Exploring an Absent Presence: Wayfinding as an Embodied Sociocultural Experience

by Paul Symonds, David H.K. Brown and Valeria Lo Iacono

Cardiff Metropolitan University; Cardiff Metropolitan University; Cardiff Metropolitan University

Sociological Research Online, 22 (1), 5
<http://www.socresonline.org.uk/22/1/5.html>
DOI: 10.5153/sro.4185

Received: 20 Jun 2016 | Accepted: 28 Dec 2016 | Published: 28 Feb 2017

Abstract

Wayfinding has often been seen as being about the quickest or shortest possible route between two points (Hölscher et al 2011; Tam 2011; Haque et al 2006). Moreover, this process has very often been seen as a cognitive one, with the experiential nature of wayfinding and with the embodied, emotional and sociocultural aspects of this experience conspicuously absent. We argue that wayfinding is rarely a purely cognitive process that involves an individual person, who is entirely instrumental in navigating a direct and precise route, but instead that this is a process almost always directed according to embodied and sociocultural needs. We propose a reassessment of present wayfinding definitions and suggest an alternative understanding that includes sociocultural elements, embodied individuals and experience through their embodied senses, as crucial elements of the concept. Seeing wayfinding from this different sociocultural ontological viewpoint, opens up new ways of understanding and planning wayfinding systems.

Keywords: *Wayfinding, Sociology, Embodiment, Absent Body, Sociocultural Studies*

Introduction

1.1 The concept of wayfinding is often considered as being about the quickest or shortest possible route between two points (for example see Hölscher et al 2011; Tam 2011; Haque et al 2006), yet wayfinders often choose longer routes, more comfortable routes, travel with and amongst other people, draw on the help of other people, and have different individual needs according to their corporeal and cognitive states.

1.2 Hitherto, the majority of wayfinding studies have not focused on the experiential nature of wayfinding, with the body at the centre of this experience. It is vital, we propose, that wayfinding be seen as an embodied experience if the full dynamics of this process are to be better understood. A significant observation on the current wayfinding literature therefore, is that the body is notably absent. This is perhaps not too surprising given, as Passini (1981: 17) explains, that:

> The term wayfinding, although it has appeared in the literature on environmental psychology, psychology, geography and even anthropology, does not encompass a field of study in its own right.

1.3 In this paper, we propose a holistic view of wayfinding, in which cognitive elements are not dismissed, but they are incorporated within a wider context that includes socio-cultural elements and individuals (who experience the world through their embodied senses), acting both independently and relating with each other. In order to achieve this shift of focus, we applied what Millls (2000 [1959]: 15) called the 'sociological imagination', which 'is a quality of mind that seems most dramatically to promise an understanding of the intimate realities of ourselves in connection with larger social realities'. This conceptual shift helped us to position wayfinding within the discipline of sociology, allowing us to uncover the dynamic social and cultural elements of wayfinding, which we will highlight in this paper. The different but connected areas of travel and mobility have already been investigated sociologically (Cresswell 2006; Goh 2013; Gottdiener 2000; Urry 2007), but the connection, we argue, also needs to be made for wayfinding. We agree with Cresswell (2006: 6, 7) when he argues that

> Movement is rarely just movement; it carries with it the burden of meaning … It is this issue of meaning that remains absent from accounts of mobility in general, and because it remains absent, important connections are not made.

1.4 Equally, the issue of meaning is important in understanding wayfinding as a socio-cultural and embodied activity, which will allow us to create connections and generate ideas that will shed new light on how people find their way. We highlight, for example, the effects of group wayfinding, and concepts such as the entwined knot, which Ingold (2011: 148) uses to explain how we (multiple people) use paths which ultimately entwine much like a knot; the more the lifelines are entwined, the greater density of the knot. In a wayfinding context, our own routes thus impact other people's routes. We do not, in other words, wayfind in social vacuums, but in a socially dynamic environment. Even in extreme locations, we rarely wayfind alone without some form of what Goffman and Best (2005) refer to as co-presence, a presence which we might not consciously consider, yet which acts as a sociocultural influence as we try to find our way from A to B. A clear example that illustrates how a socioculturally shaped environment affects the way in which people, as social actors, wayfind, is provided by Early (1992: 38, 39) with regards to how *baladi* people in Cairo wayfind differently from *afrangi* [1] people:

> In baladi geography, landmarks are more important than street names: so too, the baladi ethos is unstructured and personalized … while the baladi … enjoy asking for directions to landmarks and houses in baladi back lanes, the afrangi person who has grown up in more modern, grid-structured neighborhoods may view baladi lanes as convoluted and confusing. In a similar manner, the baladi Cairene sees Cairo's new, distant suburbs … as orderly, depersonalized square blocks. Faceless but functional, one navigates them not by landmarks, but by street names and numbers. Offering little chance for social interaction, their sterility bewilders baladi visitors.

1.5 Informed by a sociocultural perspective, this article will discuss the role of the body in wayfinding. We propose that the presence of the body should not be neglected, because the embodied effects of the wayfinding process are central to how wayfinding is experienced. The effects of the body on wayfinding are twofold. Firstly, they can be analysed from a kinaesthetic and experiential point of view, as it has been pointed out in the field of tourism studies by Haldrup and Larsen (2006: 284) who state that 'the embodied and sensuous experience of movement is kinaesthetically sensed through our joints, muscles, tendons and so on as we move in and across the physical world.' Secondly, the way in which embodied people move as they wayfind can reveal useful insights into their sociocultural view of the world and, vice versa, society and culture affect the way in which people move as they wayfind. We concur on this point with Cynthia Cohen Bull (aka Novack) who, in her studies on different dance genres, took into account both movements and sociocultural environment, on the premise that the body and the mind are connected and (Novack 1988: 103) 'to detach one aspect from another for analytical purposes can contribute valuable insights into the nature of movement, but if one aspect is taken as the whole, distortion results.' Similarly, wayfinding is experienced differently according to a person's class, gender ability, ethnicity, age and sexuality amongst other things and we propose that the wayfinding discourse, for this reason, can benefit greatly from being approached from an embodied socio-cultural perspective. We argue that people develop their own sociological 'wayfinding habitus', i.e. a system 'of durable, transposable dispositions' (Bourdieu 1977: 72), expressed through practice via the body and which is built overtime and is, therefore, 'embodied history' (Bourdieu 1990: 56).

1.6 More specifically, in what follows, we first consider some existing definitions of wayfinding and how the body and experience is notably absent as a subject of focus. We also briefly clarify our position with regards to the differences and similarities between navigation, travel and wayfinding. Next, following Shilling (2012), we illustrate with examples from the existing wayfinding literature, how the body can be considered an 'absent presence' in that the body and experience through the body are clearly present, assumed or implied in this work, yet rarely articulated as a subject of concern. In order to address the existing limits of wayfinding in the literature, we then propose a holistic conceptual framework for wayfinding and a revised definition, describing wayfinding as a more body-centric and sociocultural activity and process. Our framework draws on a range of concepts provided by the theories of Ingold, Goffman, Foucault and Bourdieu. For the purpose of clarity, the framework is then illustrated thematically around a number of key types of wayfinding bodies that represent the blind spots in the existing wayfinding literature: *communicative bodies, controlled and docile bodies, safe and anxious bodies and pleasure seeking bodies* respectively. Each of these embodied 'modalities' of wayfinding is discussed in relation to our framework and a range of sociological sensitising concepts. In conclusion, we argue that, being aware of the embodied and social aspects of wayfinding, will pave the way for a better understanding of how the needs of different types of people (for example those with disabilities), could be better catered for in future wayfinding systems.

Existing Wayfinding Definitions

2.1 The discourse surrounding wayfinding dates back at least as far as the 1500s, when Polynesian

islanders found ways to navigate across the oceans (Dening 2008; Passini 1981). The islanders used the stars and landmarks to wayfind without the need to know exactly where they were located geographically at any one time, in order to get to their destination. The acute abilities of some islanders to use natural elements to navigate, does not necessarily suggest that these techniques were easy to learn. In his study living with the islanders of Puluwat in the South Pacific, studying their wayfaring skills, Gladwin (1974) found that only a few were ever able to fully master these skills, and, even when they did, it took years to do so.

2.2 Those within the local Polynesian tribes, who were able to master the necessary skills, were always held in the highest esteem within these tribes. The cultural capital of these master wayfinders was high, due to the importance of these skills in facilitating movement and the resulting trade and communications between the islands. Gladwin (ibid: 125), in his anthropological research, found that the 'navigator in Puluwatan tribes is respected more than anyone including elected officials and the local magistrate'.

2.3 The term 'wayfinding', as a one-word concept which is now commonly used, is taken from the American theorist Kevin Lynch (1960: 3), who stated that wayfinding is 'a consistent use and organization of definite sensory cues from the external environment'. Lynch focused on how cues are taken from the local urban environment to perform wayfinding activities. As an architect and urban planner, Lynch's focus was understandably directed towards space and the built environment. The commonality in later definitions is the use of words such as 'relocate', 'moving', 'following' and 'movement' to describe the need to go from one place to another i.e. there is a need at some point in the wayfinding process to move through space and time from one place to another (even if the trip is circular i.e. back to the original point). The second commonality in most of the definitions is the concept of 'determining', 'navigating' or 'finding' one's way, i.e. the process of having to work out how to get between places or through space.

2.4 While well-intentioned, some definitions nonetheless remain problematic from the sociocultural perspective of embodiment. For example, the definition by Leib et al (2012: 80), who define (airport) wayfinding as 'the process by which one navigates an airport terminal using visual cues' ignores other bodily senses and needs. The emphasis on 'visual cues' illustrates an ocular bias which ignores how other senses might be involved in the wayfinding process. One practical implication of such a view is that it alienates the needs of people with sight problems, an issue raised by Small et al (2012). Furthermore, such a definition ignores the socially connected and very common act of people asking (Meilinger and Knauff, 2008).

2.5 Definitions such as that provided by Blades (1991: 1) who defines wayfinding as 'the ability to learn and remember a route through the environment', focus on the cognitive dimension of wayfinding. Whether or not we actually need to learn and remember the route in all instances of wayfinding is questionable, given the heavy and often imposed use of signage in some contexts and also when we consider Fewings' (2001: 179) concept of *recreational* wayfinding 'where the traveller has to reach a destination while not in a hurry and therefore the experience of wayfinding takes priority over the functional aspect of getting from A to B'. When shopping for recreational purposes in a shopping centre, we need to find our way and we sometimes rely on signs in the environment to do so, but we do not have to remember nor learn the route. The need to remember and learn a route, hence cannot form a fundamental part of any general definition of 'wayfinding'. According to Raubal (2008: 1243)

> Wayfinding behavior is the purposeful, directed, and motivated movement from an origin to a specific distant destination that cannot be directly perceived by the traveler. It involves interaction between the wayfinder and the environment.

2.6 There is logic in the idea that there is no need to wayfind and navigate if you can already, for example, see the destination but this is also a questionable assumption for a general definition. The use of 'landmarks' (see Head and Isom 2010; Hund and Padgitt 2010; Allen 1999), provides a destination point and yet the landmark may be distant and we may lose sight of the landmark at certain times as we move, such as when our view is blocked by tall buildings as we walk through a city or when it is possible to see the destination, but the path to it may be blocked. Finally, the ultimate destination might also be the starting point at which we are stood, such as in the case of wayfinding which involves city exploring. In this case the destination can be said to come in the form of a 'time destination' rather than a space/location destination.

2.7 Peponis et al (1990: 561) posit that 'wayfinding is a term that can refer to a rather narrow concern: That is, how well people are able to find their way to their particular destination without delay or undue anxiety'. The contribution by Peponis et al is important in that the embodied experience of wayfinding is touched on, albeit with only one specific emotion highlighted, that of 'undue anxiety'. A focus on undue anxiety might be perceived to

suggest that wayfinding is about avoiding bad emotions rather than also experiencing positive ones. The presence of the body and of the embodied experience in the wayfinding process has begun to be considered in part, in the definitions produced by Raubal (2008: 1243) and Farr et al (2014: 90) (who mention 'the interplay between human and environmental factors'), both of whom move towards an appreciation of the body. The most commonly used definitions though, all fail to *explicitly* embrace the embodied experiential nature of wayfinding.

2.8 While several wayfinding definitions (see Lynch 1960: 3; Raubal 2008: 1243; Farr et al 2014: 90) also give mention of the interaction with the environment in wayfinding, Dening's (2008: 147) view that 'way-finding (sic) is a more interpretive craft closer to the signs the systems of the cosmos imprint on the environment' is a paradigm shift which moves towards valorising subjectivity and particularism over the quest for discovering objective and universal laws of how *all* people wayfind. This shift is necessary and important as any account of subjectivity and the particular has to account for the specificities of context and the *embodied subjects* within that context. Put differently, each wayfinding experience is unique to the individual (which is not to say these unique experiences do not share significant commonalties). Moreover, wayfinding is an embodied *process* of finding our way between two points and, in addition, this process is thoroughly interpenetrated and thus inseparable from the specific time and space (i.e. context) in which it occurs.

2.9 Dening's view also offers a paradigm shift in another sense. It follows that if the body, experience, subjectivity and context are important to understanding wayfinding, then wayfinding research needs to engage a sociocultural context, something which hitherto has been lacking in this literature. The influence of embodiment within sociology is of particular importance. For example, Shilling (2001) makes a strong case for placing embodiment at the heart of the field of sociology, whilst Crouch and Desforges (2003), take steps to develop embodiment in cultural geography, when analysing tourist encounters.

2.10 It is worth also defining the relationship between wayfinding and other terms which populate the wayfinding discourse and which can blur definitions of wayfinding. The term 'travel' is also used often in conjunction with wayfinding, given that both terms involve movement between places. Travel though is a much more generic term which can be defined as 'to move or go from one place to another' (Cambridge n.d.) and which does not refer to the actual interpretive craft of how we find our way between two points.

2.11 The term wayfinding and navigation are sometimes used inter-changeably (see Bradley and Dunlop 2005; Churchill et al 2008; Head and Isom, 2010). Others, such as Wiener et al (2009) though, consider wayfinding a sub-set of navigation. Our position follows that of Dening (2008) and Ingold (2000) who interpret wayfinding as being an interpretive craft that is about how we find our way, with navigation a sub-set of wayfinding. Wayfinding for us, in other words, involves navigation but also the social interactions (such as people asking) and decisions based on embodiment (i.e. to keep ourselves safe on certain routes) and is a term that includes more than navigation.

Re/uncovering the Body in Wayfinding

3.1 Shilling (2012: 209) contends that a necessary first step in developing a 'fully embodied sociology', is to render visible, 'the absent presence of the living body in social thought' (Ibid). In bringing an embodied and experienced sociocultural focus to wayfinding studies, therefore, we consider a number of instances where this absent presence phenomenon occurs in existing wayfinding literature.

3.2 We begin with an illustration from Lynch (1960: 4), who gave mention to embodied emotions but, as an architect, projected wayfinding as a cognitive phenomenon best addressed through the construction of a scientifically verified expert system. However, even here embodiment occasionally bleeds through as an absent presence. Lynch (1960: 4) provides reference to this absence by stating: 'Let the mishap of disorientation once occur, and the sense of anxiety and even terror that accompanies it reveals to us how closely it is linked to our sense of balance and well-being'. Far from being absent, in this account of wayfinding, the body is *fully present* not only in physical movements, but also in acts of cognition such as the making of mental maps, decisions about routes etc, all of which are experienced in tandem with somatically experienced stresses and euphorias of *being* in a context. As Urry (2007: 48) points out, 'the body especially senses as it moves… Especially important in that sense of movement… is that touch, of the feet on the pavement or the mountain path, the hands on a rock-face or the steering wheel.' Gladwin (1974) supports this embodied movement as we move from A to B, giving mention of how the feeling of waves under a boat can provide valuable navigation information for one of the tribe's seafaring wayfinders, just as a city street sign can for an urban traveller. In both cases, the implicit presence of the interaction between body sensation and environment can have a central impact upon how we

wayfind, in what we agree with Dening (2008) is an interpretive craft.

3.3 Many examples exist which begin to illustrate how, in wayfinding, the body is rarely the focus or *subject* of wayfinding studies, despite being implicitly central throughout the process of wayfinding itself. Stokols et al (1978), for example, evaluated (embodied) emotions such as stress in their study on commuting, whilst Cresswell (2006) has connected aspects of embodiment with the mobility element of wayfinding. Many valuable articles on wayfinding use virtual tests, which have routes with no other users present during the tests (see Murakoshi and Kawai 2000; Slone 2015). By focusing on wayfinding *systems* which are devoid of, yet only go so far as implying / assuming the consistency of behaviour of all human bodies, important aspects of what Dening (2008) calls the 'interpretive craft of wayfinding' are rarely uncovered, or if they are, they are seldom seen as important. Apart from Dening (2008), the only exception to the absent present view of the body in wayfinding literature is that provided by Lueg and Bidwell (2005: 2) who argue:

> Wayfinding has shown to be a truly embodied activity involving physically moving the body, re-orientating the body, adjusting eyes to different light conditions, and so on…The wayfinding perspective forces the researcher to look into otherwise easily overlooked embodiment issues and suggests that there may be a lack of research on the relevance of embodiment to information behavior research.

3.4 Lueg and Bidwell provide the clearest argument that wayfinding needs viewing as a fully embodied experience. However, Lueg and Bigwell's view remains the exception and it is worth noting that their perspective was informed from a computer science and information behaviour perspective. Following Lueg and Bidwell, we further suggest that wayfinders get thirsty, tired, scared, anxious, hungry, wish to avoid getting wet, cold, too hot, too alone and need to use their body functions. At others times, some wayfinders may seek out the most dangerous routes, tracking through jungles or climbing a rock face rather than taking a simpler route. Indeed, the manner in which we wayfind might be dictated by the bodily experiences and capacities we either seek to avoid or which simply cannot be ignored.

3.5 Intuitively, therefore, the embodied, experiential aspect of wayfinding is clearly omnipresent and significant because this absent presence creates *blind spots,* which have been noted by Lueg and Bigwell (2005: 2):

> From the wayfinding perspective…human-information interaction clearly has a physical, embodied dimension. Embodiment as a constituent of human-information interaction also appears to be worth more attention as more recent perspectives in cognitive science question the traditional separation between mind and body, and also the separation between body and environment.

3.6 In the section that follows, we will build a holistic framework of wayfinding, aimed at addressing the embodied and sociological aspects of wayfinding, with a view to exploring some of these blinds spots in a little more detail.

Seeing Wayfinding as an Embodied Sociocultural Experience

4.1 In order to address the existing limits of wayfinding in the literature, we have devised a sociological and holistic framework for wayfinding. This framework is inspired by a series of concepts from the writings of Bourdieu, Ingold, Foucault and Goffman, and from two other existing models. The first model, from the field of wayfinding, was constructed by Farr et al. (2014). It is based on a study of wayfinding in airports, which follows a quantitative methodology, and it focuses on the interaction of human factors and environment in wayfinding. We build on this model, by introducing a qualitative sociocultural and embodied dimension, which tries to identify the reasons why certain elements may be important in wayfinding and how they interact. The second model, from which our wayfinding conceptual framework has been inspired, is qualitative and sociocultural and is the base for a holistic view of dance as intangible cultural heritage (Lo Iacono *and Brown.* 2016). In this model, individuals (as embodied agents who have emotions and knowledge), society, traditions, space, time and artefacts constitute a system in which 'heritage and human beings are indissolubly connected and continuously shape each other in an open-ended fluid dialogue' (Lo Iacono *and Brown.* 2016: 100).

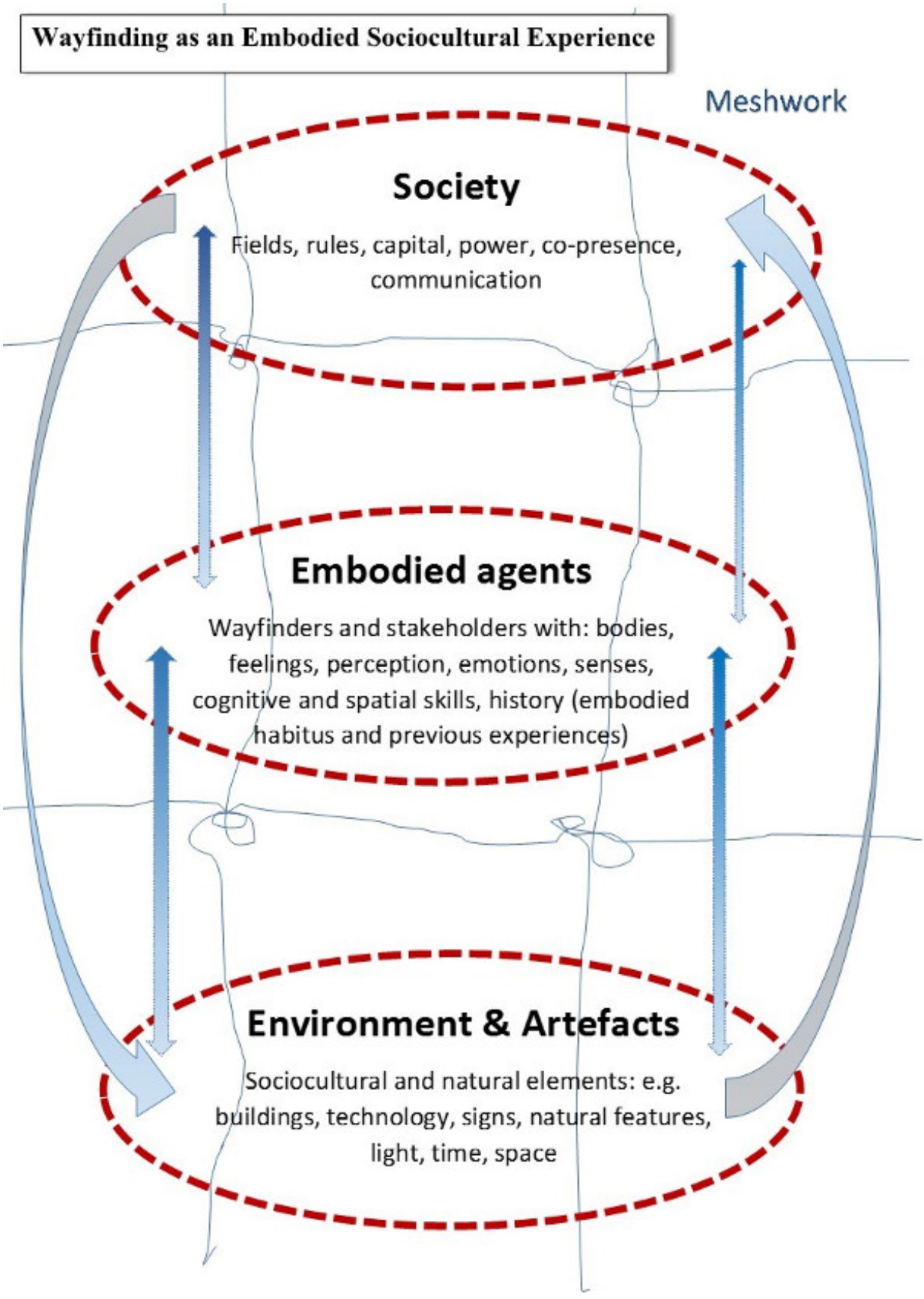

Figure 1. Framework for wayfinding as an embodied sociocultural experience.

4.2 Figure 1 highlights three main elements: society, embodied agents and environment and artefacts. These three elements are surrounded by separate dotted ovals for clarity, but this does not mean that they are separate from each other. Indeed, they overlap and connect with each other, hence we use arrows to represent connection but also movement within the meshwork. Following Ingold's (2011) concept, the meshwork, in Fig 1, is represented by lines along which embodied agents live and meet at 'entwined knots' (Fig 2). We see the meshwork as the physical setting in which wayfinding takes place, also occupied by environmental and artefactual elements, in which behaviour is ruled by society (in interaction with individuals and natural elements).

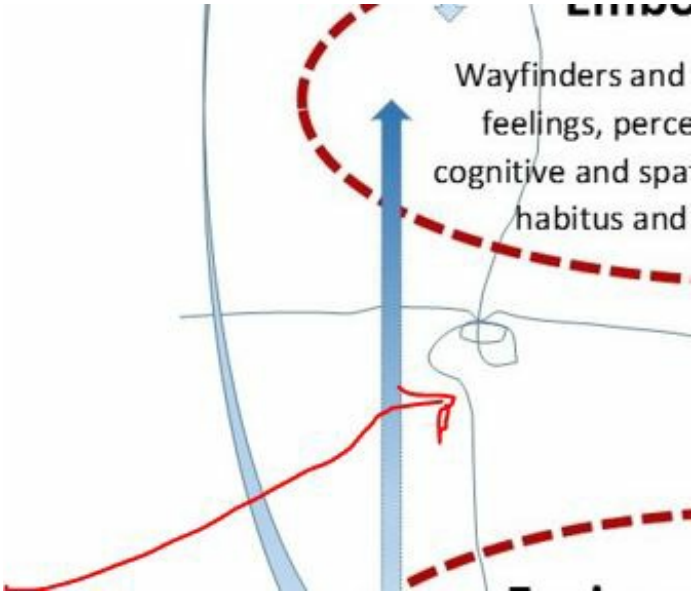

Figure 2. The entwined knot. The knot shows how paths converge to create a bottleneck or a knot.

4.3 Ingold's concept of meshwork helps to explain the dynamic nature of wayfinding, away from a simply A to B route. 'It is in the binding together of lines, not in the connecting of points, that the mesh is constituted" Ingold (ibid) explains in reference to wayfaring. The meshwork from Ingold (see Fig. 3 below) helps to highlight how routes we take, interact and continually cross over and interact with the routes of others. We do not simply find our way between A and B quickly and directly and alone. These routes are often taken together with others, to the same and different locations, along routes for pleasure and often the destination is heuristic, in the sense that we move from point to point in line with changing criteria in what is an interactive context-bound process.

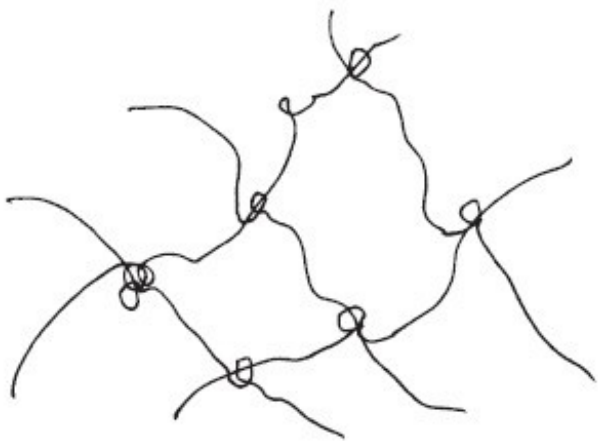

Figure 3. A meshwork - Taken from Ingold (2011: 152)

4.4 In the society oval shape in the diagram, in Fig 1, we have included fields, rules and capital, following Bourdieu's (1992) theory of practice according to which a field is a specific area of society, with its own rules and internal relationships, independent from the other fields. Inside each field, agents interact trying to increase their own capital, which can be social, economic or cultural. In relation to wayfinding, we will mention in the *controlled and docile bodies* section how, for example, people with a high level of social and/or economic capital can be led through areas not normally accessible for people who do not have the same level of capital. Other elements we have included within the society oval are: co-presence (Goffman 2005 [1967]), with regards to how, for example, *communicating bodies* are always socially influencing each other; power as in the ability to guide*controlled and docile bodies* through the environment, a concept inspired by Foucault and Sheridan (1991), and communication. Communication is present in Farr et al's (2014) model, but in our model we connect it to society in wider sense.

4.5 Embodied agents are individuals and groups of individuals who have a certain amount of freedom, or

agency, to wayfinding, but within the limits imposed by society and/or the environment (built or natural). We have included in the same oval, together with wayfinders, stakeholders who influence wayfinding through, for example, steering behaviour. Wayfinders and stakeholders are the players who interact in the social field. Embodied agents employ and are influenced by their own bodies, feelings, perceptions, emotions, senses (such as in the examples of *safe and anxious bodies* and *pleasure seeking bodies*), cognitive and spatial skills (as highlighted by Farr et al [2014]) and history. History in the form of previous experiences is important in embodying wayfinding, as it encourages a focus not only on the journey through a given space, but also through time before, during and after the actual corporeal movement through that space. Ryan (1997: 195) illustrates this point, commenting that 'a holiday begins with the last holiday – the most recent vacation experience and the re-immersion into the daily world often creates a longing for the next holiday'. This cognitive journey through time, in the planning and construction of the journey, evokes emotions drawn from previous wayfinding experiences and projected to future experiences, such as wishing to re-create a good experience, avoid a bad one or indeed seek out a new one. In our model, however, history is not only limited to the previous experiences of a place, as in Farr et al's (2014) model, but it also extends to agents' embodied 'habitus', or wayfinding habitus.

4.6 Environment and artefacts include elements such as the built environment, landmarks, spatial features, light, technology (such as means of transportation but also satnavs or the internet that can aid wayfinding). These elements, in Farr et al.'s (2014) model were categorised under different groups (for example, the web, maps and signs under communication, built elements under environmental factors). We include them in the same category as they are all elements that are external to the embodied agents, but that are socioculturally influenced and/or perceived. These elements can influence wayfinding (for example, the perception of time can influence our urgency to get to a destination and, therefore our wayfinding strategy) or they can aid wayfinding (for example, we can use the internet to study a route in advance, or use maps, signs or mobile apps to find our way).

4.7 Artefacts that aid wayfinding, moreover, can be considered a form of what Bourdieu calls objectified cultural capital (Bourdieu and Wacquant 1992), or what for Giddens are allocative resources or 'forms of transformative capacity' (Giddens 1984: 33). These artefacts are resources that, drawing on Giddens' Structuration theory (Giddens 1984), allow social agents to interact with the world and can be enabling or constraining. The way in which artefacts affect the body of their users is articulated by Burkitt (1999: 36), who posits:

> The term artefact refers to a created object in which human acting is embodied because it has been fashioned for some use within human practices … certain forms of bodily carriage and movement appear, or ways of handling objects and manipulating them, which are culture speci?c. Thus, our way of 'being in the world', of acting, knowing and thinking, is largely dependant on artefacts and how they re-form embodiment.

4.8 The interaction between body and mobility artefacts is illustrated by Spinney (2006: 729), with regards to how the bike and the rider become 'inseparable from each other within their contexts of use', and this affects the way in which the environment is perceived. Indeed, 'the experiences of movement and mobility can be seen as constitutive of the meaning and character of a place because of an ongoing dialectic between body and place' (Spinney 2006: 713). We argue that this concept is also applicable to wayfinding.

4.9 Modalities in respect of the different forms of transport and ways we can transport ourselves, is important in embodying wayfinding. Whether we use perambulatory movement, or some other form of transportation, the embodied experience of wayfinding is invariably different. Taking a bus on a route will incur a different embodied experience from if one cycles or drives (and which involve use of a SatNav). Quite different bodily sensations are also experienced by bike messengers, taxi drivers, delivery drivers and bus drivers, all of whom might be considered expert wayfinders, yet have very different interpretive maps of a city and very different experiences of this process. Drawing on Ingold's meshwork once more, we begin to see how knowledge of the possible paths, ways to navigate them and options for transporting ourselves through this meshwork of paths, provides very variable embodied wayfinding experiences for each agent. Not to be confused with travel experience, the way in which we find our way from A to B using our expert knowledge (or not) and the modality we use, impacts upon the embodied wayfinding experience.

4.10 Finally, within the meshwork, our bodies in wayfinding can be controlled using artefacts. As Robinson et al (2011: 61) explain, in discussing how our routes are managed sometimes through technologies: 'Traffic lights are ideological and are a means by which those in power (the government) get us to behave how they want'. Through this example, we begin to see how these routes we have the agency to choose, are nonetheless often in part, managed by others i.e. of a 'body that we own but do not wholly control' (Crouch & Desforges 2003: 6).

4.11 Following the above described holistic, sociocultural and embodied framework, our definition of wayfinding includes the following factors:

1. a route that needs to be followed or location explored.
2. cognitive, social and corporeal processes.
3. a process with decision making in real time and sometimes involving pre-planning and re-planning.
4. an experience
5. finding our way *through* as well as *to* spaces and places, which are influenced by society and culture.

4.12 We thus propose *the following embodied definition:*

> The cognitive, social and corporeal process and experience of locating, following or discovering a route through and to a given space.

4.13 Having provided a new model for understanding wayfinding as an embodied and sociocultural experience, and included a new definition above, in the section that follows we look at how this model can be applied in wayfinding in order to re/uncover the missing body.

Wayfinding Bodies

5.1 As indicated above, there are numerous ways in which the body has been seen to affect the experience, practice and organisation of wayfinding. These examples can be connected with a range of concepts from sociological literature that takes a more explicit view of the body in society. In so doing, the body becomes the *subject* of wayfinding rather than an absent (but clearly important) presence in the wayfinding process. Therefore, in what follows, we present a sample range of ideal typical body experiences in order to highlight the significance of an embodied view of wayfinding. These include *the communicative wayfinding body; the controlled and docile wayfinding body; the safe and anxious wayfinding body; and the pleasure-seeking wayfinding body*. We would stress that these typical wayfinding bodies are neither intended to be exhaustive of all wayfinding experiences nor are they intended to suggest that such experiences are discrete as in practice many of these bodies types will come together and be experienced consecutively or at different points in the same wayfinding process.

Communicative and Social Wayfinding Bodies

5.2 The communicative wayfinding body is one that interacts with other bodies and the places and spaces they encounter during the wayfinding process. Urry and Larsen (2011: 21) emphasise the ubiquitous nature of the bodies of *others* as we move between places, in this case using a tourist example, 'something so obvious that it has often been forgotten…is that tourists moving from place to place comprise…bodies. Such bodies encounter other bodies, objects and the physical world multi-sensuously.' (Urry and Larsen ibid). We cannot therefore ignore these 'other' bodies, as they help, hinder us and define the wayfinder. In short, there is no avoiding the process and outcome of interpersonal communication, given the crowds who wayfind in the same spaces, those who are often asked for directions (Chebat et al 2005; Farr et al 2014) and those who lead and guide wayfinders (sometimes astray). In short, wayfinding can be considered a 'somatic mode of attention', which Csordas (1993: 138) defines as 'culturally elaborated ways of attending to and with one's body in surroundings that include the embodied presence of others'.

5.3 Cruise ships provide us with a good example of both the sociological and embodiments aspects of wayfinding. Such is the size of some of these vessels, that we must find our way on the ships themselves and around ports of call, in addition to the journey from A to B which the captain and crew manage for us as we navigate to a specific destination. We manage these routes in the presence, on the larger ships, of a few thousand others, moving between masses of other bodies, with the help of others, and sometimes whilst being guided by others (such as via paid tours). Returning to the example of Ingold (2011) and the entwined knot, bottlenecks of bodies can block or affect our route, such as when local taxis fill up with other cruisers and we decide to walk to the local town and must alter our route.

5.4 Even though wayfinding is not specific to the travel and tourism industry, this industry is one in which we can see the interpretive craft of wayfinding at work. Using Laws (2004), as an example, Laws explains that 'in part, the rationale for providing premium class passengers with separate lounge facilities at airports is to ensure a consistent style of quiet and spacious accommodation throughout their journey'. Stakeholders, in this example, eliminate this saturation point represented by Ingold (2011: 148) in the centre of the paths that create the entwined knot. In other words, the 'embodied experience of this perambulatory movement' (ibid) is one that can

be enjoyed without the confusion, saturation and with less need to wayfind to find separate facilities: The refreshments, newspapers, toilets and FID (flight information display) can be found in one small safe space. By seeing wayfinding as a social interaction, we begin to gain a real-world understanding of this activity and how routes can be managed.

5.5 Many studies on wayfinding, however, have used virtual computer tests (see Spiers and Maguire 2008; Waller 2005; Lin et al 2012; Ruabal and Egenhofer 1998; Head and Isom 2010). In this sense, the term virtual is used to describe the use of computers for doing virtual tests to try and replicate user movements through spaces. While these virtual studies arguably lack what Langdridge and Hagger-Johnson (2009: 52) calls 'ecological validity', the social psychological issues Langdridge and Hagger-Johnson identify, such as crowd control, stress, obedience and 'decision making' (Hogg and Vaughan, 2011) are all factors which are experienced in the process of wayfinding and these are most often a social activity involving embodied interaction. Social factors are almost always missing from these virtual tests, the real environment and bodily connections ignored. Instead, we argue that wayfinding is a 'somatic mode of attention', as mentioned previously, and embodied agents move about in a 'meshwork', where their paths meet in 'knots' (Ingold 2011). Moreover, the meshwork overlaps with social fields, as theorized by Bourdieu, in which individuals act through embodied habitus (or practice) to increase their capital. The relationship between habitus, capital, field and practice is clearly summarised by Bourdieu with an equation: '[(habitus)(capital)] + field = practice' (Bourdieu 1984: 101).

5.6 Wayfinding involves a 'co-presence' (Goffman 2005 [1967]) in which the myriad of destinations, routes and experiences mean that we mingle with others in all but the most remote locations. Even when travelling alone in isolated locations, wayfinders eventually pass by locals or wayfinders who become 'proactive partners' (Ryan 1997: 52) in that wayfinders help to shape other people's movements and routes and not only our own.

5.7 In wayfinding with others, not only can we help each other to get somewhere, but it means we sometimes get lost together, 'through shared assumptions' (Edensor 2001) although in some cases perhaps, shared mis-assumptions. This ability we sometimes have to follow others when we might cognitively *switch off*, is expressed by Goffman (1990 [1959]) who explains that in groups we have a greater tendency to conform in order to meet the social expectations others have of us. This influence of sharing space with others can be negative in situations such as when overcrowding occurs, whilst at other times it can be positive. (Crouch & Desforges 2003: 260) perfectly highlight the way in which wayfinding can be a positive social interaction and one which is embodied, commenting: 'It is through the practice of shared body-space that space becomes transformed as social, not only by mental reflection on another's presence, but by a shared feeling of bodily activity'. The 'other' can also be our 'significant other' (Sirgy & Su 2000) and whilst these others can complement us during our navigational or mobility efforts, the sharing or co-presence involved with the task can also lead to tensions. Embodied and social dynamics are at play even when we use modalities other than walking. For example, as Sheller (2004: 227) argues with regards to car travel, people have a physical and emotional connection with their cars because 'motion and emotion … are kinaesthetically intertwined and produced together through a conjunction of bodies, technologies and cultural practices'. This, we argue, can also affect wayfinding while driving, as the presence of others on the road can generate a variety of emotions, such as road rage, which in turn affect our wayfinding strategies and decisions.

Controlled and Docile Wayfinding Bodies

5.8 Issues of power and control are important elements that need addressing when embodying wayfinding. The power we have to manage our own embodied experience as we wayfind can be seen as one which involves a balance of agency and social forces that 'constrain and enable' agency (Giddens 1984: 25). Foucault and Sheridan (1991: 138) highlighted how 'discipline produces subjected and practised bodies, docile bodies… we no longer do things instinctively i.e. turns the energy into a relation of strict subjection'. In airports many of us have become accustomed to taking routes that guide us through the immigration and security areas. Our bodies, as Foucault suggests, have become increasingly *docile* in such wayfinding processes. When journeying between two places, we are often required to hand control of our embodied selves over to others. The way in which authorities control our bodies when wayfinding, might be compared to the way in which authorities control prisoners, in which, according to Foucault and Sheridan (1991: 25), 'it is always the body that is at issue - the body and its forces, their utility and their docility, their distribution and their submission'. As Foucault and Sheridan (1991) importantly state, we cannot own power as it is a translational resource and it exists in and around us. In one of the earliest mainstream definitions of wayfinding, Lynch (1960) acknowledged how, when we move through a city, we are a part of the stage, a part of the city itself and the better we know it, the more power and agency we can draw from it. The key point here is that even when we think we are choosing our own routes,

we are often being guided by controls that are in place.

5.9 Even when we believe we have power and agency, we may unknowingly act in a docile way through enacting internalised pre-established discourses and practices. The example of backpackers (see Murphy 2001; Edensor 2001), shows that, despite seeming to want to be and believe themselves to be independent travellers, these backpackers often follow the very same routes and paths and use the same guide books, as other backpackers.

5.10 Even when we wayfind completely alone, we are expected to still abide by local laws and there are limits to the places and locations we are legally permitted to place our bodies. The "prescribed code of conduct, sanctioned by tradition, that individuals are bound to observe in their day-to-day behavior" (Ingold 2011: 162) also acts to shape how we choose to follow and use routes. We have agency to wayfind but this is strongly curtailed by our acceptance of the rules of the society, culture and environments through which we choose to wayfind. Hence, there is a close relationship between social structures and individual agency which, according to Giddens (1984), form a 'duality' (a unity of two divergent aspects of the same reality), rather than a dualism (two divided and distinct entities), with the 'bridge' being the engagement with rules and resources, expressed through every day actions, or praxis. Giddens postulates that (1984: 171)

> Human societies, or social systems, would plainly not exist without any agency. But it is not the case that actors create social systems: they reproduce or transform them, remaking what is already made in the continuity of praxis.

5.11 Similarly, wayfinders will encounter restrictions in the spaces that they are allowed to access in their attempt to find the best route to their destination. However, they can decide to contravene to the rules, sometimes at their peril, but other times to their advantage.

5.12 The need for a certain amount of agency in wayfinding is illustrated by Laws (2004: 56-57), through a case study based on a trip to China, expressing how the: 'Itineraries were carefully controlled and included features which few enjoyed…early morning starts…gruelling itineraries…little opportunity…to wander at will or even to influence the itinerary.' Laws' above example highlights a trip with little freedom for recreational wayfinding and how power is exercised to render wayfinders relatively docile bodies. Other examples in which, giving up agency is seen as a positive thing, are expressed by Goh (2013) and Reisinger and Manondo (2005) who both mention the provision of guided tours. They can 'provide comfort and the services of a capable and professionally trained guide who has the knowledge of the local resources and safety procedures and who can create an atmosphere of reassurance and being in control' (Reisinger and Manondo (2005: 222). Sometimes giving up agency in wayfinding is necessary for safety. For example, in Everest ascents, even the 'corporeal ambition' (Urry 2007: 84) to climb such a mountain is curtailed, as hiring the local Sherpas as guides is mandatory, since without hiring a Sherpa, the license to climb Everest is not normally permitted by the Nepalese government.

5.13 Furthermore, the ability of stakeholders to positively affect the locations through which we wayfind, produces an environment which offers greater commercial viability for these stakeholders. Fewings (2001: 178) perfectly highlights the case below:

> Wide-open spaces of airport departure lounges, after traversing the low ceiling corridors containing security and immigration, indicate to the passenger that their final destination has been reached. It also induces a sense of relaxation that encourages (time permitting) the passenger to spend money in the commercial areas of the terminal building.

5.14 Getting people to move in certain directions, trying to guide people on certain routes is part of what Gottdiener (1997) and Fajen and Warren (2003) call 'steering behaviour'. Our body's senses are targeted, one example being the aroma of coffee being used to attract people as they pass, is a long used steering technique. Weaver (2005: 353) gives another example from cruise ships, explaining how 'Interior spaces on board are constructed and positioned in ways meant to induce certain types of behavior. Typically, casinos, bars, and boutiques are situated in areas close to frequently used pedestrian walkways'. The attempt of stakeholders to influence people's wayfinding through space, artefacts and sensorial messages, is a practical example of how some agents, in Bourdieu's social field (which could be a ship or an airport, for instance), use different types of capital they have (both social capital in the form of power and tangible resources) to increase their financial capital through sales.

5.15 In addition, what Dodge and Kitchin (2004) refer to as 'profiling' can also have a significant impact on

our embodied wayfinding experience. The way in which we are screened, and thus allowed access to some locations and not others, can result in different wayfinders having a variety of experiences. This profiling can affect what Goffman (1990 [1959]) referred to as 'regionalisation', with factors such as our profile and our financial status (hence, our social and financial capital), affecting the regions which we are permitted to access. Regions can refer to physical spaces or symbolic areas. Goffman states that 'a region may be defined as any place that is bounded to some degree by barriers to perception' (1990 [1959]: 109). He provides the examples of physical boundaries, such as sections of an office divided by panels, but also of different clusters of conversation, for example within a cocktail party. In the wayfinding discussion, we will mainly refer to physical spaces.

5.16 Many locations, an airport being one example, now use the idea of what Goffman (1990: 109 – 115 [1959]) calls 'back-end areas'. Goffman separates the back-end areas, where the performers are based, from front-end areas, where the general public i.e. audience (in this case the majority of travellers) will normally be found. These secure back-end areas (no go areas for most of us) can also commonly become accessible for those with the necessary forms of economic, social or cultural capital (Bourdieu 1993). Royalty, celebrity, sports stars and senior political figures, for example, will often be guided through back-end areas as they move between A and B. Therefore, power in wayfinding and how we are able to manage our body through the process, is often impacted upon by the economic capital individuals have at their disposal. Drawing on Ingold's entwined knot which we mentioned earlier, this access to back-end areas affords one's body the ability to avoid routes that can act as bottlenecks. We see also that access to these back-end areas can provide our body access to different locations in space, in Ingold's meshwork, i.e. to more parts of the meshwork, even if the direction is not a direct one through the meshwork. We might take this indirect route in order to avoid the crowds and related embodied emotions, such as stress.

Safe and Anxious Wayfinding Bodies

5.17 Risk, safety, security and fear are central to the embodied wayfinding experience in that, as Giddens (2006: 44) posits, 'the body is in some sense perennially at risk'. The centrality of our body and the bodies we share the meshwork with in wayfinding, are ubiquitous and in this respect risk is also an ubiquitous element in wayfinding. Some people change their route even when this new alternative involves a much longer route, if it makes them feel safer and more secure, oftentimes regardless of whether the risk is real or imagined. Indeed, Reisinger and Manondo (2005: 222) found that there is a 'strong relationship between travel risk perceptions and travel anxiety' these risks sometimes imagined and sometimes real. The seven levels of perceived risk that Schiffman et al (2012) highlight (including financial, physical, social, and psychological risks), all have the potential to impact directly on the body in the wayfinding process. Concerns, for example, over corporeal safety in wayfinding can be a major consideration for those with disabilities, such as vision impairment. Uneven surfaces, which can cause trips or falls on pathways, can be difficult to navigate and are a very real concern. Tactile Ground Surface Indicators (TGSIs) (Small et al 2012) are an example of how the physical safety of the visually impaired's wayfinding activities is aided by cues from the built environment, through design. According to Small et al (2012), the physical safety and improved perceived experience of the sight impaired wayfinder, has the potential also to impart a feeling of dignity and independence for the person concerned. Socio-cultural structures need to engage with disability in the realm of wayfinding, similarly to what Hughes and Paterson (1997: 326) argue for the field of sociology, suggesting the need of an 'expansion of the social model and … an embodied, rather than a disembodied, notion of disability'.

5.18 A number of studies have been undertaken to compare the gender differences between the sexes (Lawton 1996; Lin et al 2012; Lawton & Kallai, 2002; Schmitz 1997; Chang 2013) with varying results, although Lawton (1996) and Chang (2013), both found in their studies that women appeared to experience 'higher levels of anxiety' than men during the wayfinding process, whilst Westwood et al (2000: 359) on quoting one of her research subjects, report:

> When I arrived in Japan I'd been flying for 12 hours and I felt very disorientated and vulnerable… one minute you're in a cocoon, the next minute you are totally alone in a strange place - it would have been very reassuring to have someone ask if I needed help.

5.19 Westwood et al go on to make the point that it is a 'fact that women travellers have to think about personal safety issues much more than men' when travelling. Such a point would suggest that wayfinding certainly is affected by our bodies, not only according to ability or disability, but also by factors such as gender. Gustafson (1998) argues that men and women perceive risk differently and one of the reasons for this difference in perception may be due to social roles. Indeed, Bordo (2003: 6) argues that women tend to be particularly conscious of how their bodies can put them at risk of sexual harassment, because of sociocultural constructions

leading to the idea that 'even when women are silent … their bodies are seen as "speaking" a language of provocation'. Hence, when trying to find their way somewhere, women may tend to be more cautious as they may feel particularly vulnerable, and this state of mind can lead to fear and anxiety.

5.20 'Physical fatigue, stress, and frustration' (Vilar et al 2012: 1), or emotional effects of 'getting lost', emotions which can include 'stress' (Churchill et al 2008), frustration, helplessness, anger and resentment, can all affect our sense of stability and safety. Being in a rush for a connecting flight and having problems to find one's way might cause increased heart-rate, poorer breathing, higher blood pressure and potential loss of self-control. The cost of disorientation, in fact, has many possible effects and as Passini (1996: 319) reminds us, 'the experience of getting lost is unpleasant, irritating and affects people's general attitude towards the setting' Furthermore, getting lost does not just affect our short term state, but it influences future choices, shaping our 'wayfinding habitus'.

5.21 In much more extreme cases of wayfinding, the embodied effects can be the threat of death. In 1993, two German tourists were brutally killed after taking a wrong turning into a bad neighbourhood (Clary 1993) after hiring a car in Miami Airport and attempting to drive to their beach side hotel. Ryan (1997) gives the example of numerous snowboarders who have died on European slopes because they chose to ignore regulated routes and to board off-piste. These are two extreme examples of how choosing to exercise our agency to the extreme, challenging social structures, can put our lives in danger when wayfinding. Using unregulated routes or getting lost when travelling is rarely so disastrous, but certainly the potential effects on the body are clear.

5.22 Safety and security issues are present in most wayfinding journeys, a point Urry (2007: 152) highlights in talking of how long journeys are 'more uncertain, more risky'. An interesting example is also given by Jaakson (2004: 57):

> The ship as a tourist bubble is secure, comfortable, and tightly controlled. By contrast, the port experience may be influenced by an apprehension due to not knowing the local language, fear of becoming lost, and fear of crime, which may cause the majority of passengers to confine themselves to the bubble core.

5.23 The comparison of the controlled environment of a cruise ship with an uncontrolled environment at port raises the issue of controlled risk and safety. We can, for example, get lost on massive modern day cruise ships, but we can do so with the knowledge that our wayfinding takes place in a controlled, bounded and relatively controlled safe space, 'the idea of risk (is) bound up with the aspiration to control' (Giddens 1999: 3).

5.24 Emotions felt in wayfinding scenarios certainly can influence people on a physical level, while people's feelings will have an effect on their bodies. In many wayfinding scenarios, emotions are often heightened due to the excitement we feel (Hendry 2008; Laws 2004), such as when we travel abroad and manage to escape a monotonous or quotidian routine. Others such as Parks (2013: 171) encapsulate embodied emotions in a wayfinding context with mention of emotions such as 'panic' and a sense of confusion:

> I had a bit of a panic getting down to the train again. You would have thought it was easy to find a train in the bottom of a boat, but actually, no. There were an extraordinary number of stairways and corridors and no signs telling passengers where to go, as if perhaps we hadn't been supposed to leave our compartments at all.

5.25 Even though, over twenty years ago, the architects Arthur and Passini ([1992]2002: 80) pointed out potential issues such as stress, frustration, feeling helpless, anger and resentment as a few of the emotions we can feel when getting lost in a place, very little emphasis has been included in wayfinding literature since. These emotions, as Burkitt (1999: 110-128) points out, are experienced within the body. However, this embodied aspect of wayfinding tends to be approached as a minor issue, almost as an after-thought. Montello and Sas (2006: 2004), for example, highlight the point that 'even minor episodes of disorientation can generate anxiety, frustration, and tardiness', creating a level of cognitive dissonance in the wayfinding process. The earlier example by Parks (2013) and the example of Montello and Sas, highlight how the body is central to wayfinding in even the simplest and basic scenarios.

5.26 Another view is presented by Chang (2013: 533) who states that for some users, 'an unfamiliar destination may generate fear and anxiety; in others, it may enhance relaxation and happiness. Thus, some may perceive the wayfinding as risky, while others may perceive it as risk free'. Laws (2004: 32) makes a similar point in stating that people tend to be somewhat anxious about visiting new locations, hence they are often in a rather apprehensive frame of mind when they embark on a journey. This effect of familiarity and unfamiliarity is also considered by Fewings (2001: 178) who notes:

> For the infrequent traveller, the process of moving through the terminal building can be a traumatic experience in terms of either reaching their destination (a departure gate or access to landside transport systems) or knowing exactly where they are within the building at any point in time.

5.27 Similarly, Lawton and Kallai (2002: 399), in their study of gender differences in wayfinding, suggest:

> Heightened concern about personal safety also results in increased anxiety about wayfinding, which in turn may affect women's sense of efficacy in the physical environment. For example, wayfinding anxiety might lead one to choose a longer, more familiar route over a potentially shorter but unfamiliar route, or to avoid jobs or careers that require travel to unfamiliar locations, or to avoid recreational trips by oneself to unfamiliar destinations, particularly after dark.

5.28 Some tourists enjoy 'the contingency and unpredictability of their encounters' (Edensor 2001: 77) and the 'challenge of constant mental and physical disruption. Such spaces may not be identifiable as demarcated stages, replete with signs and props, but are bereft of the reference points that enable particular orientations and choreographies' (ibid). Gottdiener (2000: 77) is one of the very few commentators to mention the idea of 'reorientation' in wayfinding, mentioning how we 'may pause at concessions and purchase something' and upon resuming, 'the passenger must be able to reorient himself or herself quickly': In this respect, wayfinding is rarely a precise, direct and individual route.

5.29 If the practical importance of the embodying of our understanding of the wayfinding experience is still in doubt, the problems faced by disabled travellers brings the focus of the body to the forefront, as concluded by Small et al (2012: 944) in their study on the embodied tourist experiences of people with vision impairment;

> Travel generates a degree of anxiety for a person with vision loss that builds during the planning phase and increases prior to departure. The degree of anxiety depends on the complexity of the trip, the experience of the traveller.

5.30 The example above reiterates Dening's (2008) point of wayfinding as an interpretive craft that might be experienced positively or negatively and is never merely a cognitive activity, which is simply about achieving a goal solely based on getting to a destination. Small et al (2012: 942) also highlight how people with disabilities 'have a condition that affects the function of their bodies but it is the disabling nature of socially constructed barriers that transforms them into' being considered disabled.

5.31 The wayfinding examples listed so far, support our point that wayfinding is an embodied and social activity and needs to be seen as a holistic phenomenon. We agree with Burkitt (2014: 2) when he argues that emotions are not only connected to the body (as we need a body to perceive and feel emotions), but they are also social as they are '*patterns of relationships* between self and others, and between self and the world'. In wayfinding, social bodies (of different genders and levels of physical ability), each with their own habitus, interact with environments that have structures (rules and resources, including artefacts such as signs and built spaces). This interaction causes emotions, which affect the wayfinding process and the relations between people and between these people and the environment. These 'patterns of relationships … result in patterns of activity that can become dispositions' (Burkitt 2014: 6). As Bendelow and Williams posit (1998: xiii), emotions are 'embodied modes of being which involve an active engagement with the world and an intimate connection with both culture and self'. This concept, we argue, is also true for the field of wayfinding.

Pleasure-seeking Wayfinding Bodies

5.32 The emotions of stress and fear that may affect the wayfinding process, however, are not always or necessarily perceived negatively. The experience of stress can also have positive connotations and be actively sought. Indeed, Urry (2007: 86) identifies wayfinding with a sense of adventure in stating that

> Adventure involves the body as spatially situated, experiencing and knowing the world through being in and moving around it. This is 'wayfinding', moving around *within* a world, a process of constant engagement and readjustment in relation to the environment … The opposite of this is the kind of walking through spaces that are signposted, organized, and highly predictable.

5.33 Although we do not agree with the above idea that moving through an organised space is not wayfinding, we acknowledge that wayfinding can constitute a leisure activity in its own right. Moreover, some people take wayfinding to an extreme in that they choose trips which are in effect 'wayfinding holidays' i.e. a cycling expedition or mountain climbing. Haldrup (2004: 451) introduces the concept of 'drifting' which is another variation on the concept of *recreational wayfinding*:

> Drifting produces pleasures that escape the logics of both inhabiting and navigating, and basically follows its own

> logics and prescriptions – the freedom and pleasure of movement itself.

5.34 In a similar vein, Titus and Everett (1995: 112) consider the concept of 'hedonic' search strategies which are intentionally designed for us to have a 'multisensory' experience. Some travel companies now exist to cater for holidays which have discovery and embodiment as the central focus of the trip, as opposed to a resort or attraction being the key focus and of these companies. Many offer a choice of self-guided or professional guided tours. Although these companies do not tend to use the term wayfinding in their marketing, the level of control in respect of navigation is an option and a part of the decision in choosing the preferred trip option. Wayfinding is a fundamental aspect underpinning these forms of tourism.

5.35 Edensor (2001) highlights the choice some of us make whereby we choose to intentionally wayfind in what we could call 'hyper-embodied' state. Experiencing highly physical and cognitive challenging situations can be the motivation for thrill seekers and those who seek extreme sports and challenges. This would suggest that not all wayfinding experiences should be comfortable, relaxing and easy on the body and mind. The pleasures of such trips can come in the form of embodied features, features which others would consider very stressful and uncomfortable experiences. Lyng (1990: 882) calls this thrill-seeking behaviour 'edgework' and identifies its roots in modern social life, in which individuals try to escape through this 'type of experiential anarchy in which the individual moves beyond the realm of established social patterns to the very fringes of ordered reality'.

5.36 The question which can arise from this form of wayfinding body and which might need further research is the extent to how technologies interact with such pleasure seeking bodies i.e. if the thrill or 'hyper embodied' state which Edensor talks of, means that such wayfinders would prefer to find their own way, devoid of technology. Urry (2007) in his book 'Mobilities' gives mention numerous times of the influence of technologies including mobile technologies that move with us. In wayfinding, the importance or not of these technologies, is an area worthy of future research, particularly given many recent examples of pleasure seeking bodies that have become lost, due to an over-reliance on technologies and issues such as from dead batteries and the decision not to use or learn how to use a compass (see BBC News 2016).

Concluding Comments

6.1 Even though one might ascertain that human wayfinding is inevitably an embodied experience, given that we have to use our bodies to move during the mobility aspect of wayfinding, the body remains an absent presence in the existing literature. In this paper, we have begun the work of embodying wayfinding by identifying this absent presence and exploring how the body is significant for better understanding and applying the concept. In so doing, we have identified a range of types of embodied experiences typical to the wayfinding process. These include communicative, controlled and docile, safe and anxious and pleasure seeking wayfinding bodies. Our intention, in presenting these as embodied types, is to turn the analytical gaze around and begin to represent the engagement in wayfinding experience from the perspective of the fully embodied, feeling wayfinder. We would caution that these are intended to be neither exhaustive nor definitive but rather exploratory in nature. Clearly, further research and analysis will be needed to both deepen and broaden a more fully embodied understanding of wayfinding, but we hope that this discussion has contributed to stimulating and orientating that work.

6.2 The existing definitions on wayfinding cover many elements of wayfinding as cognitive activity, but tend to share a silence in respect of the embodied experience as a significant factor. We propose that the socio-cultural and embodied dimensions of wayfinding need to be included. We, therefore, proposed a revised definition of wayfinding, underpinned by a sociological framework, that was illustrated in Fig. 1. The definition was as follows:

> The cognitive, social and corporeal process and experience of locating, following or discovering a route through and to a given space.

6.3 This new definition is unique in that it includes two key elements that are missing from almost all definitions on wayfinding. The inclusion of terms 'social' and 'corporeal', whilst also showing value to the 'cognitive', we propose, makes this a much more rounded definition which truly reflects the process of wayfinding, a process that involves a very strong sociocultural element. Other people, as we stated in Figure 1, affect our wayfinding experience at every level including the planning of the spaces through which we find our way, and the interactions we have as we travel with others, and in the presence of others, or with the help of others. We have also explained in this paper that the body is central to wayfinding in that our bodies' needs often dictate many route decisions.

6.4 Understanding wayfinding from an embodied perspective which involves a strong sociocultural focus, rather than being a purely cognitive process, is important because of the different needs each of us has as we try to find out way between places. Wayfinding, we feel, is too under-researched for example, for those with disabilities and special needs and by introducing a new definition, we hope to begin to lead the way towards greater understanding of wayfinding as an embodied experience that occurs as a social experience.

Notes

[1] The words baladi and afrangi have various meanings in Egyptian Arabic but, in this context, baladi refers to working class people who originally emigrated from the countryside to Cairo, while afrangi can be considered upper/middle and upper class people. According to Early (1992: 26) "the baladi:afrangi relation is one of the insider and the outsider, of the have-nots and the haves, of the pragmatic and the ideal."

References

ALLEN, G. L. (1999). Spatial abilities, cognitive maps, and wayfinding. *Wayfinding Behavior: Cognitive Mapping and Other Spatial Processes*, p. 46-80.

ARTHUR, P., & Passini, R. (1992). *Wayfinding: people, signs, and architecture*.

BBC NEWS (2016). 'Walkers criticised after Ben Lomond rescue', BBC News website, 11th January 2016, accessed 5th October 2016.

BENDELOW, G., & Williams, S. J. (1998). *Emotions in social life: critical themes and contemporary issues* London; New York: Routledge. [doi:10.4324/9780203437452]

BLADES, M. (1991). Wayfinding theory and research: The need for a new approach. In *Cognitive and linguistic aspects of geographic space* (p. 137-165). Springer.

BORDO, S. (2003). *Unbearable Weight: Feminism, Western Culture, and the Body*., 2nd Revised edition edition. Berkeley, Calif.: University of California Press.

BOURDIEU, P. (1977). *Outline of a theory of practice*. (R. Nice, Tran.). Cambridge: Cambridge University Press.

BOURDIEU, P. (1984). *Distinction: a social critique of the judgement of taste*. London: Routledge.

BOURDIEU, P. (1990). *The logic of practice*. (R. Nice, Tran.). Cambridge: Polity Press.

BOURDIEU, P., & Johnson, R. (1993). *The field of cultural production: Essays on art and literature* Columbia University Press.

BOURDIEU, P., & Wacquant, L. J. D. (1992). *An Invitation to Reflexive Sociology*. Cambridge: Polity Press.

BRADLEY, N. A., & Dunlop, M. D. (2005). An experimental investigation into wayfinding directions for visually impaired people. *Personal and Ubiquitous Computing*, *9* (6), p. 395-403. [doi:10.1007/s00779-005-0350-y]

BURKITT, I. (1999). *Bodies of thought: Embodiment, identity and modernity*. Sage.

BURKITT, I. (2014). *Emotions and Social Relations*. Los Angeles, California: Sage Publications Ltd. [doi:10.4135/9781473915060]

CAMBRIDGE ENGLISH DICTIONARY ONLINE. (n.d.). 'Travel Meaning in the Cambridge English Dictionary'. Retrieved December 1, 2016, from http://dictionary.cambridge.org/dictionary/english/travel.

CHANG, H.-H. (2013). Wayfinding strategies and tourist anxiety in unfamiliar destinations. *Tourism Geographies*, *15* (3), p. 529-550. [doi:10.1080/14616688.2012.726270]

CHEBAT, J.-C., Gélinas-Chebat, C., & Therrien, K. (2005). Lost in a mall, the effects of gender, familiarity with the shopping mall and the shopping values on shoppers' wayfinding processes. *Journal of Business Research*, *58* (11), p. 1590-1598.

CHURCHILL, A., Dada, E., De Barros, A. G., & Wirasinghe, S. C. (2008). Quantifying and validating measures of airport terminal wayfinding. *Journal of Air Transport Management*, *14* (3), p. 151-158. [doi:10.1016/j.jairtraman.2008.03.005]

CLARY, M. (1993, April 9). 2 Charged in German Tourist's Slaying in Miami: Crime: Woman was killed during a robbery as her children and mother watched. Both suspects were already in custody on unrelated robbery counts. *Los Angeles Times*. Retrieved from http://articles.latimes.com/1993-04-09/news/mn-21008_1_robbery-charges.

CRESSWELL, T. (2006). *On the move: mobility in the modern western world*. Taylor & Francis.

CROUCH, D., & Desforges, L. (2003). The sensuous in the tourist encounter introduction: The power of the body in tourist studies. *Tourist Studies*, *3* (1), p. 5-22.

CSORDAS, T. J. (1993). 'Somatic Modes of Attention', *Cultural Anthropology*, 8/2: p. 135-56. [doi:10.1525/can.1993.8.2.02a00010]

DENING, G. (2008). Respectfulness as a performance art: way-finding. *Postcolonial Studies*, *11* (2), p. 145-155.

DODGE, M., & Kitchin, R. (2004). Flying through code/space: the real virtuality of air travel. *Environment and Planning A*, *36* (2), p. 195-211. [doi:10.1068/a3698]

EARLY, E. A. (1992). *Baladi Women of Cairo: Playing with an Egg and a Stone* Boulder: Lynne Rienner Publishers.

EDENSOR, T. (2001). Performing tourism, staging tourism (Re) producing tourist space and practice. *Tourist Studies*, *1* (1), p. 59-81. [doi:10.1177/146879760100100104]

FAJEN, B. R., & Warren, W. H. (2003). Behavioral dynamics of steering, obstable avoidance, and route selection. *Journal of Experimental Psychology: Human Perception and Performance*, *29* (2), p. 343.

FARR, A. C., Kleinschmidt, T., Johnson, S., Yarlagadda, P. K., & Mengersen, K. (2014). Investigating effective wayfinding in airports: a Bayesian network approach. *Transport*, *29* (1), p. 90-99. [doi:10.3846/16484142.2014.898695]

FEWINGS, R. (2001). Wayfinding and airport terminal design. *Journal of Navigation*, *54* (2), p. 177-184.

FOUCAULT, M., & Sheridan, A. (1991). *Discipline and punish: the birth of the prison*. London [etc.]: Penguin books.

GIDDENS, A. (1984). *The constitution of society: Outline of the theory of structuration*. Univ of California Press.

GIDDENS, A. (1999). 'Risk and responsibility', *The modern law review*, 62/1: p. 1-10. [doi:10.1111/1468-2230.00188]

GIDDENS, A. (2006). 'Fate, Risk and Security'. Cosgrave J. (ed.) *The Sociology of Risk and Gambling Reader*, New Ed edition., p. 29-60. Routledge: New York.

GLADWIN. (1974). East is a Big Bird: Navigation and Logic on Puluwat Atoll (New edition edition). Harvard University Press.

GOFFMAN, E. (1990 [1959]). *The Presentation of Self in Everyday Life* (New Ed edition). London: Penguin.

GOFFMAN, E., & Best, J. (2005 [1967]). *Interaction Ritual: Essays in Face to Face Behavior* (New edition edition). New Brunswick, N.J.: Transaction Publishers.

GOH, D. P. (2013). Walking the global city: The politics of rhythm and memory in Singapore. *Space and Culture*, 1206331212451686.

GOTTDIENER, M. (1997). *The theming of America: Dreams, visions, and commercial spaces* Westview Pr.

GOTTDIENER, M. (2000). *Life in the Air: Surviving the New Culture of Air Travel* Lanham, Md: Rowman & Littlefield Publishers.

GUSTAFSON, P. E. (1998). 'Gender differences in risk perception: Theoretical and methodological erspectives', *Risk analysis*, 18/6: p. 805-811 [doi:10.1023/B:RIAN.0000005926.03250.c0]

HALDRUP, M. (2004). Laid-back mobilities: Second-home holidays in time and space.*Tourism Geographies*, 6(4), p 434-454.

HALDRUP, M., & Larsen, J. (2006). Material cultures of tourism.*Leisure Studies*, *25* (3), p. 275-289. [doi:10.1080/02614360600661179]

HAQUE, S., Kulik, L., & Klippel, A. (2006). Algorithms for reliable navigation and wayfinding. In*Spatial Cognition V Reasoning, Action, Interaction* (p. 308-326). Springer.

HEAD, D., & Isom, M. (2010). Age effects on wayfinding and route learning skills*Behavioural Brain Research*, *209* (1), p. 49-58. [doi:10.1016/j.bbr.2010.01.012]

HENDRY, J. (2008). *An introduction to social anthropology: sharing our worlds*. Palgrave Macmillan.

HUGHES, B., & Paterson, K. (1997). 'The Social Model of Disability and the Disappearing Body: Towards a sociology of impairment', *Disability & Society*, 12/3: p. 325-40. DOI: 10.1080/09687599727209 [doi:10.1080/09687599727209]

HOGG, M. A., & Vaughan, G. (2011). *Social psychology* (6th Edition). Harlow, England: Prentice Hall.

HÖLSCHER, C., Tenbrink, T., & Wiener, J. M. (2011). Would you follow your own route description? Cognitive strategies in urban route planning. *Cognition*, *121* (2), p. 228-247. [doi:10.1016/j.cognition.2011.06.005]

HUND, A. M., & Padgitt, A. J. (2010). Direction giving and following in the service of wayfinding in a complex indoor environment. *Journal of Environmental Psychology*, *30* (4), p. 553-564.

INGOLD, T. (2011). *Being alive: essays on movement, knowledge and description* London?; New York: Routledge.

JAAKSON, R. (2004). Beyond the tourist bubble?: cruiseship passengers in port.*Annals of Tourism Research*, *31* (1), p. 44-60.

LANGDRIDGE, D., & Hagger-Johnson, G. (2009). *Introduction to research methods and data analysis in psychology*. Harlow, England; New York: Pearson Prentice Hall.

LAWS, E. (2004). *Improving tourism and hospitality services*. CABI.

LAWTON, C. A. (1996). Strategies for indoor wayfinding: The role of orientation.*Journal of Environmental Psychology*, *16* (2), p. 137-145. [doi:10.1006/jevp.1996.0011]

LAWTON, C. A., & Kallai, J. (2002). Gender differences in wayfinding strategies and anxiety about wayfinding: A cross-cultural comparison. *Sex Roles*, *47*(9-10), p. 389-401.

LEIB, S., Dillman, B., Petrin, D., & Young, J. (2012). A Comparison of the Effect of Variations to U.S. Airport Terminal Signage on the Successful Wayfinding of Chinese and American Cultural Groups. *Journal of Aviation Technology and Engineering*, *1*(2), p. 79-89. http://doi.org/10.5703/1288284314661 [doi:10.5703/1288284314661]

LIN, C.-T., Huang, T.-Y., Lin, W.-J., Chang, S.-Y., Lin, Y.-H., Ko, L.-W., Chang, E. C. (2012). Gender differences in wayfinding in virtual environments with global or local landmarks. *Journal of Environmental Psychology*, *32* (2), p. 89-96. http://doi.org/10.1016/j.jenvp.2011.12.004.

LO IACONO, V., & Brown, D. H. K. (2016). Beyond Binarism: Exploring a Model of Living Cultural Heritage for Dance. The Journal of the Society for Dance Research, 34/1: p. 84-105. [doi:10.3366/drs.2016.0147]

LUEG, C. P., & Bidwell, N. J. (2005). Berrypicking in the real world: A wayfinding perspective on information behavior research. *Proceedings of the American Society for Information Science and Technology*, *42* (1). Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/meet.14504201241/full.

LYNCH, K. (1960). *The image of the city*. Cambridge, Mass.: MIT Press.

LYNG, S. (1990). 'Edgework: A social psychological analysis of voluntary risk taking',*American journal of sociology*, p. 851-886.

MEILINGER, T., & Knauff, M. (2008). Ask for directions or use a map: A field experiment on spatial orientation and wayfinding in an urban environment. *Journal of Spatial Science*, *53* (2), p. 13-23. [doi:10.1080/14498596.2008.9635147]

MILLS, C. W. (2000). *The sociological imagination*. Oxford University Press.

MONTELLO, D. R., & Sas, C. (2006). Human factors of wayfinding in navigation.

MURAKOSHI, S., Kawai, M. (2000). Use of knowledge and heuristics for wayfinding in an artificial environment. *Environment and Behavior 32*(6), p. 756-774.

MURPHY, L. (2001). Exploring social interactions of backpackers. *Annals of Tourism Research*, *28* (1), p. 50-67. [doi:10.1016/S0160-7383(00)00003-7]

NOVACK, C. (1988). 'Looking at Movement as Culture: Contact Improvisation to Disco',*TDR*, 32/4: p. 102-19.

PARKS, T. (2013). *Italian ways: on and off the rails from Milan to Palermo* New York: W.W. Norton & Company.

PASSINI, R. (1981). Wayfinding: A conceptual framework. *Urban Ecology*, *5* (1), p. 17-31.

PASSINI, R. (1996). Wayfinding design: logic, application and some thoughts on universality.*Design Studies*, *17* (3), p. 319-331. [doi:10.1016/0142-694X(96)00001-4]

PEPONIS, J., Zimring, C., & Choi, Y. K. (1990). Finding the building in wayfinding*Environment and Behavior*, *22* (5), p. 555-590.

RAUBAL, M. (2008). Wayfinding: Affordances and agent simulation. In*Encyclopedia of GIS* (p. 1243-1246). Springer. [doi:10.1007/978-0-387-35973-1_1469]

RAUBAL, M., & Egenhofer, M. J. (1998). Comparing the complexity of wayfinding tasks in built environments. *Environment and Planning B*, *25*, p. 895-914.

REISINGER, Y., & Manondo, F. (2005). Travel Anxiety and Intentions to Travel Internationally: Implications of Travel Risk Perception. *Journal of Travel Research*, *43* (3), p. 212-225. http://doi.org/10.1177/0047287504272017. [doi:10.1177/0047287504272017]

ROBINSON, P., Heitmann, S., & Dieke, P. U. C. (2011). *Research themes for tourism*. Wallingford, Oxfordshire; Cambridge, MA: CABI.

RYAN, C. (1997). *The tourist experience: a new introduction.* Cassell plc.

SCHIFFMAN, L. G., Kanuk, L. L., & Hansen, H. (2012).*Consumer behaviour: a European outlook*. Harlow, England; New York: Pearson Financial Times/Prentice Hall.

SCHMITZ, S. (1997). Gender-related strategies in environmental development: Effects of anxiety on wayfinding in and representation of a three-dimensional maze. *Journal of Environmental Psychology*, *17*(3), p. 215-228. [doi:10.1006/jevp.1997.0056]

SHELLER, M. (2004). 'Automotive Emotions: Feeling the Car',*Theory, Culture & Society*, 21/4-5: p. 221-42. DOI: 10.1177/0263276404046068

SHILLING, C. (2001). Embodiment, experience and theory: in defence of the sociological tradition. *The Sociological Review*, *49*(3), p. 327-344. [doi:10.1111/1467-954X.00335]

SHILLING, C. (2012). *The Body and Social Theory* (Third Edition edition). Los Angeles: SAGE Publications Ltd.

SIRGY, M. J., & Su, C. (2000). Destination image, self-congruity, and travel behavior: Toward an integrative model. *Journal of Travel Research*, *38* (4), p. 340-352. [doi:10.1177/004728750003800402]

SLONE, E., Burles, F., Robinson, K., Levy, R. M., & Iaria, G. (2015). Floor plan connectivity influences wayfinding

performance in virtual environments. *Environment and Behavior*, *47* (9), p. 1024-1053.

SMALL, J., Darcy, S., & Packer, T. (2012). The embodied tourist experiences of people with vision impairment: Management implications beyond the visual gaze. *Tourism Management*, *33* (4), p. 941-950. http://doi.org/10.1016/j.tourman.2011.09.015. [doi:10.1016/j.tourman.2011.09.015]

SPIERS, H. J., & Maguire, E. A. (2008). The dynamic nature of cognition during wayfinding.*Journal of Environmental Psychology*, *28* (3), p. 232-249. http://doi.org/10.1016/j.jenvp.2008.02.006.

SPINNEY, J. (2006). 'A place of sense: a kinaesthetic ethnography of cyclists on Mont Ventoux',*Environment and Planning D: Society and Space*, 24/5: p. 709-32. DOI: 10.1068/d66j [doi:10.1068/d66j]

STOKOLS, D., Novaco, R. W., Stokols, J., & Campbell, J. (1978). Traffic congestion, Type A behavior, and stress. *Journal of Applied Psychology*, *63* (4), p. 467.

TAM, M. L. (2011). An optimization model for wayfinding problems in terminal building.*Journal of Air Transport Management*, *17* (2), p. 74-79. http://doi.org/10.1016/j.jairtraman.2010.06.001. [doi:10.1016/j.jairtraman.2010.06.001]

TITUS, P. A., & Everett, P. B. (1995). The Consumer Retail Search Process: A Conceptual Model and Research Agenda. *Journal of the Academy of Marketing Science*, *23* (2), p. 106-119. http://doi.org/10.1177/0092070395232003.

URRY, J. (2007). *Mobilities*. Cambridge, UK; Malden, MA: Polity.

URRY, J., & Larsen, J. (2011). *The tourist gaze 3.0*. Los Angeles; London: SAGE.

VILAR, E., Rebelo, F., & Noriega, P. (2012). Indoor human wayfinding performance using vertical and horizontal signage in virtual reality. *Human Factors and Ergonomics in Manufacturing & Service Industries*, n/a-n/a. http://doi.org/10.1002/hfm.20503.

WALLER, D. (2005). The WALKABOUT: Using virtual environments to assess large-scale spatial abilities. *Computers in Human Behavior*, *21* (2), p. 243-253. http://doi.org/10.1016/j.chb.2004.02.022

WEAVER, A. (2005). The McDonaldization thesis and cruise tourism.*Annals of Tourism Research*, *32* (2), p. 346-366. http://doi.org/10.1016/j.annals.2004.07.005. [doi:10.1016/j.annals.2004.07.005]

WESTWOOD, S., Pritchard, A., & Morgan, N. J. (2000). Gender-blind marketing: businesswomen's perceptions of airline services. *Tourism Management*, *21* (4), p. 353-362.

WIENER, J. M., Büchner, S. J., & Hölscher, C. (2009). Taxonomy of Human Wayfinding Tasks: A Knowledge-Based Approach. *Spatial Cognition & Computation*, *9* (2), p. 152-165. http://doi.org/10.1080/13875860902906496 [doi:10.1080/13875860902906496]