

Entry Title		Mobile Methods
Author		
1	Name	Kate Moles
	Affiliation, country	Cardiff University, UK
	Lead author email	molesk@cardiff.ac.uk
	SAGE Author ID	[office use only]
All author bio(s)		Kate Moles is a lecturer in sociology at Cardiff University, who conducts research with a focus on mobilities (notably walking and swimming); heritage, the past, memory, and the family; and young people and community. These different threads often overlap in her work, and she has been part of projects that have allowed her to attend to different facets of each. She is interested in the everyday practices and cultural meanings within each site she researches; looking at the ways people perform and accomplish identities, and the stories they tell as part of that.

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Abstract	Mobile methods generally describe an attempt to physically or symbolically follow people, objects, or ideas in a way that prompts analysis of the accounts, practices or experiences of, and interconnections between, mobility, immobility, flows, and networks. Within that broad definition, there can be a difference in the type of interest given to issues of mobility within the research project, broadly divided between a focus on mobility either as a practice or set of practices and as a method or methodological approach. By positioning

	and understanding mobility as a practice, the research focus is on people who move as part of their everyday lives, in their work or through their leisure. This understanding of mobility might mean it is important to accompany participants in their mobile practices, “going about” their daily lives with them and attending to the ways movement is part of the way they know and make their social worlds. Mobility can also be adopted as a method or a methodological approach, whereby as part of the data collection, mobility is brought into the research encounter, as a way of changing the dynamics of interaction.
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Introduction

Mobile methods are used to follow or accompany people, objects, or ideas either physically or symbolically. They generate analysis of the accounts, practices or experiences of, and interconnections between, mobility, immobility, flows, and networks. Within that broad definition, there can be two emphases: on mobility as a practice or set of practices and on mobility as a method of data collection or methodological approach to more general research questions. By positioning and understanding mobility as a practice, the research focus is on people who move as part of their everyday lives, in their work or their leisure activities. This approach to mobility can mean accompanying participants in their mobile practices, going about their daily lives with them, and attending to how movement is part of the way they know and make their social worlds. Mobility can also be adopted as a method or a methodological approach, whereby mobility is brought into the research encounter as part of the data collection, as a way of changing the dynamics of interaction. Hence, generic methods of fieldwork can include collecting data on the move. Mobility can therefore be part of qualitative research in a variety of ways. Thinking conceptually about different aspects of the research process is a way to consider how mobility can contribute to the research.

This entry is ordered according to different points in the research process to bring to the fore these discussions. Initially, this entry examines how mobile methods can be brought into research questions, and the different ways research questions can be constructed to bring mobility into the research design.

Second, this entry examines the negotiation and conceptualisation of access and how that is different when methods and participants are mobile. Third, this entry considers ethical issues as a way to think about mobile methods and what they should be doing. Fourth, strategies for data collection are described, before finally thinking about how the data can be analysed and represented. The discussion is framed primarily in terms of sociology, anthropology, and cultural geography, but mobility and mobile methods can and do inform research across the social sciences, including studies of health and education.

Mobilities and Mobile Methods

The development of mobile methods has, since 2000, accompanied increasing attention to sociological, anthropological, and geographical work on mobility in general. Spatial movement has always been a societal phenomenon: nomadic and transhumant peoples, mass migrations, exploration and colonial expropriation, mass expulsions and ethnic cleansing, the movement of refugees and economic migrants, and diasporic populations. But it is only recently that mobility has been treated as a topic of sustained social science research in its own right (see, e.g., Buscher & Urry, 2009; Urry, 2007). This implies attention to places and spaces and hence to movement within and across spatial boundaries. The development of mobile methods has gone hand in hand with that renewed spatial sensibility. It is therefore possible to think in terms of a “mobile turn” in the social sciences and even of a new “mobilities paradigm” that in turn has implications for research methods (Sheller, 2014). As Mimi Shiller demonstrates, a very large array of topics now come under the aegis of mobilities research and hence of mobile methods. These topics include tourism, migration, and border studies; mobile communications and software-supported infrastructures; automobility, velo-mobility, and various kinds of passengering; children’s mobilities, elderly mobilities, and studies of gendered mobilities; and walking, climbing, dancing, biking, and other forms of trained bodily movement (Shiller, 2014). These in turn imply multiple research methods and mobile methods that reflect the modalities of movement and its enactment. The remainder of this entry discusses just some of those research strategies, paying particular attention to forms of qualitative data gathering and analysis.

Constructing Research Questions

It is important that the methods adopted fit the research questions asked. There is, for example, no point in designing a project to find out how many journeys everyone in London makes on the underground each year using qualitative mobile methods: The data would not answer the question. It might even be beyond the scope of a qualitative project to try to gather data about how many journeys a person, or a group of people, make in a month or even a week. It is important to have clarity about what the topic of interest is; whether that is where people go specifically, and in that case should the researcher gather

GPS data or map their routes somehow. How important is it to know exactly where they went and what will that allow to be claimed through analysis? Such an approach might answer questions of motion but not of mobility as a social and subjective phenomenon. Yet, mobile methods (such as accompanying individuals) might help the researcher to understand how social actors navigate the underground system, and talking to them along the way could illuminate how they make strategic decisions about their journey: How they cope with getting lost or confused, or how they make sense of maps and directions.

Qualitative methods allow researchers to understand what movement means to people, how they accomplish it, and how they manage their own or others' mobility. And, developing that, it is important to consider how being on the move offers a way of being in or knowing or acting in that particular place. In turn that provokes the idea that data gathered *on the move* might offer a useful methodological consideration: What kinds of research questions might call for the researcher to accompany the participants while they are mobile? What analytical affordances, or claims made through the data, might that method offer that gathering accounts of these actions while both researcher and participants are stationary might not? And, if it is the mobile practices participants are involved in that are of interest, then how can they be present in the research without the researcher participating in them? This provokes further consideration; when the world is a mobile one, and people move at different paces, across varying scales and through embodied, affective ways, could there be any research project that did not account for issues of mobility as part of it or that produced accounts of the world that imagined the people and places as fixed and static.

There is a need, from the onset, for the researcher to pay attention to mobilities of different scales and sorts, to think attentively about what mobility is, and how it is present in the research setting, group of participants, or set of practices that are of concern in the investigation. What is the phenomenon being researched? What is it a case of? These questions are pertinent when considering research practice as mobile; the boundaries of the research setting cannot be predetermined if the participant is leading the research to wherever they want; it is impossible to imagine who will come into the research frame when out cycling with bike couriers on their daily business; it would be hard to anticipate what soundscapes will feature in interview recordings while navigating a river by kayak. As such, it is important to think about research questions in ways that allow for understandings and inquiries to unfold, to move with the practices encountered, and to develop through the research encounters.

There is a compelling argument that being mobile—indeed any shared physical exertion—opens up a shared set of bodily practices, linked through a rhythmic engagement with the world that produces a space of rapport and conversation (see Macpherson, 2016). This varies, depending on the physicality of the exertion and the rhythm of the movement, but conducting mobile research offers ways of

interacting that differ from those when static. When walking, the gaze of the researcher and the participant is often trained forward and not towards each other, the pauses in conversation are filled with other sounds and do not descend into stifling silence so quickly, and external stimuli are able to intrude on the interaction in unexpected ways, taking the conversation to other places, both real and imagined. The idea of “talking while walking” (Anderson, 2004) offers research interviews a situated engagement with the landscapes negotiated by the researcher and the participant, sharing the multisensory, embodied encounters of the places. This “walking as method” allows research to unfold in the places and at the pace of the participant; and draws on particular ethnographic ways of imagining the construction of research questions. These would imagine the questions to be shaped through the research encounter as it progresses, shaped by and moulded through the different directions the research goes. In the research where Jon Anderson first introduces the walking while talking method, the work of the walk—or as he called it the “bimble,” an aimless wander—fulfils multiple purposes in his research and all lead to a refinement of research questions and the emergence of methodological innovation, through the combination of practice and place. Taking activists for walks away from the camps they were occupying in environmental protest allowed them to shared activist knowledge, let off steam, and also reminisce about the site and other sites like it. The act of walking became “a midwife of thought” (Anderson, 2004), a practice, and a place that allowed the emergence of new ideas and directions of inquiry.

Negotiating and Conceptualising Access

Rather than imagining access as a single point to be negotiated once, it should be conceptualised as an ongoing process that requires rolling discussions with participants. The research encounter will likely transverse multiple settings, encountering people who might not have been anticipated, be taken to places not normally visited, and hear or be present during unpredicted encounters. Asking participants to go places, or to take the researcher on their mundane journeys, is asking for access to their time and participation, as well as to their places and interactions. For some participants, this can be unproblematic. For others, issues of visibility when out and about might be significant; they might not want to be seen with the researcher in places they normally go as it might prompt questions and interest from others. Issues of confidentiality and concerns about preservation of anonymity can all arise because the researcher is accompanying them in social settings that are public, and they are observable to anyone who is there.

Conversations that take place when moving through shared space may take on a different tone when potentially being overheard, and considerations of whether they can be described as confidential when undertaken in public space arise. Even the prospect of being seen with someone who is unknown, or

outside of the participants' peer group, can deter participation or change the ways people participate. For example, in a project that asked young people to take researchers where they "normally went," the places visited were unexpected (Moles et al., 2011). A summer spent walking up mountains and around deserted streets was time well spent in and of itself, and developed wonderful relations with the young participants, but when asked towards the end of the summer, the participants admitted they had not been taking the researchers to their "normal" places or anywhere that they might encounter someone they knew because they felt uncomfortable being seen with members of the research team. In a closed community and amongst teenagers, the preservation of anonymity, and the awareness that being out and about with someone unknown, would provoke questions and queries meant that the young people did not take the risk and actively sought to avoid it. This was of course data in its own right, but not the data that had been anticipated or which contributed to the research questions that had initially been imagined.

This example is used to illustrate a broader point about access: While the participants had granted the researcher access to parts of their life, they had not, for example, allowed the researcher into their more intimate social worlds. The presence of the researcher might have elicited unwanted questions or attention. It might have marked the participant out as different or special in ways that they did not wish. Additionally, participants might have been doing work of protecting their peers by preserving distance from the research and not allowing access to the activities their peers were engaging in. This highlights how the position of the researcher in the lives of the participants is only ever as privileged as they allow it to be and that the negotiation of membership of the settings is based on continued and unfolding issues of access that are not about a single participant or based on a single access point. This also raises important points about how to understand participation in the lives of participants and the claims that can be made around how much mobility opens up spaces of dialogue and rapport.

Different issues may be encountered when accessing people engaged in different mobile activities, such as walking, swimming, cycling, or running. These activities necessitate the capacity to physically accomplish their practice if participatory observation is desired. If the research questions would benefit from this form of observation (to go where they go, to do what they do), then capacity to do those activities needs to be considered. This might mean considering levels of fitness, well-being, and physical health. Additionally, if the research questions would benefit from participants being mobile, it is necessary to consider their levels of fitness, well-being, and capacity. Levels of mobility that researchers might take for granted will exclude certain people and groups from fully participating in the research in these ways, but there are other ways in which people can participate that does not involve participation in the mobile practices. Neil Stephens and Sara Delamont (2006) describe how their research on capoeira involves insights and understandings discerned from both full participation as a

practitioner (Stephens is a *capoeirista*) and sedentary observation (Delamont conducts observations and interviews with teachers and practitioners).

Mobility can offer a way of accessing groups, of breaking down perceived boundaries, or of demonstrating category or group allegiances through shared activity. By being a participant, it is possible to gain access to social or geographical spaces that would previously be closed. While watching a cockfight in Bali, Clifford Geertz was forced to flee, along with the other spectators, when police came to break up this illegal activity. He found a hiding place in the courtyard of a house and began talking to the owner. Geertz had encountered difficulties accessing this community, unable to persuade people to take part or to allow his intrusion into their lives. Much of this was bound up with their understanding of him as another Western academic, distant and displaced from them and their social worlds. By participating in the shared running away from the police, Geertz broke down some perceived barriers and gained access—physically and metaphorically—to the house of a powerful man in the village. Through this, he gained the endorsement of the man, and through that negotiated access to the rest of the village. In this instance, it was through the shared running away that Geertz was able to access his population; the shared act and symbolic actions of it opened up the social world in a way he was previously unable to achieve.

If the group a researcher wants to access is mobile or has no fixed location or space through which to access them, then it is important to consider ways to move with them or, alternatively, to bring their mobility into the research data in other ways. Emma Jackson (2015) tells the story of the social relations of the city through a multimethod approach to understanding the flows, trajectories, and daily movements of young homeless people. But Jackson's research was predominantly located in a day centre, a locus where the overlapping lines and mobilities converged. Using a range of ethnographic methods, and inviting participants to draw the mobility of their lives into the research encounters through various creative approaches to the methodological approach, the day centre and her role as a volunteer within it offered a way of accessing the mobile lives of these young people while remaining in one place. Mobility was brought into the frame through the use of participant mapping, ways to represent their movement while remaining stationary.

Various mobile practices can facilitate entry into different groups. There are considerations in gaining and maintaining access that often differ from negotiating access to a static population or space.

Underpinning a mobile methods approach is the understanding that it is important to think about how settings, identities, and interactions are not fixed and static but mutable and fluid. Access and the consent to continue the research must be thought of in the same way: something that is part of an ongoing negotiation based on the time and place it occurs in and the changing settings and social worlds the research moves into. Practically, this means viewing access as a conversation that keeps

happening; something negotiated and considered in the situated context of the research and appraised by the understanding that the research must cause no harm to either researcher or participants.

Ethical Issues

The ethical issues extend those already presented in the access section. Ethics cannot be understood as a single point (“ethical approval”) that has to be passed but rather as an unfolding set of relations that will be more or less apposite and require attention differently during the duration of the project. There will be various ethical issues that will need attending to depending on the nature of the research project, but with a mobile element as part of it, it is worth anticipating the researcher and participants moving through various settings, encountering unexpected events or people, and taking part in physical exertions of some form. The diversity of ethical considerations that might arise in the course of mobile research means it is almost impossible to anticipate all the ethical dilemmas that might arise, but this section outlines some of the main issues. The key thing for researchers to remember is to retain an ethical sensibility throughout their entire research project, considering the best ways they can act that will obviate harm to both themselves and their participants at each point in the process. This will require drawing lessons from ethnographic research and its relationship to ethics, wherein issues of self-presentation and the negotiation of researcher identity is important to consider throughout, along with the ongoing relationships between researcher and participants. These relationships will change as new and changing dynamics between researcher and participants emerge, which will be shaped and produced spatially and temporally.

The researcher must recognise that harm might be experienced by individuals or groups through the research, and they might experience “anxiety, stress, guilt and damage to self-esteem during data collection” (Murphy & Dingwall, 2001, p. 340). Participants might feel anxious about bringing the researcher into their social worlds and allowing them access to their interactions, ideas, and understandings. It might also elicit anxiety to position someone as an “expert” of something or ask them to represent a particular practice or group of people. Self-awareness and reflection are often part of mobile research asking participants to reflect on their social worlds and provide a commentary of them as data. As Margarete Kusenbach (2003) describes in her seminal research using the go-along method, this method opens up a situated and contextual set of revelations about the routes people normally navigate and the ways they make sense of them through their own lived experience. This “street phenomenology” allows access to five particular themes that are revealed through this particular approach: environmental perception, spatial practices, biographies, social architecture, and social realms (Kusenbach, 2003). The ways in which these topics are brought forth by participants may open up potentially beneficial outcomes, recognising that they like where they live and feel comfortable

there, or potentially harmful ones; that they dislike where they live, and it is an unpleasant place to be. While participants might feel comfortable talking about these issues at that time and place, a walk often opens up an ease in interaction, and they might later reflect on these discussions and fear overshare or misrepresentation in either published work or public accounts of the research. What might have felt personal and of a time and a place is transported away from those points and made to represent something else. The experience of being “written about” or to have one’s words come to “represent” a place, a group of people or even one’s own identity, will never communicate the complexity, multiplicity, and contradictions every person embodies. This act of translating sustained, in-depth research encounters into research papers or reports will always leave out more than they can include, and so erase whole sections of people and places. This act can cause harm for the participants, and the choices the researcher makes about what is significant or of interest may be at odds to that which the participant regards as such.

When using mobile methods, the researcher also needs to consider issues around anonymity and confidentiality from the outset. If these are promised to the participant or are something that is appropriate for the research, can they be achieved? The public nature of the interactions in a mobile research encounter and the visible presence of the researcher within the research setting mean people can come to know that the research is taking place and will be able to identify participants. If an interview is being undertaken while out walking, then people will be able to overhear the conversation as they walk past or if they are walking at a similar pace close by, which then can problematise more stringent claims of confidentiality and anonymity. Issues of anonymity arise when the research is visible; members of the setting or group can identify those who are participating simply by being able to see them. Additionally, with many mobile methods, the situated accounts of the participants are important to the story being told, and so anonymising the settings or routes from the work removes a significant part of the analysis. There is no single response to these issues, and instead, it is important for the researcher to consider them in the context of the research questions and project, and in dialogue with participants.

There are ethical considerations in the way researchers present themselves and in the negotiation issues of consent in relation to participants’ understandings of what the research will involve. Issues of opacity and disclosure are important for researchers to think about when they are undertaking any qualitative research, but when the research interaction is mobile, and participants are not bounded geographically it is important for them to seriously consider what this will mean in the project. Even something as seemingly standard as consent forms become difficult to accomplish when the research participants, for example, spend their time in the water or on bicycles. Movement of people into and out of the research setting or practice might happen regularly. It will often simply be impractical to

seek consent from everyone in the research setting or for researchers to disclose their identity to each new entrant to a setting or set of practices.

This reflects the emergent nature of research design and analysis in mobile methods; things that were anticipated in consent forms will not cover all eventualities, people, or interactions that are part of the research encounters. The focus of the research will alter as new lines of inquiry emerge, taking the research in literal and figurative new directions. While it is possible, and important, to inform the participants what can be anticipated that taking part in the research will entail, it will not be possible to be comprehensive in this prediction. Further, there are various power relations between researcher and participants in the issue of disclosure, of the objectives of the research project, of the identity of the researcher, and in the reasons for doing the research at all. These are part of the ongoing ethical negotiations that need to occur within the context of the research project, with an awareness of the expectations on the part of all people involved.

Mobile methods are often lauded as being participatory in their capacity to offer participants a greater autonomy in the ways the research occurs. For example, participant-guided walks allow the route to be chosen by the participant, shifting power to them in terms of where the research is located. The idea that this sharing of responsibility in determining how the research takes place offers the participant more influence in the research design is ethically appealing. It offers researchers a way of redressing power imbalances and inequalities through the positioning of the participant as the expert who can control the research. While there is a lot to commend in the involvement in participants in the ways research develops, it is also important for researchers to reflect critically on this model of power within research and problematise the simplistic belief that they as researchers can bestow power on the participant through these actions. The way to negotiate all ethical concerns and positions is through an ongoing negotiation and openness between researcher and participant, within a research team, or between a student and supervisors. It is important for researchers to consider carefully what participants are told about what participation will involve before they consent to take part; researchers need to be clear and upfront about what this participation will entail, even if that means explaining that the nature of the research means it is hard to predict how it will unfold and that much of the direction it takes will be up to their input. Researchers must present the data and the participants in the study as accurately as possible, based on a thorough, considered, informed, reflexive analysis.

Data Collection

Published accounts of data collection can suggest an abstract, disengaged strategy based on a linear, straightforwardly unfolding model of research conduct. However, in the actual work of doing research, things often arise that would be regarded as problematic, or at least unpredicted, in this way of

considering research design. Qualitative research has an emergent nature: Things arise and become significant or part of the setting or practice that the researcher could not have predicted at the onset, and mobile methods particularly give rise to these emergences. Being mobile calls on the researcher and the participant to respond to changes in location, exertion, and stimulation much more often in comparison to remaining stationary. Undertaking data collection while on the move means the researcher needs to consider practical and theoretical issues as they arise, reacting to changes in the way the setting is understood or conceptualised, how the field is bound, and how participants are enrolled or included. Collecting data on or through movement means the researcher needs to think about the ways the experiential, sensual, fluidity of the social world being researched can be recorded or represented, and the various ways bodies are positioned in and through the social practices and processes that construct it.

One of the first ways researchers often undertake data collection is by going for a walk or a drive or a bus journey in a locale. Researchers have always done this; before demarcating the space of the research, the researcher has to get a feel for where it is situated in relation to other spaces, and what is part of the space itself. Moving around it, taking it in, getting to know various material and architectural elements are important. Seeing who goes there, checking about how that changes during different times and days will be an important initial part of research undertaken in a particular setting. Nick Emmel and Andrew Clark (2008) sought to understand what happens and what passes along networks within communities, and the ways these form, break down and are maintained. Their work looked to add place to the network analysis of the communities they were interested in, retaining the spatial context of the networks rather than erasing or ignoring them in the accounts and analysis. The first stage of this research was what they called the “walkaround method”; walking their setting as participant observers, identifying “rapid appraisal indicators of particular features of the area, or places within the area—the ways in which houses, gardens and streets are maintained and decorated for instance” (Emmel & Clark, 2008, p. 9). They took photographs and made fieldnotes and repeated these excursions regularly through the fieldwork period. They described how these walks had multiple purposes, allowing them to get to know the area and appraise changes that occurred in it during the fieldwork. It worked as a memory prompt in interviews with participants, asking about issues they saw and changes that had occurred. Finally, it acted as a way of making their research visible; they were seen by and saw potential participants and were able to stop and talk to them, potentially recruiting them for their interviews.

Getting out and about is a key part of gathering data, and the different ways researchers can move through it offers different ways of knowing the places they research. In addition to the advantages previously outlined, getting out shifts researchers’ sociological attentiveness and attunes their

sociological attention to the social world in different ways. As Charlotte Bates and Alex Rhys-Taylor (2017) argue:

Instead of thinking about social life from the vantage point of the lecture hall or the classroom, going for a walk is a way of engaging with the social world and allowing it to ask questions of us. It is an exercise and a form of training, in sociological attentiveness, as well as a way of letting the sociological imagination roam. (p. 4)

There are different reasons that mobile research might be useful for the research topic being studied. For example, Nicola Ross and colleagues (2009) used two types of mobile methods in their research with young people in public care—guided walks and car journey interactions—which allowed them to explore sensitive topics with their young participants. The mobile research encounters allowed intimate, personal accounts to be “interwoven within narratives of the mundane ordinariness of the everyday” (Ross et al., 2009, p. 605). The guided walks invited participants to take the researchers on tours of their locales, particularly to significant places for them, and the car journeys were part of the routine travel to and from the designated fieldwork sites that the researchers made with their young participants. This method allowed flexibility and openness, and an immediacy and connection to the young people’s everyday experiences:

These were interactions on the move and conversations that took place within them were interspersed with interruptions, of stuttering, paused, lost, repeated exchanges, within which the intimate was interspersed with the mundane. Spaces for narratives to be shared was opened up, closed down, diverted, and revisited in response to the negotiation of these shared experiential journeys. (Ross et al., 2009, p. 608)

The rhythm of a walk and the lack of direct eye contact between researcher and participant are often presented as facilitators of “good” and “flowing” conversation, allowing natural pauses that do not seem fraught, and spontaneous changes in topic based on the interactions with the natural world and the social settings met along the way. The form of this interaction allows the conversation to be shaped by geographical prompts and interruptions from the landscape and people and animals encountered as it is traversed. This “trialogue” (Anderson et al., 2010) between place, participant, and researcher is something often considered as part of the “walking interview,” guided walk or go along. As Thomas Hall, Amanda Coffey, and Brett Lashua (2009) describe, the interview becomes a three-way conversation, with interviewer, participant, and locality engaged in an exchange of ideas, “place has been under discussion but, more than this, and crucially, underfoot and all around and as much more of an active, present participant in the conversation, able to prompt and interject” (Hall et al., 2009, p. 549). Kusenbach’s (2003) go-along method brings these considerations to the fore by considering the lived experience of the participants in situ: drawing attention to the complex and subtle meanings of

place in the everyday experience and practices of her participants through situated accounts produced as she accompanied them on walks around their neighbourhood. Justin Spinney (2015) discusses the go along, and in particular the use of biosensing technology, if only to supplement the more impressionistic aspects of mobile data collection. (For other accounts of the go along as a data collection method, see Carpiano, 2009; Clark & Emmel, 2010; Evans & Jones, 2011).

“Shadowing” (Czarniaska, 2007) means following a person or series of persons as they go about their everyday lives, moving with them socially and spatially. Elizabeth Quinlan (2008) provides a succinct account of how shadowing can be a productive data collection method, grounded in her own research, conducted in health-care settings. It is not without its problems—intrusiveness and disruption of everyday activities—but that is true of all forms of participant research. Indeed, many conventional forms of participant observation, de facto involve shadowing, as one’s research participants move within organisations, in the countryside, through urban neighbourhoods and areas. Through the deployment of such methods, the location of the research stops being something of a backdrop and instead is a purposeful focus of the research encounter and analysis.

Mobile research encounters can take a path unplanned and without direction. Anderson (2004) invited activists to accompany him on a “bimble” when seeking out an opportunity to talk to them away from the protest camp he was researching. This unfolding, meandering wander allowed space to talk, and thoughts to unfurl as they navigated the natural world together. Rather than having an interest in the place as somewhere accounted for in the talking whilst walking, this recognises walking as a cultural practice and looks at the potential of “bumbling” (aimlessly walking) through a coingredient environment to prompt previously unstated or unrecalled knowledge of the lifeworld. This practice begins to move beyond the walk as a simply a method to be used to “collect” data, and more towards a practice that involves and enrolls the researcher and participant in particular embodied, emplaced relations. This follows the writer Rebecca Solnit’s (2000) suggestion that:

Walking is the intentional act closest to the unwilled rhythms of the body, to breathing and the beating of the heart. Walking, ideally, is a state in which the mind, the body, and the world are aligned, as though they were three characters finally in conversation together, three notes making a chord. (p. 5)

The process of bimbbling allows an opportunity for a dialogue to emerge “not simply between the body and mind of the individual, but also between the individual and the place” (Anderson, 2004, p. 258). The rhythm of the walk, the aimlessness of the exercise, prompted reflection, engagement with old inscriptions of meaning and the re-encountering of existing meanings, memories, feelings, and experiences that make up the individual’s understanding of their lifeworld. Indeed, as Kate Moles (2008) describes, the walk can take people to unexpected places, real and imagined, past and present.

People's memories of other people and places come forth when they walk and talk, prompted by senses, and intersections of times and places metaphysically.

It is also important to consider that the same walk can mean very different things to different people; the place will be differently understood by different bodies; the meaning of the walk will be different (and multiple) for people at different times. People walk for a range of embodied, political, emotional, and philosophical reasons—which will shape their understandings, motivations, and type of walks they will undertake. This method is not metaphysical of course; Charlotte Bates reminds researchers to attend to the materiality of the social world they traverse. Her ethnographic work in a London square shows how attending to desire lines and urban design through the practice of walking allows researchers to consider the ways in which place is “desired, imagined, made, and lived” (Bates, 2017, p. 56). Jo Vergunst (2010) draws on Henri Lefebvre's notion of *rhythmanalysis* to develop a historical and ethnographic account of a single street, emphasising the temporality of walking, and the embodied gestures—learned and patterned movements—that generate identifiable rhythms of individual and collective activity.

Being mobile often requires that the researcher and participant will be involved in some kind of physical exertion that draws attention to the relationship between bodies in and of place. Exceptions to this would involve research based on mechanical movement, in a car, bus, or train for example (Laurier et al., 2008). If the research involves or requires moving around, it is important for the researcher to consider the route and the distance that will be covered during the research encounter. The duration of the excursion, the landscape encountered, the weather on that day, and the clothes or kit the participants and researcher require are all significant. For example, a long walk over difficult terrain might pose physical challenges for the researcher and for participant. In this case, rather than paying attention to the scenery and the landscape or the social interaction the movement facilitates between researcher and participant, it may provoke focus to be directed towards a particularly embodied concern, as John Wylie (2005) described in his autobiographical description of a coastal walk. This might mean that attention shifts from the movement or the experience of the scenery, as Hannah MacPherson (2016) describes: “traversing the landscape on foot results in an embodied experience of landscape that also subverts any sense of landscape as being solely about scenery: the landscape is embodied through blisters and exhaustion” (p. 433).

Moving with people with varying levels of fitness will open up but also close down means of engaging; conversations may ebb and flow as breath is caught and lost, a changing landscape will affect how distinctive bodies (aged, disabled, gendered) will experience it in different ways. The rhythm of the steps and breathing will produce particular forms of encounters, the necessity to attend to difficult terrain will alter the focus and topics covered, and the necessity to fully focus on the mobile encounter

in the terrain will eliminate talking all together at times. There will be forms of mobility that promote verbal interaction and other forms that prohibit it. Much walking and driving research centres on verbal exchanges, albeit emplaced and embodied, while work on swimming does not place the verbal interaction at the fore of the shared mobile practice, instead focusing extensively on the embodied, multisensory experience shared by participant and researcher.

Taking into consideration that different bodies will be differently positioned and will have different capacity to be mobile is important. Considering how different bodies negotiate and navigate mobilities is significant and MacPherson (2016) considers these important issues in her work. By drawing attention to the “cultural context of the walker’s body,” she critically engages with the simple proposition of walks as sites of rapport and encourages researchers to recognise the various ways people walk, the meanings walking holds, and the ways people move, as embodied, social beings. Kate Boyer and Justin Spinney (2016) describe how journey making is an important aspect of the accomplishment of motherhood and consider the emotional and affective dimensions of the material–human assemblages that must be negotiated as part of it. This work highlights the important political dimensions of im/mobility and the identity work that is bound up in “embodied cultures of mobility” (Spinney, 2006, p. 713). Boyer and Spinney’s (2016) work also highlights the importance of attending to the human–material assemblages of the world that researchers study.

Practically, recording mobility raises a host of issues to consider. Maps, drawings, and photographs can be produced by the participant or the researcher (or both). This could be done as shared data generation with both researcher and participant present or as something self-directed by the participant. This produces particular narratives of the place through visual data and can offer insights into what is significant for the participant: what they include and do not include, how they relate the different places included to each other, and the ways they account for their choices. Often, researchers will conduct interviews with participants about these research data, offering verbal accounts of the visual data. Diaries or logs of movement can also gather data over time and indicate place. These data sources take account of the places participants have gone but, like the maps, photographs, and drawings, remove the embodied practice of movement from the data collected.

Alternatively, it is possible to record the movement in some way; this might involve recording a GPS track of the route undertaken or mapping in situ. This produces geographically accurate representations of the lines and the points but again does not capture the act of movement; it produces representations that remove the body and the cultural and social context from the action. Video methods offer a way of gathering visual and sound data while on the move. The proliferation of cameras designed to be worn when on the move allows them to be attached and left alone for the duration of an activity. These cameras offer a “live” experience of the activity undertaken and often from a sensible vantage point

(when they are worn on the head or on the chest). They point in the direction the participant is moving and capture the view ahead and the sounds surrounding it. The effect is at once compelling and disorientating; there is no editing and no focus. Researchers see and hear the world as it is recorded, and this can be overwhelming and difficult to watch, let alone analyse, or make sense of. As with all these data collection technologies, it is important for researchers to consider how the data collected allow claims to be made about the social world, and how this relates to the research questions being asked.

Analysing and Representing Mobile Data

Mobility-oriented social science highlights the importance of investigating “how worlds (and sense) are made in and through movement . . . [and in so doing not only] . . . illuminate important phenomena but provide compelling new modes of knowing” (Buscher, Urry, & Witchger, 2010, p. 13). If the process of analysis is understood as making sense with the data, and a concern is how worlds and sense are made in and through movement, then it is important for researchers to consider how this movement remains as part of the analysis undertaken and in the representation of the social worlds that they produce. This can be particularly difficult, as the process of writing requires fixing things in place. However, analysis and representing the data is not a case of simply reporting “what is there” or “what we have found”; it is an active creation of social life through the bringing to life, on the page, of the social actors and social worlds observed and researched as part of the research. And, so, retaining the mobility of social life in these representations and telling stories that invigorate curiosity about mobile life need to be considered and worked towards.

Being in the world is being a body in the world; so, it may be interesting and important to attend to the embodied practice of different ways of moving through the world. The ways landscape is accounted for by participants, along with the ways the texture and contours are perceived, will change if encountered while driving through it in a car with the windows closed, cycling along a mountain road, or bog snorkeling immersed in muddy waters. The multisensory nature of the world will be experienced differently depending on the mobile encounters researcher and participant have with it. As part of their analysis and representation of the data, researchers need to consider the various ways of encountering place, which could be considered on a physical (even biological) level; perhaps thinking about the endorphins produced when partaking in physical activity, or the more-than-human engagements and assemblages they are part of. It might be significant to consider the different embodied practise of different mobilities, the affective moments that leave people with an enduring legacy from their time spent somewhere; the highs of standing on top of a mountain and the lows of the long trudge home of a wet and tired school run.

Sarah Pink (2007) advocates the use of video method as a means of representing and allowing access to the understandings of participants' experiences. She filmed and edited walking interviews with visitors to Green Lanes Community Gardens. Through the showing and viewing of these films, Pink argued they could help others develop sensory embodied (emplaced) understandings of another's experience. In contrast, Saunders and Moles (2016) produced a series of audiowalks with a group of young men, in an attempt to get them to "tell us about your area." Rather than offering an avenue into the lived experiences of the men, the audiowalks they produced were messy, disorientating experiences. Walkers got lost, went down dead ends, and were often instructed to look for things that were not there, or could not be seen from the point they were being instructed to look at them from. The method did not fit the young men's lived experience of their lives; they could not translate the indexical, situated understandings they held of their neighbourhoods into public facing, smooth narratives of place. This example is used to draw attention to the necessity that researchers consider how they represent their data, and what claims they can make from the data. Mobile methods do not offer the capacity to climb into someone's body and experience the world as they do; researchers are always offered partial insights, accounts and narratives, and particular presentations of self.

Concluding Thoughts

As this entry has demonstrated, mobility and mobile methods have become increasingly mainstream topics in the social sciences. As well as encouraging general analytic attention to mobility, that trend has encouraged the development and use of mobile methods. Such developments in turn mirror the wider call for multiple methods, mixed methods, and multimodal research strategies. Mobility implies attention to the senses and sensory methods (Pink, 2009) and to embodied social activity.

A concluding note of caution is appropriate. Peter Merriman (2014), while welcoming the development of mobilities research, counsels against the overenthusiastic adoption of bespoke "mobile methods." In particular, he argues against any imperative that the researcher *must* move with the participants. Methods for mobility research—diverse and multimodal—do not automatically have to be "mobile" methods in the sense of mandating moving *with* participants or implying that a field researcher must necessarily be "on the move." Merriman challenges the assumption that moving with and being physically close to participants *necessarily* yield better research than other methods. He argues for a broad understanding of the research field and advocates:

more balanced discussions of the advantages and powers of "mobile methods" and to maintain a plural sense of what mobilities research is, has been, can be and should be: expanding the number of disciplinary perspectives on movement and mobility; working across disciplinary

boundaries; developing different theoretical and empirical avenues; drawing upon a plurality of methodological approaches (Merriman, 2014, p. 183)

Such advice is salutary, reminding researchers that research on mobility is not confined to a single disciplinary, theoretical, or methodological paradigm. By retaining an attentiveness to the mobility of the social world, researchers will be able to follow lines of inquiry that draw out these concerns in their analysis, which is something that adds to the understanding of mobile social worlds. But that does not imply a single methodological orthodoxy.

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