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Exploring methods and techniques for the analysis of senses of place and migration

Cristóbal Mendoza
Universidad Autónoma Metropolitana-Iztapalapa, Mexico

Ricard Morén-Alegret
Universitat Autònoma de Barcelona, Spain

Abstract
The debate on 'sense of place' has been widespread in geography since the mid-1970s, yet with few exceptions the analytical potential of this concept has not been fully realized as far as the study of migration movements is concerned. A major reason for this has been methodology, or specifically the difficulties in capturing and evaluating the relevance of 'place' for migration processes. From a multidisciplinary standpoint, the article assesses the potential of both qualitative and quantitative methodologies, and also identifies several conflicting aspects that arise when analysing senses of places and international migration, such as 'scale', 'representation', 'sensibilities' and 'consciousness'.

Keywords
migration, mobility, qualitative methods, quantitative methods, sense of place

I Introduction

Sometimes people can be *moved* (i.e. emotionally touched) when feeling attachment to a place, and people can *move* (i.e. migrate) from one place of residence to another, yet little research has been done on methods and techniques for studying both kinds of human *movement* taking place at the same time. Now, approximately 125 years after the publication of Ernest Ravenstein's 'The laws of migration' (1885) – a seminal moment in scientific approaches to migratory movements – and two centuries after the publication of Jane Austen's *Sense and Sensibility* (2007 [1811]) – a book the themes of which reflect the collapse of mechanical philosophies, giving rise to a more sensory view of nature and a new field of moral sciences (Gaukroger, 2010; Rousseau, 2011) – may be a good time to stop and think geographically about the methods and techniques that are used to study 'sense of place' and 'migration'. As Claval (2001: 191–192) expressed, the contemporary *homo geographicus* is no longer a pure spirit or simple worker: individuals look, listen, taste, smell and touch, and it is in so doing that they build their experience of the world. Indeed, the epistemological turn in the humanities and

Corresponding author:
Cristóbal Mendoza, Universidad Autónoma Metropolitana-Iztapalapa, Av. San Rafael Atlixco 186, Col. Vicentina. Del. Iztapalapa, 09340-México DF.
Email: cmp@xanum.uam.mx or cristobalmendozaperez@yahoo.com.mx

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social sciences happened several decades ago, but postmodern and poststructuralist geographies are still alive following a variety of evolving trends (Soja, 1989; Woodward and Jones, 2009).

Among these, the humanistic approach in geography has extensively worked on 'place' and 'space', with the latter being characterized as general and opposed to the particularity of place (Tuan, 1975). Places exist not only as physical entities but also as a result of people's different experiences, and places are full of meaning and encompass an existential dimension, an emotional link with the human being. People's lives occur in and interact with specific places with well-defined attributes (Buttimer, 1976; Pred, 1984; Tuan, 1977). In an increasingly unequal global world, places may acquire a greater role in providing security and assurance for individual identities (Massey, 1994).

In line with the idea of processes of identity construction, the concept of 'sense of place' conceives place as a key aspect of subjectivization. This concept is analytically powerful since it transforms 'space', understood as a generic abstraction, into 'place' through the actions and experiences of individuals (e.g. Crang, 1998; Massey, 1994; Relph, 1976; Rose, 1995; Sack, 1997; Tuan, 1975). The sense of place, built upon everyday experiences and subjective feelings, can be so intense that it becomes a central element in the construction of an individual's identity (Massey, 1995; Rose, 1995).

Recent geographical approaches to the sense of place have also considered the character intrinsic to place as a localized, bounded and material geographical entity, as well as the feelings of attachment and detachment that human beings experience, express and contest in relation to specific places (e.g. Cosgrove, 2000; Mayhew, 2004). In this context, applying the idea that attachment to a place increases with the distinctiveness of that place, planners sometimes deliberately create or preserve 'memorable and singular structures to make a space distinctively different ... to encourage in the residents an attachment to that place' (Mayhew, 2004: 444).

From a critical viewpoint, Doreen Massey's essay on the 'global sense of place' has stressed the importance of 'rejecting false nostalgia for pre-modern singular and coherent places, and embracing instead the culturally multiple, dynamic and connective aspects of place in a globalizing world' (Massey, 1994: 149). Indeed, places are currently being reconstructed by an increase in mobility, with more people being on the move (e.g. due to improved transport and information technologies), and some institutions and social practices are becoming more mobile too (Sheller and Urry, 2006; Urry, 2007).

In recent decades, there has been noticeably growing interest in studying the relationships(s) between migration processes and place, including, for instance, the impact of the characteristics of place on human migration (e.g. Walters, 2000), the importance (or lack of importance) of people's sense of place in the case of migration among certain high-skilled migrants (see, for example, Boyle et al., 1998; Fielding, 1992), the conceptual challenges of studying the sense of place in migration histories (Pascual-de-Sans, 2004), the relevance of migration for people's sense of place among specific immigrant groups living in settler societies (for the case of Greeks, Lebanese and Vietnamese residing in Australia, see Armstrong, 2004), and the different and similar ways in which the sense of place is expressed by different immigrants and natives (for the case of immigrants, Afro-Americans, 'watermen' and other white residents living in Calvert County, Maryland, see Wasserman et al., 1998).

The discussion of 'place' and 'sense of place' has undoubtedly been very widespread in geography since the mid-1970s, but with few exceptions the analytical potential of these concepts has yet to be fully achieved as far as the study of migratory movements is concerned. Certainly, there is a shortage of broad reflection in the academic literature regarding methods for

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studying the relationship between 'place' and migration.[1] A major reason for this failure is methodological, due to difficulties in capturing and evaluating the relevance of 'place' for migration processes. Thus, from a multidisciplinary as well as a more narrowly geographical standpoint, this article reviews methods that have been used to analyse the complexities of the relationship between migration and place. Building on a review of the literature and the authors' reflections, the article assesses the potential of these methods for the study of migration in geography.

The article's analytical review of the literature also includes contributions from other disciplines, since geographers have rarely attempted quantitative approaches to assess or measure 'sense of place'. This is partly because the very definition of the sense of place has been traditionally associated with subjectivities and non-positivistic approaches. Thus, as early as the mid-1970s, Relph (1976: 4) believed that 'clarification (of sense of place) cannot be achieved by imposing arbitrary definition'.

In contrast to those stances, the literature from environmental psychology, and environmental management in particular, has attempted to separate the different interpretative layers or analytical dimensions of the concept of the 'sense of place'. Hummon (1992: 272), for instance, accomplishes this by distinguishing between two main dimensions of the concept: place identity and place dependence. Sense of place thus involves 'both an interpretative perspective *on* the environment and an emotional reaction *to* the environment'. For this literature, 'place dependence' is understood in the context of the functional uses of places and how well these serve the achievement of people's goals, whereas 'place identity' refers to the emotional and symbolic meanings associated with particular settings (e.g. Hernández et al., 2007; Jorgensen and Stedman, 2001; Raymond et al., 2010; Williams et al., 1992). So, the discussion on 'sense of place' from a multidisciplinary perspective certainly implies an epistemological debate, due to differences in the philosophical bases of the methods. The bottom line of the argument (and this is a main topic of the article) is the seemingly eternal discussion on positivist versus phenomenological approaches, and their respective validity for understanding migrants' perceptions of places.

At the same time, migration and mobility studies are an expanding area in geography and social sciences (e.g. Blunt, 2007; Sheller and Urry, 2006), and deal with the main contemporary research themes and issues of debate within the subfield known as population geography (Gober and Tyner, 2005). Internal migration, residential mobility, international migration, immigrant assimilation or adjustment and the emergence of immigrant enclaves are all core themes of population geography, although migration is also relevant in regional demography, public policy and even social theory. Additionally, what has been dubbed the 'new geography of human mobility' links migration to inequalities such as those structured around North/South, unskilled/skilled and domestic/international divides (Ishikawa and Montanari, 2003). Furthermore, migration has been the focus of social constructivist and psychoanalytical approaches (e.g. Sibley, 1995) and migration studies are playing an increasingly active role in the recent emergence of affective and emotional geographies (e.g. Gorman-Murray, 2009; Heikkilä and Yeoh, 2011; King, 2002). So, in migration research today, in addition to the three dominant strands of thought – i.e. the legacy of Ravenstein's approach informed by recent economic theories, the world systems theory and social network approaches (Hiebert, 2009) – there exist alternative theoretical and methodological approaches.

Within international migration studies, the transnational approach has been gaining momentum since the 1990s, when such literature was dominated by US anthropologists and sociologists. Their view was that transmigrants

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take actions, make decisions, feel concerns and develop identities within social fields that connect them to two or more societies simultaneously (Faist, 1999; Glick Schiller et al., 1992). Migration creates fluid, transnational spaces, which are defined as both a social terrain that reflects migrants' biculturality and a fragmented and diffused geographical reality (Kearney, 1995; Rouse, 1991). Since transnational communities are social and cultural constructs without precise geographical limits, the role of 'place' is only partially recognized by this literature.

Recently, however, the transnational approach has partially recognized the importance of place, with some authors giving accounts of transnational mobility that are attentive to everyday practices and geographical emplacements (e.g. Conradson and Latham, 2005; Ehrkamp, 2005). Such accounts place 'transnationalism' in a broader context, including an array of multiple mobility experiences occurring in specific geographical settings (Sheller and Urry, 2006; Urry, 2007), as well as the study of gender constructions in transnational spaces (Ong, 1999; Pessar and Mahler, 2003). By stressing 'place', this literature has enabled the visualization of multiple migration experiences, diverse social and spatial practices, a variety of personal identities and gender constructions, and complexities associated with migration decision-making (Halfacree, 2004). In a similar vein, Mitchell (2004) believes that geography should focus on the analysis of the movements and practices of migrants in specific contexts and places when studying transnational migration. This relates to the broader theoretical question of how the cultural constructs of nation, citizenship and society reflect (or affect) immigrants and their lives, as such transnational images, representations and constructions of places are not isolated from structure and agency (Mitchell, 2004). Even though the relevance of the transnational approach for discussing (and even challenging) assumptions on international migration has been recognized, it is argued that not all international migration movements are transnational in nature, and so the paper focuses on all types of international migration.

Certainly, migration is a complex phenomenon that has been studied from different perspectives and within different disciplines. Researchers examining migration do so with a variety of goals and therefore specify their objects of study differently. To be coherent and internally consistent, researchers select a methodology that can best achieve those goals. This does not mean that scholars are restricted to a single well-tried method, but it is clear that the methods chosen must be in tune with the overall objectives of the research. As Castles (2012) has summarized:

> Methodology and methods are often confused, or used as if they meant the same thing ... *Methods* are specific techniques used to collect and analyse information or data ... *Methodology*, by contrast, is about the underlying logic of research. It is closely linked to the branch of philosophy known as *epistemology* – literally 'the theory of knowledge' ... Each discipline has its own methodology. (Castles, 2012: 18–20)

This paper considers several methods and methodologies related to geography and other social sciences, and it considers their implementation in human migration research.

Taking this into account, the paper analyses (1) both qualitative and quantitative methods – as suggested by Sui and DeLyser (2012); (2) both mobile methods and sedentary methods, bearing in mind the ideas put forward by the likes of Evans and Jones (2011); and (3) both geographic methods and transdisciplinary methods – taking into account reviews such as that by Gaile and Willmott (2005). New emerging processes that do not fit well into these dichotomies but, before trying to move beyond them, it may be useful to organize the exploration and analysis of methods by considering these dichotomies. Indeed, although our discussion respects these distinctions to a certain

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extent for analytical purposes, the shortfalls of such dichotomies are recognized, and the article aims to assess the usefulness (and the limits) of combining different methods.

The following section is therefore devoted to a variety of qualitative methods and techniques – including, among others, semi-structured interviews, focus groups, participatory research and biographical analysis – which have been used to explore the relationships between 'place' and 'migration'. In the third section, audiovisual methods and techniques are explored, including documentary video, radio analysis, photography and, particularly, mental maps. The article then moves on to examine quantitative methods, and in so doing looks at the potential of the approach adopted by environmental sciences, which has separated the different conceptual layers of a 'sense of place' in order to quantify their relevance for migration studies, in addition to breaking migration down into variables that can measure a sense of place inherent to the migration process. The article concludes with some final considerations and suggestions, stressing the importance of building bridges across the aforementioned divides.

II Exploring qualitative methods and techniques

Qualitative methods have emerged as a useful way of understanding the complexities of migrants' senses of place. Of these, semi-structured interviews have become the most common technique used in human geography (e.g. Buttimer, 1985; Morén-Alegret, 2008; Mullings, 1999; Nagel, 2005; Western, 1993), although other qualitative techniques for studying senses of place among immigrants have also been explored, such as focus groups (Goss and Leinbach, 1996), participatory research (Mountz et al., 2003; Pain, 2004), analysis of biographies (Findlay and Li, 1997; Halfacree and Boyle, 1993), journeys as research exploration and hermeneutics (Armstrong, 2004) and narrative analysis (Gutting, 1996).

Qualitative interview analysis may give voice to interviewees, help interpret significant social or cultural phenomena, and from those observations propose theories from which valuable new information can be obtained (Ragin, 1994). However, one possible shortcoming of this technique is that although researchers can interview dozens of people – e.g. 34 informants (Western, 1993) or 102 immigrants (Morén-Alegret, 2008) – at the end of the day the qualitative data obtained is not representative of all immigrants related to the places under study. This so-called shortcoming can be highlighted as a problem by positivist researchers but may be considered irrelevant by some humanist and feminist geographers if the aim of the research is to explore the processes producing a particular event and to promote a detailed understanding of sociospatial experiences. In fact, when research is conducted as a conversation rather than an interrogation, qualitative interviews can raise informants' awareness as they discuss, understand and come to terms with their own personal experiences and even become empowered (Madge et al., 1997; Morén-Alegret, 2002). From a positivist point of view, researchers' engagement with participants may imply bias in questioning and answers. However, the aim of such research is not to obtain 'objective' knowledge, and consequently it might not make sense to talk about 'bias' in such cases.

Taking into account another meaning of 'representation' than the above, recent non-representational theory (NRT) proposals are also increasingly being considered a potentially useful way of approaching and/or understanding geographical concerns and issues (Lorimer, 2008; Thrift, 2008). Indeed 'human life is based on and in movement ... Non-representational theory takes the leitmotif of movement and works with it as a means of going beyond constructivism' (Thrift, 2008: 5). According to Thrift, among other proponents, non-representational theory

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seeks to capture the flow of everyday life and therefore concentrates on practices, understood as material bodies of work or styles that have become stable over time (through, for example, the establishment of corporeal routines; Thrift, 2008).

At the moment, it is still too early to assess specific instances of NRT for research on human migration and sense of place, since most of its contributions have been theoretical. However, relevant preliminary links to some of the tenets concerning place and immigration (e.g. getting 'in touch with the full range of registers of thought by stressing affect and sensation'; Thrift, 2008: 12) can be found in an article on pro-rural migration by Halfacree and Rivera (2012), who, after arguing that migration should be regarded in a more contextual and biographical manner and attaining some characteristics of what is known in non-representational theory as an 'event', suggest that 'the affective dimensions of the rural environment, in particular, may afford profound biographical consequences for the migrant' (p. 109). In any case, it has been suggested that if someone has NRT epistemological contributions in mind, ethnography is the best method. Avoiding pre-existing categories or explanations, such ethnography could study movement, affect and sensation (Estévez Villarino, 2012).

Departing from ethnography, Boyle and Halfacree (1998) stress the usefulness of a bio-discourse methodology for the analysis of material from interviews and focus group and conclude that decision-making processes in migration cannot be assumed to occur in isolation from everyday life, which is both individual and collective at the same time. Indeed, discourse analysis enables researchers to tease information out of their respondents' words. This kind of analysis advocates treating the language itself as a data resource. Integrating discourse analysis into the biographical approach provides a biographical-discourse or 'bio-discourse' methodology that can be used for analysing migrants' experiences regarding sense of place.

In a recent and revealing example of the usefulness of the bio-discourse methodology for exploring migrants' senses of place, Ní Laoire (2008) studied international return migration to Ireland using a biographical and life-course perspective and found that, after interviewing more than 30 migrants, 'the narratives construct a normative association between life stage and place, associating Ireland with "settling back" and the migrant destination with youth and transience'. More than a question of 'encircling' feelings in places over time, Findlay and Stockdale (2003: 6), in a qualitative study of migration into rural Scotland, concluded that 'the analysis of the transcripts involved a cyclical process of reading the texts, interpreting and abstracting themes, coding and further organization of themes, further interpretation and eventually the formulation of the model' (p. 9). Among their conclusions, they highlighted that 'interviewees seemed to stress that embeddedness was as much a sense of continuity and social connectedness (following Massey's definition of place) as it was a function of temporal and social processes. In this way, 'place' (as the locus of social connectedness) becomes powerful in shaping migration actions over the life-course, as well as, of course, itself being shaped by migration' (Findlay and Stockdale, 2003: 26). This methodological approach 'rests not only on the paramount importance accorded to people's "conscious" expressions of the meaning of migration, but also on those aspects of consciousness which affect actions in a less-than-discursive, subconscious manner'. For them, epistemology should inform rather than preclude methodological strategy.

Similarly, Halfacree and Boyle (1993: 336), in an inspiring article on the biographical approach in migration studies, noted that Giddens (1996) uses the flow of everyday life in his concept of 'practical consciousness'. This concept expresses how we know how to 'get on'

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in everyday life without having to 'think about' our actions. Both daily life and practical consciousness would be crucial for understanding migration experiences, as they rely upon routines and structured forms of behaviour. One of the conclusions suggested by Halfacree and Boyle is that there is a 'need to undertake in-depth investigation of the biographies of migrants in order to gain appreciation of the intentions implicated in the migration decision' (p. 343).

Building on those thoughts, it can be suggested that the biographical approach can also be relevant for studying migration and sense of place. How an individual senses a given place and how that sensory experience is expressed are also related to her/his own biography, including previous migration movements but also childhood experiences and dreams, education paths, languages spoken and political engagements. However, the biographical approach is more time-consuming and, especially for international migration studies, involves overcoming higher cultural, social and linguistic barriers than conventional approaches.

Indeed, as in any qualitative research involving people from a variety of geocultural backgrounds, cross-cultural challenges may be relevant when studying migrants' sense of place (Twyman et al., 1999). Undoubtedly, forms of body language and non-verbal communication vary depending on cultural backgrounds. In this regard, human geographers have long drawn attention to the embodied experiences of class, gender, race and sexuality in how bodies are read and constructed by others during fieldwork (Bain and Nash, 2006; Davies and Dwyer, 2007; Silvey and Lawson, 1999). For example, Mullings (1999) concluded that her own particular combination of gender, race, class and age characteristics had significant effects on the type of information that she collected in her fieldwork with expatriate managers and workers in information-processing companies in Jamaica.

In this regard, the researcher's positionality is a major methodological issue and, as Findlay and Stockdale (2003) note, even though interview questions influence interviewees' lines of thought, their responses and comments often open up unexpected new avenues for exploration. In an interview, intimate, secret and singular narratives may emerge. The combination of interviews with focus groups is the methodological strategy used by Currle (2011), who argued that focus groups can be more useful for grasping collective narratives and for approaching new topics. With regard to migration research, she has noted that:

> the success of focus group discussions is highly dependent on the group composition. In groups with members from different ethnic backgrounds discussing highly emotional topics, a focus group moderator has to manage a range of possible difficulties ... Discussions with highly qualified migrants are much less complicated to carry out ... The biggest problem is in the recruitment of participants. If one can overcome this problem, focus group discussions are an effective method for achieving insight into the migration histories of highly qualified migrants. (Currle, 2011: 21–22)

Indeed, when studying feelings and emotions, silences can be as relevant as voices. As Crang (2005: 231) pointed out, 'the fear and mistrust that we negotiated with potential project participants was not a barrier to overcome, but rather an instructive part of the research process'. These barriers have even been found when academics have opted for a clear political stance on social action and transformation through research. In this regard, in their study of people with transnational connections between northern New Jersey and El Salvador, Mountz et al. (2003) sensed hostility to the interviewers that arose from the interviewees' fear of the immigration services.

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On the other hand, scale is also an issue when dealing with qualitative methods. As pointed out by Comaroff and Comaroff (2003) almost everything takes place at multiple scales, and people no longer live in bounded social contexts. The question is how to carry out research in multiscaled, translocal places (Crang, 2005). Multisited ethnography has been seen as a tool for studying migrant spaces by looking beyond fixed, local and bounded sites (e.g. Gil Martínez de Escobar, 2006; Hall, 2004; Mand, 2005; Riccio, 2005). While not necessarily based on ethnographic methods, some geographers have opted for translocal research into migration (e.g. for skilled migrants – see, for instance, Findlay et al., 2008; Willis and Yeoh, 2002).

Following a similar approach, others have chosen to observe how the transnational is translated (or reinterpreted) in different local contexts. The point to stress here is that senses of place are constructed in transnational spaces, but are expressed in places. In fact, for political transnational spaces, scholars have argued that immigrants' habitual transnational engagements are far from being socially unbounded and 'deterritorialized', since transnational action occurs in quite specific territorial jurisdictions, and appears to reproduce pre-existing power asymmetries (Guarnizo et al., 2003). In a similar vein, Smith (2001) uses the metaphor of 'transnational urbanism' to explain how transnational social actors are materially connected to socio-economic opportunities and political, structural and cultural practices found in cities at some point in their transnational circuits.

This discussion on transnationalism raises an epistemological issue, since migrants' senses of place are created through individuals' transnational (or at least binational) life-paths connected with situations that are more than mere assemblages of visible phenomena (Hägerstrand, 1982). When dealing with overlapping senses of place that are constructed through complex migration trajectories, researchers usually obtain a picture of the current situation (and eventually a reinterpretation of her/his past personal trajectory in the present). Rather than trying to capture the complexity of place construction, its changes over time and its relevance for a comprehensive understanding of migration processes, scholars have usually preferred to concentrate on specific spheres of research, such as the significance of immigrants' everyday spaces (Amin, 2002; Conradson and Latham, 2005; Nagel, 2005; Ortiz-Guitart and Mendoza, 2008), the use and appropriation of public spaces by transmigrants (Ehrkamp, 2005; Garbin, 2009) and the relationships between personal biographies and places (Findlay and Li, 1997; Halfacree and Boyle, 1993).

Data collected from transnational studies generally does not reflect the widespread circularity of modern international movements; and its cross-sectional collection precludes the analysis of immigration as a dynamic process. Seeking an answer to this, Massey (1987) produced the ethnosurvey, a research design composed of five specific features: multimethod data collection, representative multisite sampling, multilevel data compilation, life history collection and parallel sampling (see also Massey and Zenteno, 2000, for an appraisal of its value). Following ethnosurvey techniques, the Mexican Migration Project (MMP) has gathered social, demographic and economic information on the household and its members since 1982. This source has been very useful for identifying patterns of Mexican–US migration over time, such as general patterns (e.g. Massey et al., 2002), information on undocumented migration (e.g. Donato and Patterson, 2004) and information on remittances to Mexico (e.g. Massey and Parrado, 1994). However, although this complex source is of major interest for the study of long-term tendencies, it falls short when exploring the role of place in migration movements, apart from comparative analysis of migration trends in

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different territories (see, for instance, Massey, 2008).

More than multisited research, and giving a slightly different twist to the argument, the new mobility paradigm (e.g. Blunt, 2007; Sheller and Urry, 2006; Urry, 2007) suggests the need to explore non-sedentary methods in order to access people's attitudes to the environment that surrounds them – i.e. the method itself should be mobile (e.g. walking interviews; Evans and Jones, 2011). Some mobile methods share the idea of a methodology that enables co-experience with the subjects. For instance, in order to study migrants' transnational networks and related urban spaces, researchers can join the flow of migrant circulation, becoming travel companions while crossing the Mediterranean sea by boat or while driving vans on motorways (e.g. Schmoll and Semi, 2011).

Certainly the body itself (either in movement or static) has been seen as a relevant 'locus' for studying people's sense of place (see, for instance, Nast and Pile, 1998), although emotions embodied in places have rarely been studied in relation to migration (for an exception to this rule, see Tolia-Kelly, 2004). However, cultural geographers have studied feelings and emotions towards places through performances (for example, in urban spaces, Fenton, 2005; Pinder, 2005), and health geographers have explored the contingent nature of the 'sense of place' for health and quality of life (e.g. Eyles and Williams, 2008). In any case, these innovative methods that can capture the contingency of place are of limited interest for the analysis of regularities and changes over time.

In that context, feminist and poststructural geographies have been opening new avenues for research on human migration shifting the scale to the body and, thus, revealing processes, relations and experiences that have otherwise been obscured (e.g. Mountz, 2004; Nast and Pile, 1998). As for research techniques concerning migration, in a case study on the Canadian government's response to the arrival of migrants smuggled by boat from China in 1999, for instance, 'the strategy of embodiment entails following civil servants through their day-to-day work in relation to human smuggling' (Mountz, 2004: 339). According to this, when carrying out research on migration and sense of place, apart from studying migrants themselves, it may be relevant to take into account the spatial implementation of migration policies and, more specifically, the embodied geographies of the nation state.

Additionally, the roots of the epistemological importance of paying attention to the body in geographical studies of migration can be traced back to, among others, Henri Lefebvre's reflections on the space being produced in order to be *lived* by people (Lefebvre, 1991). This French philosopher sketched two closely imbricated 'histories of space' that can also be considered 'histories of the body' (Gregory, 1997: 205): one is constructed through a radicalization of Karl Marx's critique of *political economy* (with some links to Jürgen Habermas's theory of communicative action) and the other is built on an oblique critique of psychoanalyst Jacques Lacan's work (with connections to Michel Foucault's writings). Regarding the latter 'history', it is relevant to stress here that Lefebvre is interested in 'the space internalized in the form of mental "topologies"' (Gregory, 1997: 219), which can be linked to migrants' senses of place; and, in general, these theoretical proposals, critiques and debates can be useful for enriching an in-depth qualitative analysis of semi-structured interviews or ethnographic data. For instance, a sense of place can be directly affected by suffering and embodying racist discrimination. Additionally, some geographers have adopted the notion of embodied or situated knowledge as a substitute for disembodied 'objective' knowledge when studying

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'migrants' and 'the other' (Morén-Alegret, 2002; Simonsen, 2009).

III Exploring audiovisual methods and techniques

Further analysing the embodied connections between place and migration processes, and in an attempt to explore new avenues of research, social scientists have explored audio methods, visual methods and, last but not least, audiovisual methods in strictu sensu (e.g. Grossman and O'Brien, 2007). Among the latter, video is particularly outstanding because it is useful for capturing movement by tracking the fluidity and rhythms of everyday life (Garrett, 2011; Hindmarsh et al., 2010), and, for instance, documentary videos can show places where immigrants' daily life occurs while offering voices and images gathered during interviews in situ to a variety of immigrants (Morén-Alegret, 2010).

Regarding audio methods, radio can, for instance, portray changes in sound in relation to senses of place linked to the arrival of immigrants (Browne and Onyejelem, 2007). In relation to visual methods, photography may be used to capture the memory of migration histories (McGarth, 2007). In this regard, Tolia-Kelly (2004) considers visual cultures (e.g. photographs, pictures and paintings) to be prismatic devices that refract the lived landscapes of South Asia and East Africa in the process of 'making home' in Britain. These visual cultures are considered materials that enable embodied connections with landscapes experienced prior to migration, including sensory connections with past homes, natures and family life.

In communicating outcomes that combine two senses at once, audiovisual methods and techniques can display movement, flow and processes better than other approaches. However, on the one hand, managing or supervising complex technical issues is a challenge for any researcher seeking to use audiovisual methods and, on the other, it can be very difficult to build bridges across the existing cultural divide between the academic culture of researchers and the TV or video cultures of technical staff that one may have to hire in order to carry out an ambitious audiovisual project. Nevertheless, audiovisual methods may be of great utility when combined with other qualitative methodologies, as demonstrated by O'Neill and Hubbard (2010) in their research on recent arrivals in the East Midlands, Britain, which included an arts project called 'A Sense of Belonging'. This project conducted participatory arts based methods (including guided walks and arts/research workshops). By doing so, they stimulated high-quality interdisciplinary research and the production of art visual works that were considerably useful for facilitating connection, communication and feedback, thus contributing to public awareness of the issues newcomers have to face (O'Neill and Hubbard, 2010). Among other outcomes, the partners contributed to the creation of a 'politics of dislocation' that explores how people attach themselves affectively to different places in different ways.

Among visual methods, mental maps stand out for their long tradition and many interpretations in geography. In the 1970s, following a constructivist approach, the literature on mental maps that flourished in behavioural geography assumed that mental maps showed not only experiences, but also people's constructs (Pinch et al., 2010). Through the lens of a positivist approach, the question of how to measure images of places was of the utmost relevance. A relevant example is how Wolpert (1966) noted that perceptions of social and physical environment affect an individual's decision to migrate. In a similar vein, Gould and White (1974) found that students from different countries had consistent images of geographies that were mainly constructed from a shared national viewpoint. The use of mental maps to aggregate individual views, and so develop a generalizable view of geographical information concerning perceptions and preferences, has

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certainly been observed by some scholars since then (see, for instance, Lopez and Lukinbeal, 2010; Walmsley, 1982).

In a critical review of Gould and White's book, Tuan (1974: 591) believed that 'the maps of the book are opinion and information surveys presented in a cartographic form'. In so saying, Tuan suggested that for these authors maps are only tools for capturing data to be 'placed' on pre-defined hypotheses. Indeed, Gould and White's positivist hypothetico-deductive method supposes that the human mind is naturally constructed in spatially relational terms. However (and this is a major criticism of cultural geographers), it seems that humans naturally retain overlapping images of places that may (or may not) generate layers of spatial knowledge (De Castro, 1997). The suggestion is that positivist approaches fall short for understanding people's perceptions of places.

Subsequently, when the cultural turn in geography solidified in the 1980s and 1990s, mental maps (also known as 'cognitive maps' for some scholars seeking to stress the differences from previous approaches) have been seen as a mixture of spatial cognition, place representations and spatial imagination that can provide information not only about places themselves, but also about people's identities and behaviours in relation to them. Therefore, mental maps not only represent a simplification process, a mechanism for breaking down territorial units into spatial schemata, but also a process of (re)constructing reality (Bataillon and Panabière, 1988; De Castro, 1997), and can be filled with ideas and images of individuals' economic, political, cultural or social contexts (Ley, 2000). Under humanistic approaches, maps can provide information on people's contexts, but the emphasis is on their emotions and feelings and how they may be expressed in spatial terms. Emotions cannot be aggregated, and so generalizations are not on the agenda of these approaches.

Following this line, mental maps may certainly capture senses of place that have been constructed throughout individuals' life-courses. However, when asked to draw a map, people need to focus on particular territories. For research into lived spaces and urban imaginaries, this issue has been solved by asking participants to focus on particular cities when making their maps. In doing so, mental maps show how individuals analyse and organize personal spaces (e.g. leisure spaces), and how relevant they are for orientation and carrying out everyday activities. In these studies, cognitive mapping is part of broader methodological strategies, and is accompanied by other qualitative tools, such as semi-structured interviews and photography (for a case study of Bogotá and São Paulo, see Silva, 1998; for Mexico City, see De Alba, 2004; Ortiz-Guitart and Mendoza, 2008).

Recently, through innovative use of 2D and 3D GIS, geovisualization has facilitated the identification and interpretation of spatial patterns as well as relationships between complex data sets in the geographical context of a particular study area (Kwan and Lee, 2003). Involving a geographical dimension in the visualization process, scholars in the 'time geography' tradition have mainly examined women's daytime movement patterns, employment activities and household responsibilities, and have identified the restrictive effect of space-time constraints on their activity choice, job location, travel, and occupational and employment status (Hanson and Pratt, 1995; Kwan, 2000; Laws, 1997). Though suggestive, the use of GIS to explain dynamic processes is difficult, since GIS models are geared toward static situations (Kwan and Lee, 2003). Furthermore, GIS-based methodologies only help to gain insight into subjectivities and feelings if they are complemented with other techniques, such as the cartographic narratives Kwan used in her research with Muslim women (quoted in Kwan, 2002). As argued by Pickles (2006), GIS emerged with particularly strong commitments to modernist and progressivist notions

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of science and a renewed sense of the power of the universality of hypothetico-deductive methods. The absence of a reworking of basic ontological categories as well as insufficient attention to the ways in which metadata are constructed have led to the assumption that GIS is a different approach to 'science' based on a specific paradigm of knowledge production. Consequently, many geographers have taken the view that there simply is no need to take seriously the decade of critical geographic work on hypothetico-deductive approaches to science (Pickles and Watts, 1992).

In any case, the use of mental maps and other visual methods as spatial representations with social meanings in order to understand migration decision-making has been scarce in the literature. One possible reason for this is the difficulty inherent in interpreting the role of geographic scale in forming migrants' perceptions of their places of origin and their destinations. When dealing with international migration, even senses of place that may be attached to small locations cannot be understood without making reference to nation states. Indeed, representations of the nation state seen via mental maps and spatial discourses come to generate fields of meaning and are used to explain immigrants' decisions (e.g. whether to stay or return). Mendoza (2006), for instance, understood a mental map of a Walmart store in Albuquerque drawn by a recently arrived migrant in terms of a change of life (from 'dull' rural Mexico to an 'exciting' American way of life), and a desire to remain in the USA in the future. Similarly, Carreras (2008) found that positive images of Sarajevo (and its urban changes) were relevant for everyday life and for the well-being of a group of young people, yet the desire of this group for a consumer-oriented lifestyle was so intense that they viewed emigration from Bosnia-Herzegovina as the most likely future scenario to fulfil their expectations. Though they may be difficult, mental maps help to reveal opinions about other places experienced along people's migration routes, and they are helpful for understanding past and future migration movements.

Mental maps epitomize the epistemological turn in geography. Along positivist lines, the first studies of mental maps took for granted the existence of an objective mappable space against which their maps could be compared (Cosgrove, 1999). However, considering contributions from humanistic approaches, recent studies of cartographic representations by migrants on places situated the migrant at the centre of the analysis (e.g. her/his life-course, professional background, emotions and feelings), with the construction of spatial knowledge being built with an array of qualitative techniques along with cognitive maps (for example, for spatial narratives, see Carreras, 2008; Mendoza, 2006). This combination of methods considers that cartographic representations are functional and technically efficient regarding the analysis of narrative forms and discourses (Cosgrove, 1999). Yet, even if a certain epistemological autonomy of cartography is recognized, the emphasis on cartographic and spatial narratives implies that the underlying paradigm should be geographical (i.e. not cartographic; Turco, 2010). The next section deals with quantitative methods that are supposed to be more 'objective', even though subjectivities concerned with senses of place are barely measurable.

IV Exploring surveys

Quantitative approaches to assess the relevance of 'place' and 'sense of place' have mainly come from environmental psychology, environmental management and social psychology. The strong phenomenological tradition in geography regarding the sense of place may have discouraged researchers from exploring quantitative methods. Yet the literature on environmental sciences and psychology argues that people's senses of place are composed of different (and various)

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analytical layers, such as 'place dependence' (i.e. functional uses of places and how well these serve to achieve people's goals) and 'place identity' (i.e. emotional and symbolic meanings associated with particular settings), and thus they can be studied separately.

These analytical dimensions of the sense of place may be further broken down into more specific theoretical categories. Although not used for quantitative analysis, Relph (1974) was the first to propose a scale of sense of place by employing a framework of references of insideness/outsideness. Along similar lines, Eyles (1985) was one of the first geographers to use statistical tools to measure sense of place, and classified the respondents to a survey conducted in Towcester, England, into different types of sense of place. Those who were thought to have weak feelings towards the place were classified into 'apathetic-acquiescent' and 'instrumental' groups. The others range over a wider scale: commodity, social, family, nostalgic, platform-stage, way of life, roots, environmental. More recently, Lewicka (2011) proposed two types of place attachment (traditional and active attachment) and three types of non-attachment (alienation, place relativity and placelessness).

These categories, despite being more specific than broader concepts or analytical dimensions, are still difficult to translate into measurable variables. In an attempt to solve this dilemma, Shamai (1991) divided a six-point theoretical classification of sense of place into four categories (no feelings, belonging, attachment, commitment). Similarly, the place construct scale devised by Nielsen-Pincus et al. (2010) was based on three dimensions of sense of place that were asked about separately. Each dimension was composed of several questions that used seven-point Likert-type answers ranging from 'agree very strongly' to 'disagree very strongly' (Nielsen-Pincus et al., 2010).

Once the dimensions and categories have been defined, the construction of indexes is usually the next step in quantitative research. Most empirical research has opted for multidimensional scales of sense of place (Bricker and Kerstetter, 2000; Jorgensen and Stedman, 2001; Shamai, 1991; Stedman, 2002), although others have chosen a one-dimensional scale (e.g. Brown et al., 2003; Hay, 1998; Williams et al., 1992; Woldoff, 2002). As an example of a complex one-dimensional index, Hay (1998) constructed a 'sense of place' indicator out of four interrelated questions (feelings of place attachment, importance of localized ancestry, feelings of being an insider, and motivation to remain in the area of study). The four variables were statistically analysed by a reliability test and found to be good indicators of the intensity of the sense of place (alpha.70; standardized item alpha.70). Standardized scores were then calculated by adding the z scores of the four variables to form the composite index (Hay, 1998). Similarly, Williams et al. (2010) constructed four dimensions of sense of place (neighbourhood rootedness/mobility, neighbourhood sentiment, neighbours, environment/health) from 46 variables of a survey carried out in two neighbourhoods in Hamilton, Canada. Subsequently, after using logistic regression models to predict sense of place from sociodemographic variables, they found that sense of place was strongest among seniors, long-term residents, unmarried people, residents with a lower level of education and immigrants. Taking a different approach, Kyle et al. (2005) tested three models of place attachment: the first was a single model where items were loaded onto one dimension of sense of place; the second used a three-dimensional scale with separate conceptual layers of sense of place, and the third combined both, with the three first-order factors being loaded onto a single second-order factor. The best model was the one with the greatest amount of disaggregation between the analytical dimensions of sense of place.

Even though the epistemology behind quantitative methods is not really much of a consideration for many of the practitioners of these

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methods (Robinson, 1998), it is recognized that statistical techniques form part of the positivist scientific method (e.g. Abler et al., 1971; Peet, 1998). Based on hypothetico-deductive techniques, positivism states that only what is directly observable and measurable is acceptable as evidence. Thus knowledge is to be achieved via structured theory-led observations to be placed in general categories and explained through relationships that are indeed functional laws (Johnston, 1989). Therefore, research goals are defined to be geared at finding 'objective' indicators for measuring the relation between place and migration/ethnicity (e.g. Brown et al., 2003; Lewicka, 2011; Shamai, 1991; Shamai and Ilatov, 2005). More than a question of choice, the method itself is a main objective of research.

Therefore, by stressing methods, and emphasizing the construction of complex scales, either one-dimensional or composed of various dimensions and models, the conclusions of this empirical literature are in many cases limited to identifying which variables are best for understanding people's sense of place. Furthermore, in doing so, much discretion is on the side of the researcher, who is responsible for giving weights and values to dimensions, concepts and variables. In order to avoid discretion, open questions are not widely used in quantitative analysis when assessing sense of place (yet they may provide more nuanced results). An exception to this rule was the study conducted by Cuba and Hummon (1993) in three regions of Cape Cod, Massachusetts. Respondents gave open responses to the question 'Why do you feel at home here?', and their responses were grouped into six dichotomous variables that measured distinct qualitative dimensions of place attachment. Similarly, for emigration from Mexico City, Mendoza (2009) used an open question to explore the sense of place in the different places that make up possible migration routes. The highly diverse answers were grouped into five categories that reflect different levels of acceptance or rejection of places. Among the results, it was remarkable that respondents failed to voice positive opinions or feeling towards any of the places that (possibly) made up their migration route, and the USA as a 'place' ranked low.

Another type of confrontation comes from the problem of scale. Clearly 'sense of place' may be understood on any scale, from a room in an individual's home to specific regions (Nogué i Font, 1993; Shamai, 1991), and individuals' senses of place at specific times may involve different overlapping and connected places. As far back as the late 1970s, Tuan (1979) recognized a clear difference between the sense of place connected with large administrative divisions, such as regions or cities, and that related to small spatial units, such as rooms. Later, Cuba and Hummon (1993) considered that there had been few studies that simultaneously examine identification with places of different scales, from the dwelling to the community and the region. Certainly, a significant number of studies of the 'sense of place' have exclusively focused on cities and residential areas, with this being assessed in terms of levels (and expressions) of attachment to the residence that are generally related to the length of residency (e.g. Brown et al., 2003; Hidalgo and Hernández, 2001; Manzo, 2003; Taylor, 1996; Woldoff, 2002).

The quantitative approach usually separates 'sense of place' at different scalar levels (e.g. nation state, region, city), and aims to explore relations between them. Thus, for instance, Shamai (1991) concluded that 'nested allegiances' among Jewish students in Toronto, Canada, reinforce each identity, and senses of place do not compete with each other. In his study of emigration from Mexico City, Mendoza (2009) shows similarly strong positive correlations between senses of place regarding the home and the municipality of residence; yet correlations are weak between these two and feelings towards 'place of birth', and the

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opinions of the USA are not related to any other feelings or places. The author concludes that the sense of place is constructed from bottom to top, with allegiances becoming weaker as 'places' as they become more distant both in space and time. This conclusion certainly recalls Tobler's (1970) famous first law of geography: 'Everything is related to everything else, but near things are more related to each other'.

Scale brings up the issue of sampling, since researchers must choose not only the number of people, but also the 'locus' in which a survey is carried out. Even with random criteria, assumptions have to be made concerning how the sense of place is measured within administrative-bound Euclidean-defined areas. So, research has usually opted to measure the sense of place in residential terms, and specific neighbourhoods and cities are selected. For example, using a hierarchical linear modelling analysis, Brown et al. (2003) examined attachments both to the home and to the block/neighbourhood in 600 residents in an area of Salt Lake City experiencing a gradual decline. Some results were predictable, such as the fact that the sense of place was significant for homeowners. Perhaps less predictable was the finding that white non-Hispanic populations are less attached to the neighbourhood than other ethnic groups, despite having lived there longer (Brown et al., 2003). This case study stresses the role of ethnicity (and perhaps the difficulties of generalization) in evaluating senses of place. In other cases, the variations on local senses of place are studied within a national framework of reference. For instance, Lewicka (2011) found in her study of 'place attachment' in Poland that the sole predictor of attachment and local identity was the length of residence (in the neighbourhood and in the town/city), regardless of the number of moves, the number of different towns/cities in which the individuals lived for longer than three months, and whether they were working abroad or not. This 'encircling' of places in Euclidian administrative-defined limits is one of the main flaws of the use of quantitative methods for exploring people's senses of place, since migrants' subjectivities and identities are constructed in several places (not always of a territorial nature; e.g. cyberspaces) throughout individuals' life-courses. To cope with a range of multiscalar place-related identities, large samples (far beyond the number of 30 that eventually enables statistically representative sampling) can be used, but surveys must necessarily be carried out within the limits of bounded areas.

In an attempt to overcome the 'locational' restrictions associated with sampling, the new mobilities paradigm has recently proposed creative ways of selecting when and where to sample, rather than focusing on numbers. Depending on the objective, the new paradigm proposes that research methods need to be 'on the move' in order to simulate in various ways the many and interdependent forms of intermittent movement of people, images, information and objects (Urry, 2007). For instance, airports, train stations and other communication hubs may be suitable 'non-places' (Augé, 1995) for capturing the senses of place of individuals for whom mobility may be an inherent part of their lives, or the method may be mobile itself, with the researcher being engaged in travelling. Such methods of sampling go against the very idea of randomness, since individuals are not chosen following probability criteria. Instead, researchers place themselves at socially and institutionally constructed 'intersections' to maximize the chance of reaching specific types of individuals performing certain kinds of role. Many of these intersections are increasingly dynamic and mobile.

The new mobilities paradigm encourages creative thinking about migration and mobility patterns. Epistemologically, this represents a break from previous quantitative-based research, for which migration, mobility or settlement are usually reduced, when exploring senses of place, to variables such as 'length of residence',

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'number of moves', 'ethnicity' and 'place of birth'. More interesting, perhaps, is the use of these indicators as discriminators when comparing the sense of place of different groups. Thus Hay (1998), in his study of sense of place from a cross-cultural perspective, found significant positive correlations between intensity of sense of place and residential status, social belonging, age and number of ties, but negative correlations with years of residence elsewhere and travel abroad for residents in the area of study. These indicators were less clear for 'outmigrants'. In a similar approach, Shamai and Ilatov (2005) compared the sense of place of non-immigrants and immigrants in a northeastern region of Israel. Again, results vary from one group to another, with a non-significant correlation between years of residence and sense of place for immigrants.

As previously suggested (e.g. Boyle and Halfacree, 1998; Kwan, 2002; Kwan and Knigge, 2006; Kwan and Lee, 2003), a combination of methods may help to overcome the limitations associated with a specific methodology. For instance, before carrying out fieldwork, researchers might use censuses and other official statistical information sources to design qualitative interview quotas according to the interviewees' age, gender or nationality, whereas qualitative analysis of transcribed interviews can inform researchers about core hidden issues before preparing the questionnaire for a subsequent quantitative survey. Twigger-Ross and Uzzell's (1996) approach in their study of the London Docklands adds a new model for mixed methodology to our discussion. Once the main dimensions and variables had been identified in a survey, they defined a qualitative tool to study the depth of sense of place among a selected group of previously surveyed residents. But such an approach is rarely used in the literature, because of different ontological bases underlying methods that are themselves rooted in contrasting philosophical foundations; when this combination of methods is chosen, the positivist scientific method usually prevails (with the qualitative methods only being used for confirmation or rejection of previous hypotheses). However, as stated by Stedman (2002), a combination of methods is challenging and may be fruitful, since:

> positivistic research on sense of place ... often neglects important theoretical tenets, including the relationship between symbolic meanings and evaluations ... On one hand are interesting statements that sound like testable hypotheses but derived from the phenomenological tradition that avoids positivistic hypothesis testing; on the other hand are quantitative treatments of place that have failed to engage these important theoretical tenets. (Stedman, 2002: 562)[2]

V Final considerations

Many decades ago, Ravenstein's laws of migration underlined the potential importance of certain characteristics of place for migration, while the aforementioned Jane Austen novel suggested that, beyond mechanical perspectives, there were other useful and sensitive ways of approaching and understanding human actions. Bearing both in mind, this article has explored different methods for studying the sense of place and migration. The discussion on the 'sense of place' has undoubtedly been very widespread in geography since the mid-1970s, but with few exceptions the analytical potential of this concept has yet to be fully achieved as far as the study of migratory movements is concerned. A major reason for this failure lies in the methods, due to difficulties in capturing and evaluating the relevance of 'place' for migration processes. Thus, from a multidisciplinary and geographical standpoint, the article has reviewed methods that have been used to analyse the complexities of the relationship between migration and place. Building on a review of the literature and the author's reflections, the article has assessed the potential of these methods for the study of migration in geography.

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Our discussion has highlighted that the philosophical underpinning of the different methods somehow conditions research questions and objectives. Indeed, for positivists social science is a matter of improving research methods to the point at which they can accurately describe and measure social facts (Castles, 2012). Positivists tend to be quantitative social researchers who work with surveys and censuses and who have come to believe that ever more sophisticated statistical packages and computer analysis can lead to objectivity. In contrast, our literature review has challenged 'objectivity' assumptions of positivist approaches, and has revealed a vast array of qualitative and audiovisual methods that may throw light on the complex relationships between place and migration processes.

Certainly, this discussion has ontological and epistemological ramifications. For geographers such as Edward Relph, Yi-Fu Tuan and Doreen Massey, who take phenomenological approaches, a unique holistic sense of place can only be addressed by sensorial methods. However, from the positivistic view that prevails in some environmental and psychology studies, the concept can be broken down into multiple layers or analytical layers. From this latter perspective, surveys, variables and models are the techniques; for the former, emotions, sensations and feelings dominate the language.

Our critical review of the literature has also indicated the different strengths and flaws of the methods. So far, the most used method for assessing the relevance of the sense of place in migration processes has been the semi-structured interview, which offers a great deal of flexibility, and enables a combined analysis with other methods. Apart from a relevant amount of discretion associated to interviews, its main flaw lies in difficulties with capturing movement and flow. Furthermore, with the exception of some audiovisual methods and innovative uses of GIS, research into 'sense of place' and 'migration' has generally focused on specific places, although migration implies more than one territory (or even state), and place attachments go far beyond closed settings.

Moving away from 'sedentary' static techniques, mobile methods that reflect the new paradigm of mobility suggest that the locus for analysis should be placed on the movement that gives a distinctive character to individuals' senses of place (Evans and Jones, 2011). The mobility paradigm does indeed introduce new insights to the debate. It is no longer a question of identifying a 'study area' to explore people's sense of place in a bounded-closed Euclidean territory, since places themselves may be remade by the fact that a growing number of people (as well as institutions and social practices) are much more mobile.

This debate also suggests devising more innovative ways of sampling beyond closed territories, which implies a real challenge for quantitative methods. Developed in territories defined by administrative limits, surveys are believed to be 'objective' tools for measuring senses of place among immigrants (yet personal criteria have to be chosen in defining fieldwork techniques, e.g. questionnaires). Furthermore, the lists of questions in surveys that are generally chosen to inquire about emotions and feelings are necessarily too simple to capture nuances and changes, although triangulating between interview and statistical techniques may help detect data anomalies.

In this regard, our discussion has touched on several conflicting aspects of the analysis of senses of place, with scale being particularly relevant. Senses of place may be felt on many scales, and there is no single 'sense of place', but rather embedded interconnected feelings that may be seen in particular 'settings'. The issue of scale highlights again the role of 'place' in research. This is not only a choice that depends on the interest of those researching specific territories, but also (and ideally) relates to theoretical approaches and paradigms associated with particular research objectives and

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interests. Thus, adopting a transnational perspective, some authors have chosen 'transnational spaces' as their locus for analysis, although, for the study of the construction and reproduction of transnational practices, these spaces have been 'rooted' in particular bounded settings.

Indeed, there is a long way to go in terms of exploring methods and techniques for analysing the implications of migration for senses of place and senses of places for migration. Questions of statistical representation, scale, sensibilities and consciousness are among the key issues to be addressed. A possible answer may be found in the combined use of both quantitative and qualitative methods, and the joint efforts of multidisciplinary teams (Sui and DeLyser, 2012). In this regard, interrogations of subjectivity and (audio)visual methodologies drawn from a variety of sources (e.g. feminist theories of the body) have emerged as tools for understanding people's lived experiences in an interpretative manner rather than exclusively for conducting spatial analysis. Indeed, positionality could be explicitly acknowledged by geographers and other social scientists alike when studying migration and sense of place in order both to take into account as much of the author's potential bias as possible and to pay attention to difference while conducting research. It is widely accepted today that there is an irresolvable 'unknowability' of the authors' positions (Pratt, 2009; Rose, 1997), but, in the same way that authors disclose their personal names and the institutions they work for in publications, more effort can be made to reveal positions regarding the topic studied (e.g. personal migration histories, gender, age, status and social background). If, for instance, Mimi Sheller, Yi-Fu Tuan and John Urry discussed the sense of place and migration, one may wonder whether their own migratory experiences could add information to that debate (including possible points in common regarding cosmopolitanism) or about the degree to which their current theoretical proposals could be related to their personal moment in life, gender or ethnic background.

Beyond the combination of different methods, our discussion has highlighted how the conventional quantitative/qualitative dichotomy, though helpful to a certain extent for organizing the review and synthesis of the literature, falls short when addressing the complexities of migrants' senses of place. Methods such as mental maps, documentary videos, the ethnosurvey and innovative uses of GIS show new methodological avenues for building bridges between methods with varying philosophical foundations. The role of geography as a discipline in this field is only just starting to be explored at a time when 'place' and 'migration' are of utmost relevance in social sciences and policy-making. Hopefully, this article will stimulate further geographical thinking, debate and research.

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Notes

1. For example, a search in the Scopus database (www.scopus.com) of the keywords 'sense of place', 'migration' and 'method' produces a total of just five references (10 May 2011, 13.25 pm): Armstrong (2004); Chiro (2004); Pascual-de-Sans (2004); Rye (2006); Yamaguchi (2005).
2. A cautionary note should be introduced here that is especially addressed at young researchers. Even though collaborative research work including a variety of methods is ideal, the constitution of interdisciplinary research teams is time-consuming and very difficult, specifically regarding infrastructure, ethics and coordination. Furthermore, perhaps due to current economic restrictions, the

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academic institutional systems have evolved in ways in which a combination of research methods is hard to implement among those scholars at the early stages of their academic careers (i.e. graduate students and junior faculty staff).

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