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## **Embodied Photography and Touring Food**

*'Places are like ships, moving around and not necessarily staying in one location. They travel, slow or fast, greater or shorter distances, within networks of human and non-human agents. Places are about relationships, about the placing of peoples, materials, images and the systems of difference that they perform.'*

(Bærenholdt et al., 2004, p. 146)

### **Introduction**

Photographing tourist destinations can be as important as, or sometimes more important than, travelling. Photographs can on the one hand become important objects for memorising those good old days and on the other become the end of travelling. They are viewed and shared with other after the end of journeys, and through collecting tourist places by snapshots, photography becomes an end itself (Sontag, 1979). Photographs become deprived of the contexts where they are taken. They become an art, a way of exhibiting the capability of travelling and producing photographs, instead of 'recording' what has been happening around the photographer. Yet with digitisation of cameras, producing, storing, sharing and editing photographs become much easier than before. No films are required and therefore the cost of photographing is decreased, and different ways of taking photographs encouraged. Apart from these obvious phenomena, what

differences does digitisation of cameras bring, in terms of using them and the effects the come with different usages, become the primary concern of this paper.

To investigate such problem, this paper adopts actor-network theory in order to see how technologies participate in a changing process and 'culture' of taking photos. Also, this paper draws on the insights from mobility studies to extend this paper to a broader social process or context that regulate as well as enable tourist to formulate their photos. The paper is based on a fieldwork in culinary tourism in Taiwan. In order to reflect the mobile character of tourist and the circulation of photography and information, this study adopts mobile ethnography which emphasises on the relationships constructed upon various interactions of actors than one or more physical locations (Wittel, 2000; Sheller and Urry, 2006). With the support of the fieldwork, this paper argues that digital cameras have the potential to create embodied virtual copresence for tourists to communicate their bodily engagement with places. The technological affordances of digital cameras are then considered as the performance that connects embodied experiences and visual production and consumption.

## **Aestheticising tourist places**

The process of aestheticising tourist places can be traced back to the development and the use of diorama, the primitive form of mediating places and rendering the real. Diorama, according to Slater (1995), involves striking experiences in which a form of magic show captures the audiences when seeing the material world being transformed into representation. But the twist, in a shorter version, here is that because audiences can see the consequence of representing but don't understand its mechanism, the visual device, diorama, is admired and mystified. And because it is the represented not the mechanism of representing that is grasped by the audience, diorama becomes the demonstration of the technical power. Consequently, it is such object that is attributed with power rather than the mechanism and the theories about the visual.

Such kind of mystification epitomises the admiration of cameras and photographs, rather than and embodied interactions in/with places. The idea of body-subject directs the intention to the movement of body in place (Seamon, 1980). The concept of body-subject indicates that consciousness is always embodied and inhabits place. Seamon argues that a place is revealed through bodily movement in the sense that the spatiality of one's home is structured in the coordination of intention and movement of body in that place. A place is therefore constructed around habitual movement and inhabitation within it. In analogous photography, such kind of relationships recedes. This kind of processes of knowing places is substituted by photography in tourism. Places are thought to be the material world transformed into collectable snapshots (Sontag, 1979). Photography is welcomed by its demonstration of material world without being noticed as a substitution of it, just like the way diorama is admired. Moreover, these snapshots aestheticise what is captured by camera and renders photos not only real but also treasured and collectable. It follows that the meaning of whatever being photographed is eroded and replaced by the appreciation of photographs as such and collect them into albums.

Tourist photography is therefore thought to obliterate embodied interaction with places. Osborne (2000) considers that photography and travelling have formed a circle since the nineteenth century. The circle in which the capability of aestheticising images instigates the desire for travelling on the basis of taking photos, and the aesthetic aspect of

photographs is the consequence of transforming a place into images. Photography also obliterates the copresent interactions with places, which were still possible when mediating a place is made through the camera obscura. Through this process, photographs are disembedded from a real place and generate meaning of touring a place from the consumption and collection of the visual. Assisted by the commodification of tourism and the development of capitalism, photography homogenises places as well as the characteristics of the places developed through dwelling in them.

## **Tourist performance, cameras and photographs**

Tourist photography aestheticises tourist experiences as well as reworks tourist memory about a place and connecting family members even at the moment of taking photos. To analyse photography in such a manner underlines the importance of performance and embodiment in tourism. In terms of walking, there are different patterns in which tourists walk through tourist sites, such as the Taj as Edensor suggests (1998). Through improvised interactions with places, tourists take up the representations of tourist places and yet create opportunities to reflect upon the structure that organises tourist places and representations. Tourist activities are therefore thought as a performance in which managing front-stage social contexts and back-stage creates space for tourists of being reflexive (see also Edensor, 2000).

The performance of tourists also applies to photographic activities. Tourist photography is often the product of intermeshing 'professions' knowledge about taking photos as well as different creations and shared by tourists as amateur photographer (Chaney, 1993). Such kind of photographic activities on the one hand is a way of aestheticising tourist places through photography, yet on the other brings on the opportunities to perform these places in different ways. There might be ironical, post-tourist, performance which mocks the traditional of taking photos in every tourist sites (Feifer, 1985; Edensor, 1998, ch. 4). Or tourists could perform different ways of engaging with tourist places, such as resisting tight schedule of visiting by on the one hand arguing with tourist guides and on the other photographing the site from different angles for compensating not enough time (Edensor, 2001, p. 76). Therefore, photography is suggested to be the emblem of tourist performance (Haldrup and Larsen, 2006).

Another important aspect of tourist performance concerning taking photos is the relationships emerging from the coordination of tourists and their cameras. A research on the tourists in Denmark investigates how cameras are used differently in order to take pictures of different scenes and to pose the tourists' family members (Bærenholdt et al., 2004, ch. 5). This research is important in at least three senses. Firstly, their discussion about performance and photography is a rejection to examine photography as representations of tourist experiences. Seeing from the perspective of representation neglects the process of how photos are produced and therefore risks the danger of obliterating various ways of engaging with tourist places, which is a significant source of reworking on memory through photography after journeys. Secondly, it marks the importance of socio-technical studies, e.g. actor-network theory, in understanding the processes and meanings of travelling. By looking at the hybrid of human and non-human (c.f. Latour, 1993), tourist destinations can be uncovered through one or several networks of transportations, corporations, local authorities and organisations, information and communication technologies, signs and symbols, images, tourists and so on. A tourist destination is constructed on the basis of these physical and imagery actors and thus

should be understood accordingly. Thirdly, following their propositions, understanding photography and its relation to family members who travel together is approached by revealing the photographic process of 'staging social relations and the transformation of places into private theatres of blissful family life' (Bærenholdt et al., 2004, p. 122).

The third point is of particular importance in this paper as it pinpoints the transformative potential of cameras. The transformative character of the human and non-human is crucial to the actor-network theory informed analyses in that in such network every single actor involves a series of translating, modifying or distorting processes which enable primitive machines or people to perform otherwise (Callon, 1991; Latour, 1999). Cameras seen in this fashion are not only machines being used for some tourists but mediators of tourists' romantic gaze or the intimacy shared by their family members (Haldrup and Larsen, 2003). Moreover, such kind of networking between places, tourists and cameras, adopting Law (1999), is never homogeneous but is in constant tension which perform both agency and structure. In other words, tourist photography highlights the performativity of the 'actor-network' that fabricates the social relation, e.g. intimacy, in association with the camera-tourist hybrid, and making it durable.

The discussions above mainly concentrate on the social relations with the emphasis of family. Although there are various discussions about embodied tourist experiences, none of them adequately explains how embodied interactions are connected and reworked through the hybrid of cameras and tourists. In the following, I discuss how such hybrid come into being and what difference it brings about.

## **Rhizomatic connections, cameras and online photo albums**

Rhizome is useful in explaining a flattened pattern of connecting tourists and cameras. Yet understanding the meaning of photography requires the tracing of the profound relationality in association with travelling and using cameras, which is the main purpose of this and the following sections.

Rhizome is often used as a powerful metaphor to describe the socio-technical fabrication of the social (Law, 1999) and the connections in the Internet (Lemos, 1996). For Latour (1999), rhizome captures the transformative character that actor and network perform. He uses Deleuze and Guattari's explanation of rhizome: that it is *intermezzo*, 'always in the middle, between things' (1987, p. 25). The networking is constantly in the state of becoming, 'all manners of becomings' (1987, p. 21; see also Latour, 2005). Such analysis unfolds the 'affordances' (Gibson, 1979; Hutchby, 2001) of digital cameras into different aspects. Firstly, digital cameras, such as compact digital cameras or camera phones, could be adopted as ways of taking notes. Some of the interviewees expresses that it's more convenient to organise information, such as bus schedules/routes or names/address, in digital format. The information can be easily accessed, stored and organised. Secondly, as one of the interviewees reflects, camera phones and consumer digital cameras are very useful in entertaining children. He takes pictures of the children and shows the pictures to them for hanging around with them. Thirdly, there is a constant negotiation of the quality of photos and the cameras to use. Ideally, as one interviewee says, a digital single lens reflex (DSLR) is better for producing photographs with higher quality, but in some social contexts it is not practical. One of the interviewees takes a lot of photos of food in restaurants and therefore requires the cameras that can afford the quality she accepts. And yet at the same time, the camera she uses can not disturb other

customers or concern the owners. These different sorts of connecting tourists and digital cameras reflect a rhizomatic character in that the networking of them is not purely for the purpose of producing aestheticised photographs that homogenise tourist experiences. There are also constant tensions and negotiations in the networking of the social contexts, physical locations, tourists' expectations of photographs and the capacities of their cameras.

Another character of rhizome taken up by the studies of the Internet is the heterogeneous connections that link from one rhizome to another. For Deleuze and Guattari (1987), rhizomes are comprised of infinite linear multiplicities and dimensions, and they change in nature when connecting to other rhizomes. In other sense, rhizomatic connections are flat, without essential homogeneity and hierarchy. They are also deterritorialised in the sense that the nature of the rhizomes changes when they connect to other ones. Such heterogeneity describes the formation of the Internet by many in their advocate of the appropriateness of rhizome to capture the fabrication of the Internet (Moulthrop, 1994; Aronowitz, 1996; Hillis, 1996; Shields, 1996; Landow, 1997). Their discussions centre on the rhizomatic connections that the Internet has prompted. They find the Internet as a deterritorialised sphere comprised of horizontally interconnected texts/hypertexts that stand against the rooted, structured space. The following quote summarises their idea of the Internet as rhizome: 'On this plateau, users are virtual nomads, phantoms who circulate in the structures of the labyrinth' (Lemos, 1996, p. 46). These heterogeneous connections also reflect the services of online photo album in that every online photo album is a rhizome which is comprised of the photos of travelling to a place, and which connects to other one's other photo albums, webpages or other people's albums. Therefore, again, the Internet, and more specifically online photo albums, is a plateau in which various photos circulate along hyperlinks, tags, or various albums. Accordingly, through the heterogeneous connections, these photos are deterritorialised because viewing a photo of a eating something in Taiwan might end up with skyscrapers in Chicago. Those diverse tourist experiences are juxtaposed together with various links in the Internet and hence produce different kinds of viewing experiences as well. Therefore, online photo albums reflect what Best and Kellner say that they free themselves from 'all roots, bonds and identities, and thereby resist the state and all normalizing powers' (Best and Kellner, 1991, quoted in Cresswell, 1997, p. 365).

Although these analyses capture some features of fabricating the social through the Internet, these connections are not completely rhizomatic. They may appear be deterritorialised juxtaposing of diverse photos together and connecting tourists and digital cameras, however, the production of tourist photos and networking of tourists and digital cameras follow diverse sets of relationality.

## **Digital cameras, photography and relationality**

I adopt the concept of profound relationality (Sheller and Urry, 2006) to suggest the ways in which tourists, cameras and other intersecting mobilities perform the meanings of taking photographs.

The mobility turn in sociology (Urry, 2000; Sheller and Urry, 2006) emphasises the importance of taking account of the movements of the social, the material and the technical with respect to how complicatedly they perform one another. Such emphasis is associated with analysing the heterogeneity and materiality of organizing the social (Law,

2002) and with the investigation of the ways in which social entities gain their significance through heterogeneous and material connections with other entities (Law, 2003). Of the multiple mobilities, the mobilities of images, information and technologies are particularly important here to examine how knowing a place, which was previously conceived as fixed to a physical location, is performed through complex relationality of places, tourists and media technologies. Therefore, the networking of digital cameras and tourists are only the starting point of exploring how taking photos are involved in complex socio-technical relations with other tourists, tourist industry, friends and families and media technologies.

In the interviews, there are three points which reveal how choosing and using digital cameras are embedded in various sorts of socio-technical considerations.

- The most primitive form of the interconnectedness between aesthetic values and technological capabilities is that analogous single lens reflex cameras are thought to be capable of producing more delicate photographs but should be supplemented by other kinds of digital cameras for at least two reasons. Most influential one is the trend of digitisation that subsequently affects the ways of exchanging photos and tourist experiences. Moreover, it is also to do with the convenience of photo editing with digital photos so that the photos match the aesthetic values of photographers.
- The second aspect of the concerns of choosing digital cameras reflected by the interviewees is that they want to produce photographs of higher quality, such as capturing motions, depth of field or night view, but feel DSLRs are too bulky and drawing too much attention from others. Therefore, consumer digital cameras become a better option. This choice is enhanced by their observations that even though camera phones are very handy, they can never reach the quality of consumer digital cameras.
- The third point is where brand loyalty also comes into play. Choosing and using cameras of a particular brand tell yet another aspect in which social connections take part in the performance of tourists and digital cameras. For one of the interviewees, using a particular brand of camera is an extension and transformation of the trust on his friend: his friend uses this particular brand and he follows. For another one, being loyal is a way of expressing her self-identity. She has been loyal not only to Canon (she has several digital cameras produced by Canon) but also to other products and services, and is proud of keeping doing so.

Throughout the interviews, relationality extends from digital camera-tourist to analogous cameras, digitisation (in the sense of technological developments and changing ways of social practices), trust, presentation of the self, social contexts and norms. Using digital cameras are then a kind of 'situated action' (Suchman, 1987) where various ways of using digital cameras are developed in accordance to the physical and social contexts as well as personal preferences and lived experiences. What digital cameras afford tourists to do is neither determined by technological advancements nor cultural structures. The networking of digital camera related actors is one part of prosthetic culture (Lury, 1998) in which expressing self is revealed through designing the 'functions' of digital cameras by considering complex relationality behind them. Such relationship between digital cameras and tourists reflects the idea of 'circulating 'entities' (Latour, 1999, p. 17) in that various kinds of socio-technical connections circulate, occur and perform so that these entities enrich their social meaning through these connections.

These connections also affect how different embodied tourist experiences are reworked through photography rather than obliterated. In the following, I present how these connects are made and what kind of presence they bring about with the case of touring food in Taiwan.

## **Embodied virtual copresence**

Being copresent has been important and made possible through various ways. The purest form of being copresent is made through eye-contact as Simmel suggests (c.f. Urry, 2004, p. 30). Also through talking, facial expressions or arranging meetings, troubles are solved, misunderstanding corrected and commitment and sincerity developed (Boden, 1994). These changes for copresence could involve intersecting mobilities of people, information, technologies and materials. Licoppe (2004) for example demonstrates that, with different types of telephones and SMS, the absent significant others are mediated into a web of managing connectedness and become available, present for sustaining social relations. Also important in managing presence and absence is that there are various materials and technologies which are not expected in everyday life and yet with which people are connected. Such framework is also useful in examining how camera phones are used in maintaining family ties. Ito (2005) suggests the concept of virtual copresence to describe how the sense of copresence is created virtually. The research draws on the couples who share and view the photos taken by their camera phone through moblogs. Although the photos are not sent instantaneously, a sense of belonging still emerges because they know their partners are willing to take the obligation of sustaining it. Ito's research demonstrates not only the necessity of managing physical and virtual presence but also that camera phones become an anticipated technology whose appearance has not interrupted the activities of taking photos (though there are disputes of using camera phones and other compact digital cameras in different social contexts). Nevertheless, while the developments of media technologies and services creates different ways of fostering copresence, Urry (2004) indicates the importance of physical copresence. Important to his argument is that mutual attentiveness is fostered through the convergence of transportation and communication technologies. In such condition, connections, and subsequently sustaining social relations, are made through intermittent travel, which brings physical copresence to extend or sustain virtual interactions, and which is increasingly supported by mobile machines.

Tourism is another way of making physical copresence, with friends and family and with places, and various kinds of 'connections' are made in the attempt of coupling food and place. As discussed above, embodied interactions is an important way of knowing a place and in Taiwanese context tasting places is an important embodied tourist activity. There are various foods that link to a particular place as the production of food involves people, weather, ingredients, restaurant, menus, decorations or cultures to make food 'authentic' (see also Germann Molz, 2003). And yet it is also the governmental or commercial promotions of the linkages between foods and places (e.g. various kinds of food festival) that strength the necessity of travelling for food. Apart from those, various television programmes centre on the process of making a particularly delicious dish, from how every ingredient is planed/bred/manufactured to how the ingredients are transformed into a dish that make everyone in the programmes desire to taste it extremely badly. Also, it is because the Internet provides an access to promote or exhibit various delicious foods and tasting experiences of a particular place, so that paying attention to what one would

like to try along one's journey becomes easy and gradually gains importance for Taiwanese tourists.

Moreover, it is also the embodied virtual copresence that enhances the activities of taking photos of food and reveals the embodied aspect of photography. One of the interviewees takes a lot of food photographs as shown in below. Her way of taking photos invites the viewers of her blog to scrutinise the food with her through stimulating the viewers' own experiences of similar food or the same restaurant. She complains that her pork chop was over cooked and became tough. One viewer replied that he/she can imagine the taste from the photo and another viewer shared he/she similar tasting experiences in that restaurant.



**Figure 1: Japanese fried pork chop**

Such kind of activities is partly aroused from the concerns of authenticity in the Internet (Hine, 2000). The commercial promotions presented in the abovementioned ways could not assure tourists how the foods in those promoted restaurants taste like. Furthermore, bloggers such as my interviewee produce their own photos and interpretations of the foods they taste. Such way of introducing food attracts viewers as well as brings concerns. When talking about disparate embodied experiences and the imaginations through photos, another interviewee responded that:

'... half and half [can a photo be understood]. You need to be there to have that feeling [about the place]. Another half requires imagination. And what is photographed becomes your own memory. Every time I see them, I feel that I'm back in that feeling again.'<sup>1</sup>

Following her words, communicating with photographs requires participation or imagination of the processes through which those photographs are taken. Imagining through digital photography therefore also requires comparable experiences to do so.

Drawing from the interviews, there are two aspects of absent presence involved in photographing toured foods. Firstly, following Thrift (2004), digital cameras always participate in tasting places and become one crucial gadget for travel (as well as dwelling)

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<sup>1</sup> Interview extract, 15/12/06.

so that they are seamlessly incorporated into the journey of touring foods. Yet it is also crucial to note that with the unconscious presence of digital cameras, photographing reworks not only virtual copresence for intimacy (Ito, 2005) but also embodied tourist performance with places (Edensor, 1998). Secondly, with the cooperation between tourists, their cameras, Internet, appropriate softwares and online services, a sense of presence unfolds before viewers as if participating into the journey where the viewers were absent. In a similar vein, absent embodied experiences are also brought into the present through the networking of photographs and the imagination of the process of bodily engagement with tourist places.

Nevertheless, digital photography on embodied interactions is not a guarantee of embodied virtual copresence. These photos are more a bridge, joining the two banks of a river, not juxtaposing them. They could be thought as a bridge with which two different sets of tourist experiences are connected at some points, and not connected at others. Embodied virtual copresence only appears when the connections are established, rather than a pre-given status, being present whenever a viewer accesses any photo. In other words, digital photographs lose the 'power' that analogous cameras can 'produce' or are accused of in rendering the real and aestheticising tourist experiences (Sontag, 1979). Digital photography entails more networking of machines, humans, technologies and even softwares to perform a series of tourist experiences: it entails more of what Barthes (1981) describes as 'there has been'. That is to say that the problem of referentiality between 'representations' and 'the represented' is reframed. What connects tourist places and photographs do not come from dwelling in that place. And referentiality is not substituted by widely circulating images, either. Rather, it is the embodied interactions of places and photographing them that 'glue' (Sheller, 2004) the knowledge of places and the different tourists together. The embodied knowledge of that particular tourist destination becomes transferable when the photographs about that place invoke the resonance from other tourists' experiences of the same place or the same sorts of places or experiences.

## **Conclusion**

In the discussions above, this paper attempts to indicate various ways in which the 'functions' of digital cameras are explored through technological capacities, social contexts, lived experiences and so on. Such way of understanding digital cameras sheds light on how presence and absence are managed through using digital cameras and photography. The way embodied virtual copresence is managed is then another way of associating embodiment with visuality. As Jokinen and Veijola (2003) says, eyes are one part of the body and subject to the way of posing body, and therefore seeing tourist places is also influenced by bodily engagement with places. With the affordances of digital cameras, bodily senses can be further connected through capturing various elements that enact viewers' imagination and experiences which relate to their bodily senses.

Photography is still an important way of collecting tourist places and affirming social relation. Nevertheless, when 'collecting', digital cameras afford different possibilities and meaning for such activity. It means on the one hand collect the aspect akin to information of tourist places, what to eat, where and when. On the other, collecting is also preservation and enactment of the bodily senses that tourists once have associated with one or more places, through which embodied knowledge are shared and intimacy enhanced.

## Reference

- Aronowitz, S. (1996) *Technoscience and Cyberculture*. London: Routledge.
- Barthes, R. (1981) *Camera Lucida: Reflections on Photography*. Translated by Howard, R. NY: Hill and Wang.
- Bærenholdt, J. O., Haldrup, M., Larsen, J. and Urry, J. (2004) *Performing Tourist Places*. Aldershot, Hants: Ashgate.
- Boden, D. (1994) *The Business of Talk: Organizations in Action*. Cambridge: Polity.
- Callon, M. (1991) Techno-economic networks and irreversibility in Law, J. (ed.), *A sociology of Monsters: Essays on Power, Technology and Domination, Sociological Review Monograph 38*, 132-61, London: Routledge.
- Chaney, D. (1993) *Fictions of Collective Life*. London: Routledge.
- Cresswell, T. (1997) Imaging the nomad: Mobility and the postmodern primitive in Benko, G. and Strohmayr, U. (eds.), *Space and Social Theory: Interpreting Modernity and Postmodernity*, 360-82, Oxford: Blackwell.
- Deleuze, G. and Guattari, F. (1987) *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press.
- Edensor, T. (1998) *Touring the Taj: Performance and Meaning at a Symbolic Site*. London: Routledge.
- (2000) Walking in the British countryside: Reflexivity, embodied practices and ways to escape. *Body and Society*, 6(3-4), 81-106.
- (2001) Performing tourism, staging tourism. *Tourist Studies*, 1(1), 59-81.
- Feifer, M. (1985) *Going Places: The Ways of the Tourist from Imperial Rome to the Present Day*. London: Macmillan.
- Germann Molz, J. (2003) Tasting an imagined Thailand: Authenticity and culinary tourism in Thai restaurants in Long, L. (ed.), *Culinary Tourism: Eating and Otherness*, Lexington, KY: University Press of Kentucky.
- Gibson, J. J. (1979) *The Ecological Approach to Visual Perception*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Haldrup, M. and Larsen, J. (2003) The family gaze. *Tourist Studies*, 3(1), 23-45.
- (2006) Material cultures of tourism. *Leisure Studies*, 25(3), 275-89.
- Hillis, K. (1996) A geography of the eye: The technologies of virtual reality in Shields, R. (ed.), *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies*, 70-98, London: Sage.
- Hine, C. (2000) *Virtual Ethnography*. London: Sage.
- Hutchby, I. (2001) Technologies, texts, and affordances. *Sociology*, 35, 441-56.
- Ito, M. (2005) Intimate visual co-presence, Retrieved 7 March, 2006, <http://cemore.blogspot.com/2005/11/intimate-visual-co-presence.html>.
- Jokinen, E. and Veijola, S. (2003) Mountains and landscapes: Towards embodied visualities in Crouch, D. and Lübbren, N. (eds.), *Visual Culture and Tourism*, 259-78, Oxford: Berg.
- Landow, G. P. (1997) *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology*. Baltimore: Johns Hopkins University Press.
- Latour, B. (1993) *We Have Never Been Modern*. Hemel Hempstead: Harvester Wheatsheaf.
- (1999) On recalling ANT in Law, J. and Hassard, J. (eds.), *Actor Network Theory and After*, Oxford: Blackwell.
- (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.

- Law, J. (1999) After ANT: complexity, naming and topology in Law, J. and Hassard, J. (eds.), *Actor Network Theory and After*, 1-14, Oxford and Malden, MA: Blackwell.
- (2002) On hidden heterogeneities: Complexity, formalism, and aircraft design in Law, J. and Mol, A. (eds.), *Complexities: Social Studies of Knowledge Practice*, 116-41, Durham: Duke University Press.
- (2003) Networks, relations, cyborgs: On the social study of technology, Retrieved 13 March, 2007, <http://www.comp.lancs.ac.uk/sociology/papers/Law-Networks-Relations-Cyborgs.pdf>.
- Lemos, A. (1996) The labyrinth of Minitel in Shields, R. (ed.), *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies*, 33-48, London: Sage.
- Licoppe, C. (2004) 'Connected' presence: The emergence of a new repertoire for managing social relationships in a changing communication technoscape. *Environment and Planning D: Society and Space*, 22, 135-56.
- Lury, C. (1998) *Prosthetic Culture: Photography, Memory and Identity*. London: Routledge.
- Moulthrop, S. (1994) Rhizome and Resistance: Hypertext and the Dreams of a New Culture in Landow, G. P. (ed.), *Hyper/Text/Theory*, 299–319, Baltimore: Johns Hopkins University Press.
- Osborne, P. (2000) *Travelling Light: Photography, Travel and Visual Culture*. Manchester: Manchester University Press.
- Seamon, D. (1980) Body-subject, time-space routines, and place ballets in Buttimer, A. and Seamon, D. (eds.), *The Human Experience of Space and Place*, 148-65, London: Croom Helm.
- Sheller, M. (2004) Mobile publics: beyond the network perspective. *Environment and Planning D: Society and Space*, 22, 39-52.
- Sheller, M. and Urry, J. (2006) The new mobilities paradigm. *Environment and Planning A*, 38, 207-26.
- Shields, R. (1996) Introduction in *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies*, 1-10, London: Sage.
- Slater, D. (1995) Photography and modern vision: The spectacle of 'natural magic' in Jenks, C. (ed.), *Visual Culture*, 218-37, London: Routledge.
- Sontag, S. (1979) *On Photography*. Harmondsworth: Penguin.
- Suchman, L. A. (1987) *Plans and Situated Actions: The Problem of Human-Machine Communication*. Cambridge: Cambridge University Press.
- Thrift, N. (2004) Remembering the technological unconscious by foregrounding knowledges of position. *Environment and Planning D: Society and Space*, 22, 175-90.
- Urry, J. (2000) *Sociology beyond Societies: Mobilities for the Twenty-first Century*. London: Routledge.
- (2004) Connections. *Environment and Planning D: Society and Space*, 22, 27-37.
- Wittel, A. (2000) Ethnography on the move: from field to net to Internet. in *Forum: Qualitative Social Research*, vol. 1.