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DOING RESEARCH IN DESIGN

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IN THE PICTURE: ETHNOGRAPHY AND OBSERVATION

What is ethnography?

Ethnographic research has a long tradition, and provides a useful introduction to the social research processes we discuss in this book. Its name reflects the key goal of ethnography, which involves the description of, or writing about, a particular cultural group or particular cultural practices. An ethnographer can therefore be characterized as both researcher and writer. In this chapter we explore the potential of ethnographic approaches to research in design, with a particular focus on the value of ethnographic research to identify and elaborate the social and cultural dimensions of design problems and solutions. We begin by describing classic ethnographic research, tracing the methodology back to its roots in anthropology. We then consider some key methodological and epistemological concerns associated with ethnography and explore how ethnographic approaches and aims have evolved in response to post-colonial and globalized contexts. The chapter then focuses on methods for conducting observations as part of an ethnographic study, concentrating on the possibilities, cautions and strategies associated with observation. Finally we outline some examples of research in design where ethnographic approaches might be applied.

The origins of ethnography

Ethnographic research grew out of the discipline of anthropology: the study of human beings, their lived experiences and their cultural practices. As a discipline, anthropology became important when colonial expansion led to the 'discovery' of societies of people living in geographically remote parts of the world, far away from the centres of colonial power. Anthropological researchers were intrigued by the differences between the practices of the newly discovered societies and those of the groups at the colonial 'centre', and attempted to document and explain how those newly discovered societies experienced daily life. Anthropological research

was typically empirical, and took place in the field; anthropologists would spend long periods of time (several months or even years) living alongside the people under scrutiny, immersed in their daily lives, and recording the experience in the form of field notes or diaries.

Our interest in this form of research arises from its focus on what can be learnt about cultural practices by studying the objects that are integral to those practices, and *vice versa*. Objects displayed in museums across colonial centres have been studied for what they convey about the cultures and societies from which anthropologists have collected (some might say stolen) them (Smith, 1999). Designed objects have for many centuries been seen as important devices for understanding a particular culture and its practices. Research into the cultural practices of remote and unfamiliar communities in far-flung corners of the globe is no longer relevant in the contemporary circumstances of a globalized, post-colonial world. Nevertheless, the basic principle that there is an intimate connection between a culture and its designed objects leads us to advocate for an ethnographic approach to research in design where cultural practices are the focus of inquiry.

As an example, the mobile phone was developed partly in response to particular cultural practices such as the intensification of work (which mean that it became important to be able to contact work colleagues when they were out of the office) and the use of the motor car (because such phones were originally designed to be used in cars). As the use of mobile phones proliferated and demand for them grew, smaller and lighter phones were designed that were more capable of being handheld. At the same time different features such as wireless broadband and built-in cameras added to their utility and popularity. As a result the practices of cultures where mobile phones are commonplace have evolved significantly, not only in terms of how people communicate and interact with one another but also with respect to issues such as privacy and surveillance, etiquette in meetings or other public spaces, and bullying and harassment in the workplace and schools. Objects such as mobile phones have been designed in response to changing cultural practices, and in this way could be said to reflect those practices, but their presence also transforms them. For these reasons, research methodologies such as ethnography, that help us better understand cultural practices, are invaluable for designers.

The evolution of ethnographic research out of anthropology has meant that while both approaches overlap in their broad research focus and research methods, they differ somewhat in their research purpose. Ethnographers focus explicitly on cultural questions by examining the behaviour, language or cultural artefacts particular to the group that is being studied (Creswell, 1998). In this sense, developing an understanding of what is meant by culture is an important preliminary to ethnographic research. Giddens defined culture as the 'ways of life of the members of a society, or of groups within a society' (1997, p. 18), pointing out that while society and culture are different neither one would exist without the other. This reinforces the central role of culture in providing a context in which humans can interact meaningfully with one another in social relationships within a society. In this sense

our culture is what binds us together as social animals and enables us to understand and be understood by others. To have a culture in common with someone else is to have a shared identification based on common understandings of a set of particular experiences. Geertz similarly explains culture as that which enables humans to associate with one another through systems of shared meaning making. He describes it as a series of 'webs of significance' (1973, p. 5) created by humans through their daily interactions.

These definitions of culture are useful for ethnographers, since they provide contexts in which ethnographic work can take place. It is possible to focus on any one of the multitude of cultural practices found in a society, which include how people dress, their patterns of working life, how they pursue their leisure as well as how the artefacts or designed objects reflect particular cultural practices or values. This notion of culture as an accumulation of interconnected social discourses suggests the methods by which a society might be understood through exploring its cultural practices.

Offering a definition of culture that is based on how patterns of meanings develop and are shared through the symbols maintained by a particular group also opens up new possibilities for defining cultural groups. People in the same workplace, people in the same profession, people who engage in similar leisure activities are each members of a particular cultural group, and through their shared social discourses share a common identity. Of course they are also members of other cultural groups based for example on their shared language, shared geography or shared nationality. In this sense, every individual is a member of the multiple cultural groups that make up a society. For many people, their culture is invisible. They are so immersed in the practices of the culture to which they belong that it is imperceptible to them. The significance of practices in defining and maintaining a culture can be seen in the ways that members of subcultures—groups of individuals who share a common identity and whose cultural practices explicitly present a challenge to social norms (Hebdige, 1979)—communicate their identification with the subculture through such practices as distinctive physical appearance, preferred leisure activities and language use that is impenetrable and exclusionary to outsiders. To use Bourdieu's terms, such groups create their own social and cultural capital.

By exploring in detail a specific social or cultural group, a key aim of ethnography is to try to understand how individual members of a cultural group experience that culture. Creswell (2008) emphasizes the ethnographic researcher's focus on patterns of daily living. Ethnographers often aim to look beneath the surface of cultural practices to examine how particular features of the culture impact on the experiences of individual members: in Armstrong's words, exploring 'central questions about the nature of human existence' (2008, p. 55). Building on this interest in everyday life, ethnographic researchers increasingly employ the methods of anthropology to conduct ethnographies in many settings that are close to home, such as workplaces, hospitals and schools.

For example, to return to the bench project (see Chapter 5) introduced in an earlier chapter, an ethnographic study of the cultural practices associated with

shopping might expose some underlying values about who does or does not have the right to sit down in a shopping centre, and for how long. Questions about the benches that address quantity, type and placement lead to deeper questions about the purpose of the shopping centre: is it business or pleasure? If pleasure, then it might be likened to a park, where benches are everywhere and sitting on them is a normal part of the cultural practice of visiting a park. If business, then benches are an unnecessary luxury and should only be provided for temporary rest.

If, as ethnographers, we examine the semiotics of a shopping centre, we might easily come to the conclusion that it is a place of pleasure. The bright lights, the soothing music, the fragrances of coffee or fresh flowers wafting from open shop doors, the spectacle of beautiful things to buy all suggest this is a place of pleasure, not business. But of course the purpose of the shopping centre is business. Everyone who goes there is in the business of buying or selling and the spectacle is illusory, designed to entice the buyer to spend money. With this perspective, benches are probably detrimental to business success as they encourage people to stay in one place instead of walk around and possibly buy something they didn't intend to. So for the designer who has been asked to provide benches, an ethnographic perspective will provide different insights into the task and enable a much more informed outcome based on a deeper understanding of the cultural practices that have grown up around the day-to-day experiences of visiting a shopping centre.

Methodological concerns

While anthropological research and ethnographic research differ somewhat in terms of their broad purposes, both use similar methods to conduct the research. In this book the word methods is used to refer to the strategies or practices used in conducting research. Methodology is used to mean the analysis or study of the principles from which particular methods have developed; and epistemology refers to questions of how we know and what constitutes reality.

The following account of concerns surrounding methodological practices in ethnographic research draws on the work of anthropologist Bronislaw Malinowski. We have used this example to illustrate the risks associated with trying to understand a culture when it is immensely different from one's own. As you read you will see how Malinowski's particular perspective leads him to interpret the behaviour of the islanders in a *culturally specific* way; in other words, he reads the islanders' behaviour through the lens of his own cultural experiences. Using the terminology of this book, Malinowski failed to approach his research reflexively: he did not take into account that his position as a researcher itself shaped the research, nor did he consider how his own habitus might frame the way he understood the society he was observing.

While the discussion of Malinowski's work relates specifically to practices in research, as you read it think about the risks for designers of failing to approach a design problem un-reflexively, or without taking account of how their habitus

frames the way they understand the world. The economic failure of the Sinclair C5 battery-powered electric vehicle (Adamson & Kennedy, 1986) could be attributed to the designer's lack of reflexive understanding of the limitations of his worldview, which encompassed neither an understanding of the influences of the powerful road lobby and petroleum industry on the marketability of the vehicle, nor a recognition of the influence on consumer choice of the culturally framed association between car ownership and social prestige. In other words, the failure of the Sinclair C5 could in part be attributed to the designer's habitus, which led him to understand the designed product in isolation from the field of its potential use. To be effective in the global marketplace, designers need to be able to make judgements that look beyond their own narrow viewpoints and take account of the perspectives of others from different cultural, economic and social backgrounds (Salvador, Bell & Anderson, 1999). As the following account of Malinowski's work shows, taking account of others' perspectives is not as easy as might appear.

Malinowski's best-known research was conducted while living on the remote Trobriand Islands in the Pacific. Here, he developed the form of fieldwork he called participant observation. In this method, researchers become *participants* in their own right in the culture and practices of the society. It was expected that by becoming an accepted member of the group, the researcher could gain a close and intimate understanding of the points of view of those observed. Participant observation requires intensive, long-term observation and participation, making use of a group of associated methods such as individual and group interviews, observations, the collection of life narratives, and records of the researcher's experience of being a participant in the society. Malinowski's research methods have since been widely adopted and developed by ethnographers.

Malinowski's diaries are instructive in revealing a key methodological problem with participant observation. Using an example from the diaries, published in 1967—twenty-five years after his death—and what Geertz (1988) therefore calls 'that backstage masterpiece of anthropology' that sits behind Malinowski's published, 'official' account of his research, Geertz explores a problem that lies at the heart of the practice of participant observation.

On the whole the village struck me rather unfavorably. There is a certain disorganization . . . the rowdiness and persistence of the people who laugh and stare and lie discouraged me somewhat. Went to the village hoping to photograph a few stages of the *bara* dance. I handed out half-sticks of tobacco, then watched a few dances; then took pictures—but the results were poor. They would not pose long enough for time exposures. At moments I was furious at them, particularly because after I gave them their portions of tobacco they all went away. (1988, p. 75)

While this extract (which is a very small part of a very large work) was never intended for publication, it nevertheless raises important cautions about the possibilities and the limitations inherent in the role of the participant observer. The diary

extract clearly betrays the researcher's own highly subjective response to the people he was living with, and reminds us of the contradictions intrinsic to the researcher's situation as both participant and observer.

These contradictions are partly methodological. In such a conflicting position, under what conditions is it possible to be both inside and engaged with the events that are observed, and at the same time located outside and detached from them? This contradiction continues to perplex ethnographers. There is also an epistemological dimension, since ethnographers must ask whose reality it is that they are experiencing. To develop this problem further it must be asked to what extent the subjective viewpoint captured in the diaries limits both the research process (what was seen and what was not seen because of this limited perspective) and the research product. How does the researcher's perspective finally colour the official text wherein the research is reported? In other words, whose point of view is represented in the final research, and how, as readers, do we know?

This leads finally to an ethical question: by what right does the researcher speak for, or on behalf of, the research subjects? As Tedlock points out, 'ethnographers' lives are *embedded within* [our emphasis] their field experiences' so that 'all of their interactions involve moral choices' (2003, p. 165). Much recent critique of ethnographic practices focuses around this ethical problem, or what Denzin and Lincoln (2008) call the 'crisis of representation'.

These concerns reveal how necessary it is to engage *reflexively* in the process of research. We do not suggest that these concerns render ethnographic research impossible. What they do lead to is a different way of framing ethnographic research so as to place these considerations in the foreground, by attempting to understand and take account of the researcher's subjectivity, and to build that understanding into both the research process and the research text. We will return to this problem throughout the book. We should make it clear that, in relation to Malinowski's diaries, what we take issue with is not his attitudes to the islanders but his lack of reflexivity that led to his misrecognition/lack of consciousness of the particular perspective through which he understood the field of his research.

Geertz's work (1973, 1988) has been influential in drawing attention to the problems inherent in the practices of participant observation and in 'doing ethnography'. His perspectives on the disciplines of anthropology and ethnography develop from his view that a study of cultures is at heart a study of meaning making and interpretation. Social meanings are not immediately apparent to people who are not familiar with particular socially established codes used to convey meaning. They are 'enigmatical' (Geertz, 1973, p. 5). As an intellectual activity, ethnography is concerned with understanding meanings through examining what people in cultures do to convey meaning. Of course meaning is not immediately apparent at the surface of a text.

Geertz points out that in attempting to understand the meaning of gestures, symbols or texts one is involved in picking a way through structures of 'piled up inferences and implication' (1973, p. 7). Often, the information we need to understand

a particular event exists in the background to (for example prior to, or in another place than) the actual event under scrutiny. Hence the role of ethnographers includes explicating the significance of a particular event or observation on the basis of what else has been observed or discovered in the background. This is further complicated by the fact that the only information we have access to is that which our research participants (or 'informants') have been able to lead us to understand. As Geertz says, while 'it is not necessary to know everything in order to understand something' (1973, p. 20), the notion that we can only ever have a partial understanding of cultural or social meanings does mean that ethnographic work at best is a series of educated guesses.

The role of the ethnographer in this process is complex, since it is not possible to reproduce in its entirety the experience of engaging with a particular culture. Hence researchers must, from the outset, take into account the particular perspective from which they are to understand the culture they observe, and maintain a reflexive stance as they engage in the interpretation and representation of the culture. This requires the researcher to constantly step into and step away from the culture observed. It also requires one to take account of the ways the researcher thinks about and understands the culture which is as important as taking account of what is unmasked about the culture itself.

As this discussion has shown, ethnographers cannot remove themselves from their observations. Since researchers' interpretations and observations of other people are permeated with the researchers' own worldviews and personal perspectives, there can be no 'innocent' observations. However, this is not to say that a researcher should give up on observation as a method for gathering information. Rather, it suggests that the identity of the researcher becomes a central concern that should be thought about and reflected on throughout the research process. Dunne, Pryor and Yates are explicit about this. They suggest that since the researcher is 'always and inevitably biasing the research . . . what becomes important is an aspect of reflexivity, that identity issues are seen as problematic and discussed in the research report' (2005, p. 61).

Debates about the role of the researcher have led to significant shifts in how ethnographies have been conceptualized. Concerns about the colonizing practices of some ethnographic research (hooks, 1990) and concerns about the legitimacy of research, where a researcher in a position of power 'gives voice' to research subjects who are in a relationship of powerlessness or subordination, led researchers to take particular notice of issues of gender, race and social class when conducting research (Denzin & Lincoln, 2008). Such concerns have not only alerted researchers to the potentially oppressive practices associated with the ethnocentrism of an observer of a culture that is different from their own, they have also opened up possibilities for researchers from marginalized or minority positions, such as women, people of colour or indigenous researchers, to step into the field and conduct research about members of their own social or cultural background in their own right. Added to this is the impact on ethnographic practices of the end of

colonialism, described by Geertz (1988) as having 'altered radically the nature of the social relationship between those who ask and look and those who are asked and looked at' (p. 131).

Typical ethnographic methods are participant observation and in-depth interviewing, which lead to the creation of 'thick' descriptions of the cultural practices being observed. In early examples of ethnographic research, these strategies for collecting data were thought of as ways an outside observer might come to know another culture as an insider might know it. In other words, there was an expectation that participation would lead to a direct or realistic understanding of the experiences of others, through researcher participation in the culture and practices studied. However, as ethnographic practices developed over time, so too did the recognition that such depictions of a culture, no matter how rich and detailed, could not communicate the reality of a particular culture directly. What was communicated was the researcher's interpretation of the reality of the cultural experience.

Recognition of this insurmountable problem—that any depiction of a culture could only take place from the limited perspective of the observer—led to shifts in ethnographic practices and purposes. Ethnographic strategies began to be seen as methods to better understand the events, social interactions and experiences that take place in social and cultural contexts, by taking the social and cultural contexts into consideration. This is why we advocate the use of ethnographic methods to help us understand how individuals act within the particular social world that they are part of, and how the behaviour, values and understandings of an individual or group are related to their broader social and cultural context. Researchers often adopt ethnographic methods, even when they are not engaged in true ethnographic research. Doing this enables researchers to foreground the context-specific nature of the research, by acknowledging that 'social action and human experience are ... highly contextualised' (Carspecken, 1996, p. 25).

New ethnographies

Classic ethnographies (which involved participant observation and long-term cultural immersion in an unfamiliar culture) are now conducted less often. In the context of a post-colonial, globalized world, such practices are increasingly irrelevant. Yet the strategies developed by early ethnographers have been adopted and modified by researchers to the extent that most research in the social realm has been influenced and informed in significant ways by ethnographic practices. Fieldwork in exotic settings has largely been replaced by research in local, more familiar settings, and much is still to be learned by asking questions such as what is this culture like, how does it operate and what are its characteristic practices when the setting is a workplace, or when the research participants are members of a minority cultural group within a larger cultural or social setting.

There has also been a shift in the goals of ethnography, from interpretation to critique. In critical ethnography, researchers assume a conflict between the individual's lifeworld and the system, in which the system colonizes the individual and relations between the individual and the system have broken down. Critical ethnography explores facets of the relationship between the individual and the wider society, recognizing that there is a political dimension in all research. Critical researchers aim to explore issues of power and the marginalization of social groups, wanting to achieve social change and social justice.

The *Fuel from the Fields* project does just this, by finding alternatives to cooking fuels such as wood, charcoal or dung. These biofuels are used traditionally in majority world communities but are both damaging to the health of individuals and have a negative environmental impact (Smith, 2007). This project did not only seek to find alternative fuel sources, it also recognized how important it was for the people involved in producing and selling the fuels to be able to maintain their livelihoods, and so incorporated their perspectives into the final design solution. Smith was well placed to do this because of her prior experience as a member of the Peace Corps in Botswana, where she lived alongside the villagers and participated in the same routine tasks such as carrying water and pounding sorghum into flour, until she felt 'the ache in my back'. These experiences gave her 'a critical understanding' of the need for designers to gain a good understanding 'of the contexts in which they are designing and of the people using their products' (Smith, 2007, p. 30). Smith's prior experiences not only gave her a sound understanding of the field in which she was designing, they also changed her habitus as a designer.

Critical ethnography has also opened up possibilities for research conducted by members of minority or marginalized communities. The practice of ethnography has given opportunities for feminists, gays and lesbians, members of cultural minority or culturally hybrid groups, and third and fourth world researchers to make their voices heard by writing about their own cultures and communities. Out of the critical concern that research conducted on behalf of the 'other' risks further silencing of marginalized individuals has grown an acknowledgement that when researchers use the research process to speak for themselves, there is greater potential for transformation and empowerment.

Autoethnography is a further offshoot of ethnographic research, reflecting both an interest in individual lifeworlds and the valuing of individual voice and lived experience. In autoethnography, the researcher writes herself or himself into the text, and the ethnographic focus is the researcher's culture and his or her place in it. Here, the researcher's own experiences become 'a primary data source' (Patton, 2002, p. 86). Increasingly, researchers will create an autoethnography that forms part of the final research text, even though the broad intent is not to write an autoethnography. Such autoethnographic sections enable the researcher to make his or her perspectives explicit (including their values and ideologies), and may include

explorations of researcher identity as a way to make obvious the relationship between the researcher, the context and the individuals that he or she is researching.

Methods in ethnographic research: observation

Observation is a key strategy for research in the social realm, and is particularly important for ethnographers. As we discussed earlier, observation is a strategy that enables researchers to engage with and observe the field that is the focus of their research. In other words, it is a strategy for 'going out and getting close to the activities and everyday experiences of other people' (Emerson, Fretz & Shaw, 1995, p. 1) and enables a researcher to become 'immersed' in the research setting. Observation has been described as the 'most comprehensive of all types of research strategies' (Patton, 2002, p. 21). It helps researchers to put together a detailed picture of what goes on before, during and after a particular event, and enables them to take account of multiple perspectives. In this sense, it is more capable of capturing the complexity of experiences than other approaches such as interviews. For ethnographers, it is the key to understanding the bigger picture context in which particular individuals engage in particular events or particular practices.

It is important to point out that ethnographers rarely use observations alone in their research, and often supplement observation data with interview texts, documents or other artefacts to enrich, clarify and validate their observations. Such *bricolage*, where the researcher uses a multiplicity of data collection methods and combines them in creative and innovative ways as the research evolves, is commonplace in qualitative research (Patton, 2002). Observation and interviewing are particularly complementary methods, with observations providing the wide-angle viewpoint that is then given more focus through interviews. We explore interviewing in depth in Chapter 7 in connection with our discussion of narrative research. At this point, it is useful to remind you that the intention for this book is not to provide recipes or suggest a formulaic approach to the selection of methods for research, but rather to present possibilities from which you can make some informed decisions. Your choice of methods will be based on the decisions you make about the nature of the problem, your choice of questions and the particular needs of your research project. If these decisions are well made, then at a fundamental level your methods will find you.

Observers may watch, listen, converse, write, draw, film or take photographs. They may choose one, several or all of these approaches to record what they observe. Observation has a key role in orienting the researcher to the particularities of the research setting in order to understand them better. Observation then provides data sources that will help address the research problem, though this is not the only goal. Observation notes provide rich information that, when used to elaborate and contextualize the research report, enhances the researcher's credibility and helps the reader engage with and make sense of the final research text (Dunne, Pryor &

Yates, 2005; Patton, 2002). When making decisions about how to observe and what to collect, it is worth remembering that these resources will later be used to create the final research text. This text will be crucial in helping the reader to connect with the setting, the people and the research, and can take many forms including performance, life history and poetry (Denzin, 2003). Designers will want to consider innovative ways to present their final research, and may have in mind the form of the final research text when making decisions about what to collect during observations.

Observer roles: some possibilities

While the core principle behind Malinowski's use of participant observation remains—to enable the researcher to establish close and sustained connections with the people and the cultural setting and thereby to achieve a deeper understanding—it is now widely acknowledged that there can be different levels of connection between the researcher and the research setting. Total immersion in the setting is not always necessary for research to be credible. Different continua have been suggested to show the range from complete participation to non-involved, pure observation (see Ary, Jacobs & Sorensen, 2010; Dunne, Pryor & Yates, 2005). Non-participant observers do not attempt to develop a close familiarity with the setting, but instead take on a slightly detached role in their observations and do not attempt to take part in the actual experiences (Ary, Jacobs & Sorensen, 2010, pp. 432–433). This is the difference between a researcher who, as part of a research project to explore collaboration, works as a team member in a design studio (a full participant) and a researcher who visits the design studio to observe aspects of collaboration but never works alongside the other designers (a non-participant). Clearly while each approach could be valuable (and its value would depend on the particular research question), each researcher would collect very different data depending on the nature of their immersion in the setting.

However, if both researchers were designers as well—in a sense insiders within the culture of design practice—their experiences would be different again from those of researchers (outsiders) who had never worked in design. It is now acknowledged that the role of participant observer is not exclusive to researchers who come in as outsiders to a setting or cultural group that is unfamiliar to them, but that the strategy is equally valuable for those who are insiders by virtue of their existing membership of the culture that is being researched. Thus, there is a further dimension to participant observation, when the researcher is an insider in the larger field of cultural practices of which the particular research setting is a small constituent.

Observer roles: some cautions

There are advantages and disadvantages in both insider and outsider roles. Insider researchers may have more credibility and may more readily gain the acceptance of

other research participants. Similarly, when the research setting encompasses groups of people who are marginalized from mainstream society, as would be the case if research participants were members of a minority cultural group such as indigenous peoples or refugees, an inside observer would avoid the potentially oppressive practices associated with having an observer who was a member of the dominant culture. However, observing a research setting as an insider reduces considerably the potential for fresh insights, as much of the setting that would seem new and different to an outsider will escape an insider's attention. Insider researchers need to be particularly aware of the need to problematize commonsense perspectives and to try to see the familiar as if it were strange. The outside observer, while having the advantage of approaching an unfamiliar setting with fresh eyes, also risks focusing attention on what is novel or exotic to them and so losing sight of the everyday experiences. There are thus different challenges associated with making the familiar strange, and making the strange familiar.

Observation is at its core a reflexive process, since the 'very process of observing becomes loaded with the [researcher's] theories of the world' (Dunne, Pryor & Yates, 2005, p. 67). No matter whether the researcher is observing from inside, outside or from a place in between, observations are neither value-neutral nor objective. An observer's existing perspectives will unconsciously shape his or her observations, by predisposing the observer to take notice of those events that fit within his or her frame of reference. Dunne, Pryor and Yates (2005) point out that besides the planned research questions formulated by researchers, they are also likely to have 'tacit' questions in play that unconsciously shape what they see to be important. This does not mean that observations are useless as research data, but simply that it is important to contextualize the observations in terms of both the researchers' theoretical orientation and their practical perspectives. This is why we advocate the use of reflexive records in which researchers show how they recognize and take account of the limitations of their perspective, and that in the final research 'text' (whatever form it takes) the researcher's positioning is made clear. The nature of these limitations also suggests the importance of making modest claims in the final research text, and avoiding drawing conclusions that attempt to make a final statement about the research question. The conclusions should be capable of adding to existing understandings while at the same time leaving open possibilities for other researchers to make further interpretations and extend those understandings.

Another limitation is that observers, by their very presence, influence the behaviour of those who are observed and thus what is observed can never be a wholly natural setting (Dunne, Pryor & Yates, 2005; Patton, 2002). People behave differently when they know they are being observed. This is more marked in more intimate settings such as workplaces, and when the observer is a complete outsider. Some outsider researchers have addressed the problem by taking on a role within the setting that enables them to participate more naturally in the day-to-day activities of the place. This could involve taking on a volunteer role in a design practice, or in a designed setting such as an office space or school.

In all cases it is important to negotiate the nature of the participation and the conduct of the observation, to obtain permission from participants to ensure that what takes place is both useful and appropriate for the research, and to follow ethical practices. Similarly, ethical considerations rule out covert observation when individuals are going to be observed closely. In every case it will be important to inform people that you are observing them, unless the size of the group to be observed makes this impractical or unnecessary (e.g. if the focus of the observation is people's movement through a building). It is worth remembering that you are observing real people, and that your presence and your observation practices will have at least a small impact on their lives.

Observation strategies

The collection of data through observation is a dynamic process. Data collection usually begins with a wide focus, which is then successively narrowed so that the researcher finds out more and more about less and less until a saturation point is achieved. At this point the data stops giving rise to new insights but instead begins to reconfirm what has already been established. Sometimes the focus shifts again, as new questions arise and new observation contexts or focuses suggest themselves. 'Wide-angle' data collection often starts before the research project even begins, as the researcher's life experiences lead to informal observations about a research problem or a research context. Personal journals, notes and reflections on readings can all form part of such preliminary observations. And often when the research has a link to a professional context, the two dimensions—personal (or habitus) and professional (or field)—inform one another repeatedly. It is useful to remember that the research process will not be linear and static but always has the potential to shift direction in response to changing conditions or the emergence of a new focus.

It is tempting to think that observation is a simple, natural activity. After all, isn't that what we do when we sit in cafés and people watch? However, as Patton (2002) reminds us, *purposeful* observation is not something we do naturally. Rather, it brings into play a range of complex capabilities such as being able to listen and pay attention, having the ability to write focused descriptions, being able to select what is important from a mass of fleeting and conflicting impressions, and on top of that being conscious of both the strengths and the limitations of our own perspectives. Some degree of prior experience and careful planning will be needed if we are to make the fullest use of the opportunities provided by observation. We suggest practising by closely observing family or friends (with permission), or keeping notes on the comings and goings on a street.

Dunne, Pryor and Yates (2005, pp. 56–57) recommend the use of two columns when making observation notes, with detailed descriptions appearing on the left hand side and commentary and interpretations appearing on the right. Such records quickly become extremely complex, and techniques for capturing events accurately need to be developed alongside techniques for recording the researcher's responses,

reflections and emerging ideas. Examples of other people's observation notes can also be studied for a sense of the level of detail that is useful (see Creswell, 2008, p. 224; Emerson, Fretz & Shaw, 1995; Patton, 2002, p. 304). It is a useful strategy to look over field notes as soon as possible to check that they make sense and add comments or elaborate while the experience is fresh in your memory.

In every case you must have some overall plan for the different stages in the process of observation, such as how you will choose the site, how you will gain access, what different levels of engagement you will have and when and how to finish (see example in Creswell, 2008, p. 225). Different research needs will require different levels of planning. While using a preplanned observation schedule can lead a researcher to missing something important when it does not fall within the scope of the schedule (Dunne, Pryor & Yates, 2005), it is useful to develop a series of general 'sensitizing concepts' to organize and guide the research (Patton, 2002, p. 278). Even short periods of observation will generate vast amounts of data, and when time is a constraint it is practical to devise a means of maintaining a focus. In the final section of this chapter, where some examples of research projects are outlined, some related sensitizing concepts are suggested that could be used to help frame the observations.

As you spend time in the research setting, you will come to know well the people you are observing. As the research progresses, you may find that the process continues beyond the formal data collection period as you bump into participants regularly and become drawn in to the natural interactions that take place in the setting where you are observing. Although such opportunistic interactions may not have formed part of your planned observations, they nevertheless will be invaluable. Throughout the period of data collection (and beyond), it will be useful to keep a research journal to record 'thick' descriptions (Neuman, 2000) of naturally occurring data (Silverman, 2001) such as conversations, encounters and your own reflections on these experiences. Extracts from the research journal can be included as research data, for example to give a sense of your personal contact and involvement with participants.

Decisions made about how to conduct observations and how to use the information collected—decisions about method—are not merely practical but are also methodological questions. Such questions incorporate the political context, which in turn affects our identities as researchers/designers and as individuals and our ethical positions. These decisions are also based on our epistemological and ontological positions—how we think we come to know the world, and what exists in the world to be known. So in thinking about 'how to' questions, we take into account our overarching methodological stance, which includes the kinds of data that fit our research purposes, the participants who would be most appropriate, the time period over which the research should be conducted and why, and so on.

The political context, at both macro and micro levels, links back to our methodological decisions. Who has the right to speak about this issue, who 'owns' the problem and whose voices should be heard are all political questions. Then our

identities as people and as researchers further inform our methodological decisions. Is the designer or researcher uppermost in our thinking as we plan the research? How might our interests as a designer be reflected in the final research product, and how will this in turn influence how we go about recording our observations? Given our particular identities, are there individuals among the research participants to whom we will relate well, or badly, and how will this affect the research? And what ethical considerations flow from our answers to these questions? And finally, but not least, what do we think it is possible to know, and what are the limits to our knowing this? As our research takes shape, methodological considerations will continue to inform everything we do.

To end this section on observation, we turn to an example of a research text that has been produced as the result of observations by a design teacher over the period of a year. We do not have access to the observation texts that Szenasy collected during that year. Observation notes are not usually published, although extracts from them will form part of the final research text. Here Szenasy's final text reveals both the identity of the researcher/teacher/designer and the shifting attitudes of the designers in her class to the idea that 'the creative professions make a huge difference in the ways we live' (Szenasy, 2003, p. 20).

Beginning with a brief account of one design student's dismissal of sustainability as 'not my issue', Szenasy charts the progress over the year of her students who at start are 'sceptical, even cynical' (p. 21) about the possibility of individual designers being able to resist the 'throw away culture' to which we are enslaved. Through gradual exposure to film, text and the ideas and practices of designers who deliberately worked against the grain of the majority culture, the students' attitudes begin to change and individuals begin to put forward arguments in their own right about the immorality of certain practices they have encountered in the observations of design practices.

Szenasy traces in some detail the subtle and complex shifts in perspective of the members of the class, and thus uses her observation records to explore possibilities for cultural change in her class of student designers. Her final text is part polemic but also part research report that has the potential in its turn to suggest strategies for other teachers of design who wish to challenge their students' perspectives. Her approach exemplifies the point that 'a narrative approach to observation, being there, provides many opportunities for establishing *critical empathy*' (Dunne, Pryor & Yates, 2005, p. 71). By being there, the researcher herself becomes part of the research and is no longer a detached, objective observer.

Ethnography for research in design

To bring this chapter to a close some further examples of research problems in design that invite an ethnographic approach are introduced. We look first at the experiences of Kayo, an emerging fashion designer who is trying to build a design

business in a regional city. She is looking for a niche market for her designs and has noticed that the market for glamorous gowns is a healthy one, particularly among young women sixteen to eighteen years old who readily spend large amounts of money on dresses for the school ball or prom. As a designer Kayo feels that the choices available to young women are very limited, with the designs more appropriate for older women, celebrities or socialites. She herself resisted the pressure to conform by dressing in a man's suit at her own school ball. She decides to research the cultural and social practices associated with the buying of the school ball gown, with the aim of identifying a niche for her work as a designer of alternatives to the traditional satin and pastel confections.

In making this choice, Kayo is exploring the relationship between her habitus (which includes her ideas about fashion) and the field (which contains a particular set of cultural practices—in this instance the practices associated with choosing a ball gown). However, the cultural practices of gown buying are themselves constituted by broader cultural practices within the wider society. These practices are shaped by values and ideologies such as the nature of femininity and how clothing reflects this, the importance of conformity and the role of the school ball as a rite of passage for young women. Kayo's design and research practice is therefore located within a set of cultural practices that are constituents of the wider society of which she is a part. For these reasons, an ethnographic research approach would be well suited to Kayo's design problem.

The project *Design for the Other 90%* (Smithsonian Institution, 2007) is another example of the usefulness of an ethnographic approach to the solution of design problems. The project was established out of a desire to address the fact that around 90 per cent of the world's population have minimal access to the kinds of products and services that members of the minority world take for granted (Smithsonian Institution, 2007). The project brought together a group of designers who were interested in finding creative solutions to the challenges of finding innovative and low-cost solutions to this problem. In one project, designer Mohammed Bah Abba (2007) based his solution to a practical design problem on his knowledge of cultural practices as well as on his knowledge of design. The design solution—the 'pot-in-pot cooler'—is based on traditional technology that uses two earthenware pots, a smaller one nesting inside a larger one, to store water and keep it cool. When wet sand is placed in the gap between the two pots, it helps keep the contents of the inner pot cool. Such pots used to be in common use, but in recent years the villagers had stopped using them.

Bah Abba understood the problem in terms of the relationship between design solutions and social realm problems. He observed that it was the girls of the villages who were expected to take local produce to the market to sell, and to fetch fresh foods from the market. With no means to store perishable foods, the girls had to make daily trips to the markets to buy and sell produce such as mangoes and onions, which prevented them from going to school. The designer had used such pots as a child in rural Nigeria, for water storage, and because of his familiarity with this cultural practice as well as his framing of the problem in terms of its social and cultural

dimensions, he was able to further develop the traditional technology to enable the pots to be used more widely and for a wider range of purposes. Now, with the pot-in-pot cooler widely available again and able to be used for storing a wide range of produce, the girls of the local villages have time to go to school.

The possibilities for using ethnographic approaches to research in design are numerous. We now suggest in brief some further ideas to show how ethnographic approaches might be applied to research in three specialist areas in design. The areas are fashion and textiles, interior design and handcrafts. In each case we identify a possible research focus and frame a research problem, then suggest some focus questions and sensitizing concepts, recommend appropriate methods for data collection and analysis, indicate the type of data that would result, suggest what type of research text might be produced and indicate who might benefit from the proposed research. We follow this pattern in each of the chapters on research methodologies, by offering brief sketches of possible research projects drawn from different specialist areas in design and using the methodological approach that is the focus of each chapter.

Questions for reflection

For all researchers whose aim is to understand cultural practices there are key questions:

1. What are some strategies for taking account of our ideological positioning?
2. Are ethnographers who share the cultural, class, gender, race backgrounds of those researched better placed to experience participants' experiences than those who are strangers? Or not?
3. To what extent would an ethnographic approach be appropriate for your research?
4. Make a list of the values, experiences, attitudes and personal views that make up your habitus and that might impact on how you plan and conduct your research.
5. Where do these prior perspectives come from? Think about personal experience, cultural background, personal social context (gender, social class, age and so on) and worldview.
6. If you were being observed as part of an ethnographic study, what could the observer do to make you feel comfortable about being observed?

FASHION AND TEXTILES

Research focus: Fashion and cultural identity.

Research problem: What are some distinctive features of a particular subculture's relationship to clothing?

Sensitizing concepts: Users of design, designers, cultural practices, subcultures, identity, fashion.

Methods:

Observe and record examples of how members of the subculture dress.
 Conduct open-ended interviews with designers who market clothes for this group, and with members of the chosen subculture (use focus groups).

Collect narratives from selected members of the two groups. Use snowball sampling or invite volunteers from focus groups.

Data collected: Observation notes and illustrations, interview data, personal narratives.

Final text: Illustrated ethnographic study.

Who is the research for? Fashion designers working within the avant-garde.

INTERIOR DESIGN

Research focus: Creating a physical and material environment that is conducive to study.

Research problem: What are the emotional effects of colour in schools?

Sensitizing concepts: User behaviour/preference, social and cultural factors, purpose and use of space, learning environments.

Methods:

Observe student behaviours in different settings with different colour use.

Conduct open-ended interviews with teachers and students to identify perceptions and preferences.

Use interviews as baseline data to develop survey to focus in detail on key concepts and explore veracity of earlier interview data.

Document research and observation: colour use in different settings.

Data collected: Observation notes, interview data and survey data.

Final text: Research report that documents research processes and outcomes and provides suggestions for future practice.

Who is the research for? Interior designers, educators.

HANDCRAFTS

Research focus: Adapting a minority culture's designs for application in another cultural context.

Research problem: Given the cultural origins of a particular design, is it appropriate to adapt it for contemporary use by a craftsperson from a different culture?

Sensitizing concepts: Designed object, designer, symbolism, cultural practices, appropriation.

Methods:

Museum research—cultural/anthropological evidence of traditional use of designs.

Interviews with custodians of cultural heritage (individual or focus group, as appropriate).

Data collected:

Historical records showing the cultural origins and significance of the design.

Interview data to supplement the above.

Final text: An ethnography of the design that locates it within a set of cultural practices, and includes critical analysis of the appropriateness of its adoption.

Who is the research for? Contemporary designers who intend to adopt the designs of any minority culture.

Conclusion

Based on our definitions of the nature of design and the work of the designer, ethnographic approaches have a valuable role to play in research in design. Ethnographic research enables us to understand more of the broad backdrop of social and cultural contexts within which users of design experience their everyday lives. If we acknowledge both the need to take account of the social contexts in which design problems arise and are addressed, and that all design involves the end user of the designed object or system, the potential of ethnographic research for designers is obvious. An ethnographic perspective helps identify those features of the designed object, of the system, and of the work of the designer that require an understanding of cultural and social practices.

Ethnographic research provides a methodological approach that enables designers to:

- Develop an in-depth understanding of the social and cultural interactions within which their own practices take place;
- Identify relationships between users' practices and the broader cultural context;
- Understand how users might engage with designed objects or systems;
- Understand how that engagement might be optimized or enhanced or alternatively be limited, restricted or nonexistent because of the cultural contexts in which the user is situated;
- Gain a variety of perspectives that either confirm, extend or challenge one's existing preconceptions as a designer.

We encourage you to explore some of these possibilities.