proximal construction of touch' (Hetherington, 2003: 1936). Something of the experience of mingling, of collapsing self and other, interiority and exteriority, making the distanced more proximate (and *vice versa*) is present in his interviewing of a blind respondent who undergoes touch tours of museums:

When I am touching something there is no 'me' and the object I am touching. It is just the object. So the me disappears ... for me it's just touching, identifying with the actual thing there ... The way I touch is an identification with something somewhere inside of you, you have got a relationship with it. ('Sarah', in Hetherington, 2003: 1934)

From such observations on touch, Hetherington considers the set of 'performative repertoires' that his blind and partially sighted respondents exhibit, including moving, touching, hearing, listening and speaking to others (p. 1935). The experience of space can thereby be understood as 'a decentred and partially connected experience of the performing (and performed) body' (p. 1935). As we have seen, haptic knowledges involve multiple relationships between the visual, the non-visual and the somatic senses. For Hetherington, touch is only one possible focus for proximal and performative forms of knowledge in the making of place (p. 1936), and he similarly acknowledges the importance of kinaesthesia.

In addition to performative repertoires, haptic knowledges are usually indissociable

from acts of memory, and the manifold associations between non-visual sensory experiences of objects, places and movements are outside the scope of this paper (although see Seremetakis, 1994). For Hetherington, initial interviews with visually impaired respondents is the departure point for considerations of the non-representational role of tactility and the emergent non-visual productions of place and, like Obrador-Pons (2007), he utilizes empirical data in order to retheorize, in this case, place, touch and memory. Therefore relationships between touch and memory are played out through ideas of presence and absence such that the footfalls and hand-holds of an unfamiliar house, or the evocative and familiar sight and feel of his grandfather's mug, is a touch that triggers involuntary memories. In this there is an immediate and empathic sense of recognition in the reader. This tactile element of absent presence he terms 'praesentia' (after Josipovici, 1996, originally concerning medieval relics) where 'something absent ... can attain presence through the materiality of a thing' (Hetherington, 2003: 1941). The tactile appropriation of familiar objects, calling absences into presences through praesentia (his grandfather's mug, an old teddy bear) is, like the blind respondents in the museum, 'about mingling: distance and proximity; presence and absence; human and nonhuman; subject and object; time and space; vision and touch' (p. 1940). It consequently becomes somewhat theoretically overburdened. His insistence that touch is usually conceptualized as 'proximal' – up close, specific, local to the body – seen as an exemplum of the performative blurring of boundaries between objects, becomes nevertheless spatially complexified by the ability to perform touch and presence at a distance, either through the absent presence of praesentia itself, or through various haptic technologies, for example (eg, Paterson, 2006a; 2008), technologies which arose originally to aid blindness and visual impairment, appropriately enough. The ability to touch and be touched at a

distance concerns more than mingling, then, indicating a larger tactile-spatial imaginary that accommodates poetic insights of memory and material proximity, further extending the repertoire of haptic knowledges as a result.

### *3 Pain and pleasure, sensuous depths and folds*

It is important to recognize that not all haptic feelings or somatic sensations are pleasant. Other landscapes and bodies that deal with more deranged sensations and environmental sensitivities, damaged sensoria, or bodies of pain tell very distinct stories (eg, Scarry, 1985), and involve very different haptic knowledges as a result; and diseased, diseasing or simply aging bodies (as ethnographically investigated by Rowles, 1978; 1980) remove the historically recognizable geographical trope of able body within accessible landscape. Returning to cross-cultural anthropology, Lynne Hume (2007: 82ff) describes the effects of self-flagellation, body modification and dance rituals involving bodily pain, scarification and mutilation that collectively imagines pain as a portal to spiritual discovery. Furthermore, not all touch is 'good' touch. While Obrador-Pons (2007) explored the sensations of sun on the skin in his haptic geographies of the beach, especially for more light-skinned western Europeans, a negative corollary is the uncomfortably hot and unbearably tender sensation of sunburn. Likewise, in the previous discussion of the resolutely middle-class ideal of the leisurely landscapes of walking we should also recognize the more unpleasant haptic sensations that accompany hard work and back-breaking labour, especially when itinerant labour necessitated walking in inhospitable territories solely for economic survival (eg, Edensor, 2000). Such recognition of the bodily pain of movement, even within an activity commonly recognized as worthy and influenced by historical romanticism, is articulated in some recent cultural geography that situates the body, pain and memory within the landscape. Yusoff, for example, examines archival accounts of Mawson's

polar expedition of 1912 which explicitly address the tactile sensations of walking on uneven snow in reindeer-skin boots, where 'you get a sense of touch which nothing else except bare feet would give you' (Yusoff, 2007: 227) and thereby a sensitivity to minor variations in the surface underfoot, yet at other points the most excruciating bodily pain, humiliating conditions and self-mutilation due to climatic conditions, malnutrition, madness and disease. In more current and less relatively harrowing practices of walking, Wylie's more literary approach accommodates the sensuous folds of both pain and pleasure into the landscape.

On his walks to Glastonbury Tor and the South West Coast Path, Wylie (2002; 2005) employs a literary style that attempts to encompass the sensuous depths and folds of body within the surrounding landscape, influenced somewhat by Alphonso Lingis' and W.G. Sebald's philosophical travelogues, simultaneously open to sensuous dispositions yet also to the immediate physicality of pain and muscular strain. At one point he describes the rhythm and foot-heavy trudge along a pathway as obscuring the assumed goal of the walk, how 'the habitual ambient resonance of depths and surfaces distils into knees, hips and shoulderblades' (Wylie, 2002: 449). Later he describes the vertiginous feeling of reaching the peak of the Tor, the assumption of the predominance of visibility from a vantage point over the surrounding fields, tempered by a visceral series of sensations attuned to the dramatic depths and folds of the landscape: 'On the summit this reflexive recognition of visibility is sensuous, felt around the torso's twists and neck craning to gaze at the sky' (p. 452). On another trudge within a different landscape, finding himself literally in the thick of it, he says: 'Limbs and lungs working hard in a haptic, step-by-step engagement with nature-matter. Landscape becoming foothold' (Wylie, 2005: 239). Partly phenomenological, the perception of landscape as a series of paths, transitions, footholds and restpoints speaks to an embodied

immediacy of feeling folded into the landscape, blurring the distinctness of the boundaries between the romantic ideal of the solitary walker (the optic, the distanced) and the more quotidian 'ache, ennui and enervation' (p. 242) of muddy trudging, muscular tiredness and footholds and handholds (the haptic, the proximal). Furthermore, something of the intertwinning of the muscular consciousness of the walker and the surrounding geomorphology of slopes, peaks and scarps is achieved by straining towards a more poetic, expressive and performative means of expressing such haptic knowledges.

To some observers this approach might stray towards the questionable romanticism of an aesthetic of the sublime, but Wylie rejects the simplistic notion of the mutual embedding of body and landscape and instead calls for 'specific walking corporealities and sensibilities' that accommodate affects along with sensations (p. 236), making a bid for that 'resolute experimentalism' of methods alluded to earlier, and employing experimental writing methods to address both 'critical and creative registers' (p. 237) in so doing. Building on earlier sections, this type of writing works towards a more affectual phenomenology of perception, able to employ a raft of critical, as well as creative, techniques in order to reach towards those corporeal sensibilities and haptic knowledges, and which include a range of affects and somatic sensations such as pain, weariness, movement, vertigo, bodily bearing, assurance, *jouissance*, rhythm, rest, trudge-heavy joy or exhausted openness to the landscape that surrounds.

## **V Conclusions: writing and the feeling of doing**

To conclude, I now point towards three brief methodological implications for future fieldwork involving haptic geographies. As we have seen, previous considerations of haptic knowledges in fieldwork have usually involved an extension of traditional reflexive ethnography, or more recently a 'resolute experimentalism' in writing and grappling

with sensuous dispositions. But, to return to the problems in the opening paragraph, that gap between *experiencing* the feeling body and *expressing* it, this is an appropriate point to ask *how* exactly can researchers attend to haptic geographies, to take account of somatic senses such as kinaesthesia, for example, and write about it? Can this be achieved through a combination of traditional and non-traditional methods, involving combinations of interviewing, participant observation, and sensuous autoethnography for example? What are the implications for recording technologies such as video, which remain multisensory only in so far as they record video and audio, say? What are appropriate methods for recording somatic sensations of proprioception, kinaesthesia and vestibular sensations, or their equivalents in non-western cultures? Is writing the most suitable form of dissemination of these somatic experiences? Is there, in other words, a future agenda for conceptualizing and applying haptic geographies? Here I tender three implications for fieldwork that address each of the sections of this paper.

First, a fairly straightforward 'reporting back' of bodily sensations through an introspective method remains possible, especially suited to the earlier psychological terminologies of Gibson's haptic system, and certainly existing ethnographic techniques are being augmented by taking account of sensory-somatic experience, such that ethnographers 'can examine and expand their own practice, so as to consider their own body and senses more fully as part of their ethnographic toolkit', as Bendix (2005: 3) posits. Reflecting upon, exploring and writing one's own sensory experiences into ethnographic accounts is akin to an honest form of Cartesian introspection which identifies and clarifies complex combinations of somatic sensations. This method remains the basis for the later 'descriptive psychology' of Brentano that forms the basis for Husserl's (1970) phenomenology. While Hetherington would characterize this as sociologically weak, other social theorists have successfully

employed phenomenological methods (see, for example, Paterson, 2007: 26). The real problem here is the assumption that there are identifiable sensations 'out there' (or, conversely, felt 'in here') reportable in this way. As discussed previously, the internal/external spatial differentiation of the body is not always so simple. However, fieldwork can still benefit from the standardization of terms. This was partly demonstrated in the section 'Haptic knowledges', where terms like kinaesthesia, proprioception and the vestibular sense were succinctly explained, and revisited in various combinations within later examinations of fieldwork. It contributes to the repertoire of terms for the examination and redescription of somatic experience.

Second, and somewhat contradictorily, some of the touchy-feely methods discussed so far are irreducible to a standardized somatosensory lexicon. As this paper has progressed, an increasing awareness of the manifold conjunctions of sensuous experience, receptivity, interiority and exteriority, and the blurring of the boundaries of the subject have complicated this, and I have argued for gaining a more detailed appreciation of the sensuous potentialities within (and of) ethnographic research. In other words, we have shifted focus from seemingly naturalistic 'sensations' to more complex, enfolded sensuous 'dispositions'. As previously shown, this is consistent with certain approaches of non-representational theory, which conceptualizes the body as 'sensuous, sensitive, agentive and expressive in relation to the world, knowing and innovating among contexts and representations that become refigured *in practice*', says Crouch (2001: 62, echoing Csordas, my emphasis). In this case, the attempt to examine and explore the 'feeling of doing' in embodied fieldwork practice, continues Crouch, is 'a means of grasping the world and making sense of what it feels like'. Now, 'making sense' involves imposing some order out of the chaos of the body in the 'field', the physically felt and barely articulable sensations that arise through embodied performances and practices within

the place of fieldwork. It signifies an apparently prediscursive 'expressive and sensuous engagement with space', an engagement that is inherently embodied and variously aware of the repertoire of senses and haptic knowledges, made as it is by subjects already embedded within a social world; we subjects who, as Crouch (2001: 70) puts it, 'reflexively and discursively refigure [our] sensuous/expressive and poetic encounters'. More pertinently, grasping towards that 'feeling of doing' within fieldwork requires a more supple awareness of the repertoire of haptic knowledges, including sensuous dispositions and the troubling of traditionally imagined spatial relations of interiority and exteriority, distance and proximity, and sensations *per se*.

Third, then, the difficulty of evoking or representing complex somatic sensations, and their potential irreducibility to a standard somatosensory lexicon, entails different ways of linguistically engaging with the haptic experiences involved. Linguistic limitations point to the recursive difficulties of transcribing one set of sensations into another language, whether that 'language' be metaphorical (from another discipline like psychology or anthropology), or descriptively literal (from a non-English-speaking culture, eg, *seselelame*). However, this is where a poetic sensibility meets a sensuous disposition, for evoking and describing sensuous dispositions and haptic knowledges benefits from the styles and methods involved in experimental or creative writing. There are glimpses of this in Stoller, Lingis and Wylie, for example, and one can point to the work of Muecke and so-called fictocriticism (eg, Muecke, 2002) as a creative engagement with language that evokes rather than describes and, like Lingis, encompasses aspects of private experience such as memory, loss and shame, attempting to convey complex politics, histories, moods and sensations through more explorative and expressive language. Good ethnographic work already achieves this, and Geurts' (2002) enfolded analyses of gait, posture, movement and idiom in the Anlo-Ewe people

is testament to this. In part this is achievable through the power of metaphor, and the English language is full of sensory and even haptic metaphors (eg, 'ponder' comes from Latin *ponderare*, to weigh). Poetry is full of sensory conjunctions achieved through simile and metaphor, and allows an alternative pathway to the sensory 'reporting back' described above. Rhythm, the folding of sensations, creativity in expression, and the use of sensory similes and metaphors can all enhance an 'ethnographer's toolkit', make a sensuous ethnography into a creative one, and make a creative ethnography out of sensuous experiences.

#### *Acknowledgements*

This article is dedicated in loving memory to my mother Jennifer, whose own ordeal with pain and immobility in the last few years finally ended when she died on 30 August 2008. Many thanks go to Ian Cook, who was unreservedly encouraging and supportive of this project throughout its gestation, and also knows about pain. Thanks also to my colleagues in the Historical and Cultural Geography research group at the University of Exeter, who commented on an early draft and provided the necessary time and space for discussion.

#### **Notes**

1. 'The dancer's body', programme 1 – 'A machine that dances'. BBC Two, transmitted 21 September 2002.
2. 'Sensory formations' is a series of edited collections, including Classen's *The book of touch* (2005), Howes' *Empire of the senses* (2005), Bull and Back's *The auditory culture reader* (2003), Korsmeyer's *The taste culture reader* (2005) and Drobnick's *The smell culture reader* (2006), and will culminate in Edwards and Bhaumik's forthcoming *Visual sense* (2009).
3. Also Howes' group project 'Multi-Sensory Marketing: A Quantitative, Qualitative and Historical Assessment' (2005–2008), funded by Canada's Social Sciences and Humanities Research Council.

#### **References**

- Aristotle** 1984: *Sense and sensibilia (De sensu et sensibilibus)*; translated by J.I. Beare). In Ross, W.D., editor, *Aristotle: works*, volume II, Princeton: Princeton University Press, 693–713.

- Aristotle** 1986: *De anima on the soul* (translated by H. Lawson-Tancred). London: Penguin.
- Bendix, R.** 2005: Introduction: ear to ear, nose to nose, skin to skin – the senses in comparative ethnographic perspective. Special Issue, 'The Anthropology of the Senses'. *Etnofoor* XVIII, 3–14.
- Boring, E.G., Langfeld, H.S. and Weld, H.P.** 1948: *Foundations of psychology*. New York: Wiley.
- Bronner, S.J.** 1982: The Haptic Experience of Culture. *Anthropos* 773, 351–62.
- Bull, M. and Back, L.,** editors 2003: *The auditory culture reader*. Oxford: Berg.
- Butler, R. and Bowlby, S.** 1997: Bodies and spaces: an exploration of disabled people's experiences of public space. *Environment and Planning D: Society and Space* 15, 411–33.
- Buttimer, A. and Seamon, D.** 1980: *The human experience of place and space*. London: Croom Helm.
- Classen, C.** 1993: *Worlds of sense: exploring the senses in history and across culture*. London: Routledge.
- 1997: Foundations for an anthropology of the senses. *International Social Science Journal* 153, 401–12.
- 1998: *The color of angels: cosmology, gender and the aesthetic imagination*. London: Routledge.
- , editor 2005: *The book of touch*. Oxford: Berg.
- Cloke, P., Cook, I., Crang, P., Goodwin, M., Painter, J. and Philo, C.** 2004: *Practising human geographies*. London: Sage.
- Cole, J.** 1995: *Pride and a daily marathon*. London: MIT Press.
- Corbin, A.** 1986: *The foul and the fragrant: odor and the French social imagination*. Leamington Spa: Berg.
- 2005: Charting the cultural history of the senses. In Howes, D., editor, *Empire of the senses: the sensual culture reader*, Oxford: Berg, 128–42.
- Crang, M.** 2003: Qualitative methods: touchy, feely, look-see? *Progress in Human Geography* 274, 494–504.
- Crouch, D.** 2001: Spatialities and the feeling of doing. *Social and Cultural Geography* 21, 61–75.
- Csordas, T.J.** 1993: Somatic modes of attention. *Cultural Anthropology* 8, 135–56.
- Dewsberry, J.D., Harrison, P., Rose, M. and Wylie, J.** 2002: Introduction: enacting geographies. *Geoforum* 33, 437–40.
- Downey, G.** 2002: Listening to Capoeira: phenomenology, embodiment, and the materiality of music. *Ethnomusicology* 46, 487–509.
- 2005: *Learning Capoeira: lessons in cunning from an Afro-Brazilian art*. Oxford: Oxford University Press.
- Drobnick, J.,** editor 2006: *The smell culture reader*. Oxford: Berg.
- Edensor, T.** 2000: Walking in the British countryside: reflexivity, embodiment and ways to escape. *Body and Society* 6, 81–106.
- Edwards, E. and Bhaumik, K.,** editors 2009: *Visual sense: a cultural reader*. Oxford: Berg, in press.
- Feld, S.** 2005: Places sensed, senses placed. In Howes, D., editor, *Empire of the senses: the sensual culture reader*, Oxford: Berg, 179–91.
- Fowler, C.J.** 2003: Review of Cameron, O.G., *Visceral sensory neuroscience: interoception*. *Brain* 1266, 1505–506.
- Fuller, T.** 1732: *Gnomologia: adagies and proverbs, wise sentences and witty sayings*. London: Barker, and Bettesworth and Hitch.
- Geurts, K.L.** 2002: *Culture and the senses: embodiment, identity, and well-being in an African community*. Berkeley, CA: University of California Press.
- 2005: Consciousness as feeling in the body. In Howes, D., editor, *Empire of the senses: the sensual culture reader*, Oxford: Berg, 164–78.
- Gibson, J.J.** 1962: Observations on active touch. *Psychological Review* 69, 477–91.
- 1966: *The senses considered as perceptual systems*. Boston, MA: Houghton Mifflin.
- 1968: On the difference between perception and proprioception. The 'Purple Perils' of James J. Gibson. Unpublished notes. Retrieved 26 January 2009 from <http://huwi.org/gibson/difference.php>
- 1986: *The ecological approach to visual perception*. London: Lawrence Erlbaum.
- Hetherington, K.** 2002: The unsightly: visual impairment, touch and the Parthenon frieze. *Theory, Culture and Society* 195–6, 187–205.
- 2003: Spatial textures: place, touch, and praesentia. *Environment and Planning A* 3511, 1933–44.
- Howes, D.** 2003: *Sensual relations: engaging the senses in culture and social theory*. Ann Arbor, MI: University of Michigan Press.
- , editor 2005: *Empire of the senses: the sensual culture reader*. Oxford: Berg.
- Hume, L.** 2007: *Portals: opening doorways to other realities through the senses*. Oxford: Berg.
- Husserl, E.** 1970: *The crisis of European sciences and transcendental phenomenology* (translated by D. Carr). Evanston, IL: Northwestern University Press.
- Ingold, T.** 2000: *The perception of the environment: essays on livelihood, dwelling and skill*. London: Routledge.
- 2004: Culture on the ground: the world perceived through the feet. *Journal of Material Culture* 93, 315–40.
- Jay, M.** 1994: *Downcast eyes: the denigration of vision in twentieth century french thought*. Berkeley, CA: University of California Press.
- Jones, C.A.,** editor 2007: *Sensorium: embodied experience, technology, and contemporary art*. London: MIT Press.
- Josipovici, G.** 1996: *Touch: an essay*. London: Yale University Press.
- Koffka, K.** 1935: *Principles of Gestalt psychology*. London: Lund Humphries.
- Korsmeyer, C.,** editor 2005: *The taste culture reader: experiencing food and drink*. Oxford: Berg.

- Lackner, J.R.** and **DiZio, P.** 2005: Vestibular, proprioceptive, and haptic contributions to spatial orientation. *Annual Review of Psychology* 56, 115–47.
- Law, L.** 2001: Home cooking: Filipino women and geographies of the senses in Hong Kong. *Cultural Geographies* 83, 264–83.
- Leder, D.** 1990: *The absent body*. Chicago: University of Chicago Press.
- 2005: Visceral perception. In Classen, C., editor, *The book of touch*, Oxford: Berg, 335–41.
- Longhurst, R., Ho, E.** and **Johnston, L.** 2008: Using ‘the body’ as an ‘instrument of research’: kim’chi and pavlova. *Area* 40(2), 208–17.
- Lorimer, H.** 2005: Cultural geography: the busyness of being ‘more-than-representational’. *Progress in Human Geography* 29, 83–94.
- 2007: Cultural geography: worldly shapes, differently arranged. *Progress in Human Geography* 31, 89–100.
- Lund, K.** 2005: Seeing in motion and the touching eye: walking over Scotland’s mountains. *Etnofoor* 18(1), 27–42.
- Macpherson, H.M.** 2009: Touch in the countryside: memory and visualization through the feet. *The Senses and Society* 33, in press.
- Mauss, M.** 1992: Techniques of the body. In Cray, J. and Kwinter, S., editors, *Zone 6: incorporations*, New York: Zone.
- McCormack, D.P.** 2002: A paper with an interest in rhythm. *Geoforum* 33, 469–85.
- Merleau-Ponty, M.** 1992 [1945]: *The phenomenology of perception* (translated by C. Smith). London: Routledge.
- 2000: *The visible and the invisible* (seventh edition; translated by A. Lingis; edited by C. Lefort). Evanston, IL: Northwestern University Press.
- Mountcastle, V.B.** 2005: *The sensory hand: neural mechanisms of somatic sensation*. Cambridge MA: Harvard University Press.
- Muecke, S.** 2002: The fall: fictocritical writing. *Parallax* 8(4), 108–12.
- Obrador-Pons, P.** 2007: A haptic geography of the beach: naked bodies, vision and touch. *Social and Cultural Geography* 8(1), 123–41.
- Paterson, M.** 2005a: Affecting touch: towards a felt phenomenology of therapeutic touch. In Davidson, J., Bondi, L. and Smith, M., editors, *Emotional geographies*, Aldershot: Ashgate, 161–76.
- 2005b: *Consumption and everyday life*. London: Routledge.
- 2006a: Feel the presence: technologies of touch and distance. *Environment and Planning D: Society and Space* 24(5), 691–708.
- Paterson, M.** 2006b: ‘Seeing with the hands’: blindness, touch and the Enlightenment spatial imaginary. *British Journal of Visual Impairment* 24(2), 52–60.
- 2006c: Seeing with the hands, touching with the eyes: vision, touch and the Enlightenment spatial imaginary. *The Senses and Society* 12, 224–42.
- Paterson, M.** 2007: *The senses of touch: haptics, affects and technologies*. Oxford: Berg.
- 2008: Digital craft, digital touch: haptics and design. In Hawk, B., Rieder, D. and Oviedo, O., editors, *Small tech: the culture of digital tools*, Minneapolis, MN: University of Minnesota Press.
- 2009: Remediating touch. Editorial in special issue ‘Re-mediating touch’. *The Senses and Society* 2(3), in press.
- Pocock, D.** 1993: The senses in focus. *Area* 25, 11–16.
- Porteous, J.D.** 1985: Smellscape. *Progress in Human Geography* 9(3), 356–78.
- 1986: Intimate Sensing. *Area* 18(3), 250–51.
- Radley, A.** 1995: The elusive body and social constructionist theory. *Body and Society* 1(2), 3–23.
- Ram, K.** 2005: Phantom limbs: South Indian dance and immigrant reifications of the female body. *Journal of Intercultural Studies* 26(1–2), 121–37.
- Reed, E.S.** and **Jones, R.K.** 1979: James Gibson’s ecological revolution in psychology. *Philosophy of the Social Sciences* 9(2), 189–204.
- Revill, G.** 1998: Samuel Coleridge-Taylor’s geography of disappointment: hybridity, identity and networks of musical meaning. In Leyshon, A., Matless, D. and Revill, G., editors, *The place of music*, London: Routledge, 197–221.
- 2005: Vernacular culture and the place of folk music. *Social and Cultural Geography* 6, 693–706.
- Rodaway, P.** 1994: *Sensuous geographies: body, sense and place*. London: Routledge.
- Roe, E.J.** 2006: Things becoming food and the embodied, material practices of an organic food consumer. *Sociologia Ruralis* 46(2), 104–21.
- Rowles, G.D.** 1978: Reflections on experiential fieldwork. In Ley, D. and Samuels, M., editors, *Humanistic geography: prospects and problems*, New York: Wiley, 173–93.
- 1980: Toward a geography of growing old. In Buttner, A. and Seamon, D., editors, *The human experience of space and place*, London: Croom Helm, 55–72.
- Scarry, E.** 1985: *The body in pain: the making and unmaking of the world*. Oxford: Oxford University Press.
- Seremetakis, N.** 1994: *The senses still: perception and memory as material culture in modernity*. Oxford: Westview Press.
- Serres, M.** and **Latour, B.** 1995: *Conversations on science, culture and time* (translated by R. Lapilus). Ann Arbor, MI: University of Michigan Press.
- Sherrington, C.** 1947: *The integrative action of the nervous system*. New Haven, CT: Yale University Press.
- Smith, S.** 1994: Soundscape. *Area* 26, 232–40.
- Smith, S.** 2000: Performing the soundworld. *Environment and Planning D: Society and Space* 18, 615–37.
- Stoller, P.** 1989: *The taste of ethnographic things: the senses in anthropology*. Philadelphia, PA: Temple University Press.
- 1997: *Sensuous scholarship*. Philadelphia, PA: University of Pennsylvania Press.

- Stoller, P.** 2004: Sensuous ethnography, African persuasions, and social knowledge. *Qualitative Inquiry* 10(6), 817–35.
- Straus, E.W.** 1966: *Phenomenological psychology: the selected papers of Erwin W. Straus* (translated by Erling Eng). London: Tavistock.
- Thrift, N.** 1997: The still point: resistance, embodiment and dance. In Pile, S. and Keith, M., editors, *Geographies of resistance*, London: Routledge, 134–152.
- 2000: Afterword. *Environment and Planning D: Society and Space* 18, 213–255.
- 2004: Movement-space: the changing domain of thinking resulting from the development of new kinds of spatial awareness. *Economy and Society* 33(4), 582–604.
- Thrift, N.** 2007: *Non-representational theory: space, politics, affect*. London: Routledge.
- Tuan, Y.-F.** 1974: *Topophilia: a study of environmental perception, attitudes, and values*. Englewood Cliffs, NJ: Prentice Hall.
- 1977: *Space and place: the perspective of experience*. London: Edward Arnold.
- van den Berg, J.H.** 1952: The human body and the significance of human movement: A phenomenological study. *Philosophy and Phenomenological Research* 13(2), 159–83.
- Wylie, J.** 2002: An essay on ascending Glastonbury Tor. *Geoforum* 33, 441–54.
- 2005: A single day's walking: narrating self and landscape on the South West Coast Path. *Transactions of the Institute of British Geographers* NS 30, 234–47.
- Yusoff, K.** 2007: Antarctic exposure: archives of the feeling body. *Cultural Geographies* 14, 211–33.