MATERIAL METHODS

Researching and Thinking with Things

SOPHIE WOODWARD

Material Methods

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For information:

SAGE Publications Ltd

1 Oliver's Yard

55 City Road

London EC1Y 1SP

SAGE Publications Inc.

2455 Teller Road

Thousand Oaks, California 91320

SAGE Publications India Pvt Ltd

B 1/I 1 Mohan Cooperative Industrial Area

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About the Author

Sophie Woodward

is a Senior Lecturer in Sociology at the University of Manchester; she carries out research into material culture, fashion and everyday lives and has a particular interest in creative qualitative methodologies. She is the author of several books including Why Women Wear What they Wear (2007), Blue Jeans: the Art of Ordinary (with Daniel Miller, 2012) and Why Feminism Matters (2009 with Kath Woodward). She is currently carrying out research into Dormant Things (things that have accumulated in domestic spaces) which explore the hidden lives of things that are not currently being used through multiple material methods. She has a parallel interest in feminist theory and is currently writing a book on Birth and Death (with Kath Woodward).

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Praise for the Book

‘This is the first comprehensive presentation and review of methods for the study of material things that incorporates the advances in material culture studies and a variety of anthropological and sociological developments of recent decades. It has extraordinary breadth including both the planning of research and the presentation of results, alongside considerations of analysis and theory, taken from a broad spectrum between art and science and all delivered in a clear and thoughtful style. There are many original ideas and suggestions for how to proceed. The result will be invaluable for students and researchers wanting to study our ever expanding world of material and visual culture.’ – **Daniel Miller, Professor of Anthropology, University College London**

‘What an excellent book Sophie Woodward has written! In ‘Material Methods’ she brings into the methodological mainstream a sophisticated and provocative analysis of the possibilities of researching the material world, in a most timely way. She considers what it means for researchers to attune themselves to and engage with the vitality of ‘things’, in ways that will provoke and inspire them to think and research differently. In chapters that cover the whole research process and span a wide range of material methods, she deftly weaves a discussion that will help the reader to be theoretically astute, practically informed, and inspired to try out new approaches. Whether or not you plan to use material methods, this book has the potential to change not only the way you do your research, but also your theoretical take on the world.’ – **Jennifer Mason, Professor of Sociology, University of Manchester**

‘An insightful synthesis of key currents in studies of materiality and an essential guide for actually doing materiality studies. This book will be invaluable in helping researchers and students understand the

different ways they can work with objects in their research practice.' –
Ian Woodward, University of Southern Denmark

1 Introduction

In *Material Methods* I outline the methodological possibilities and implications of researching the material world. The book starts from the premise that the world is simultaneously material and social, as the things that surround us are an inseparable part of how our relationships to other people are mediated, and the environment, society and culture we live in. Things and materials – as they come into being and are transformed through relations with other things and people – are an inextricable aspect of who we are, our social relations, and even our humanity (Miller, 2010). The theoretical ways of approaching these entanglements between the material and the social are multiple, yet they all in different ways emphasise the active role that things and materials play in this process. We cannot just impose meanings onto things, as they are not passive but instead are 'vibrant' (Bennet, 2009) and may resist, surprise, challenge or excite us.

This vibrancy makes things and materials both exciting to research with as well as raises questions about how we can understand these material vitalities and the ways our lives are entangled with things. In this book, I take up the methodological challenges of how to explore the elusive, silent and complex dimensions of the material world and the myriad possibilities that researching with things offer. The impetus to write this comes from my own experiences of researching with material culture within a range of different projects, and an initial frustration with how to understand clothing as material culture. I wanted to understand what clothing was and to have a language to talk and write about it; I experimented with existing methods which took me on a journey using methods such as ethnographic observations, interviews, diaries, wardrobe inventories, collaboration with materials scientists, and getting people to write about and imagine with objects. In this book, I explore the possibilities for adapting existing methods as well as developing new approaches to allow us to foreground the material, become attentive to things and materials and the effects they might have.

What are material methods?

The term material methods is one that I have created to speak to the diverse ways of carrying out research within the areas of material culture and materiality as well as the expansion of creative methods as they move into the multi-sensory, embodied, visual and material. Material methods encompass both methods that are used to understand material culture and materiality, as well as methods that draw upon the materiality of things to generate data. Material methods are, therefore, both:

1. routes *into* the substantive field of materiality (even as the methods are simultaneously always part of that field) as well as
2. methods of researching *with* things.

The first sense in which I am using the term material methods addresses the implications of the material turn and the concomitant expansion of research into materiality, materials and material culture. Theoretical and empirical interest in the material world raises questions about how we can adapt existing methods to help us understand things, material properties and the effects that things can have. Methods such as interviews or ethnographic observations have a long heritage within qualitative research, and in this book I explore how these can be – and have been – adapted to allow material relations to be foregrounded. If you are a student or researcher who is already interested in materiality, this book will encourage you to think about what implications your theoretical understandings of materiality have for how you think about methods, as well as introduce you to a range of different methods that can centre the material.

The second sense in which I am using the term material methods is to explore methods that draw upon the capacities of objects to provoke. This builds upon the acknowledgement of the role that things have in research practices (cameras, audio-recorders) as part of the methods-assemblage (Law, 2004). Participants, researchers and the tools of research are all part of how the phenomenon that is being researched is configured (Barad, 2003). All methods are material in the sense that people and things interact in particular contexts to produce knowledge. In this book, I bring together these understandings of the materiality of methods with theories of how things have effects (see Chapter 2) to explore how material methods (such as object interviews and cultural probes) involve an active engagement with the capacities of things to make methods provocative. This aspect of material methods dovetails with broader engagements with creative (see Mason, 2018) and live methods (see Back and Puwar, 2012). They are a way to help you think creatively about how you are doing research, as well as how you can understand and approach the material world.

Material methods as ways to provoke participants (and you as a researcher) is a theme I develop throughout the book and is one which can engage those of you who might not have a research focus into materiality but are interested in thinking creatively about methods that allow us to understand a multi-dimensional and multi-sensory world. In doing this, I am encouraging you to move beyond just thinking reflexively about the role of objects in your research methods to ask you to critically engage with the possibilities of thinking about things you encounter in your substantive fields of research as methodological possibilities. So, for example, you may be researching people's relationship to their workplace and think about this workplace as a material environment made up of corridors (see Hurdley, 2010), buildings, people, shadows, movements, chatter (see also Yaneva, 2013). These material facets of the workplace can be both a substantive focus as well as methodological possibilities as you engage with how to develop methods that draw upon the capacity of noises in the workplace, the arrangement of things on desks, the shifting lights in a building. The vitalities and agency of things to excite you, resist you, or affect you can be thought about as methodological possibilities. Adams and Thompson (2011) suggest that technologies and things can be research participants; things have effects upon researchers and in doing so can open up new ways of thinking. The provocative capacities of things and how you can become attentive to them are central to the methods discussed in this book.

Why is this book needed?

The 'material turn' (see Hicks, 2010 for a discussion) has led to a profusion of interest in things and materials within the social sciences and humanities; however, despite the proliferation of theoretical accounts of materiality and empirical work exploring specific materials, objects and contexts, there has not been a concomitant development that addresses the methodological consequences of thinking about material culture and material relations. The parallel fields of visual and sensory research, in contrast, include an extensive literature, which deals with the methodological implications of a renewed attention to the sensory and visual (such as Banks, 2001; Pink, 2009; Rose, 2016). The lack of methodological discussion within the literature on material culture is more profound than just a lack of books or articles explicitly focusing upon materiality and methods, as often even within articles using empirical accounts to explore materiality there is an absence of discussion or reflection on methods.

The recent spate of readers and handbooks on material culture are a case in point; they include chapters that explore the theoretical debates and orientations to materials and objects (such as Hicks and Beaudry, 2010; Harvey et al., 2014; Tilley et al., 2013), yet the methodological challenges and possibilities of researching objects often remain implicit. Epistemological concerns over how to understand messy material and social relations (see, for example, Law, 2004) point towards the need to think more critically about how to engage with these challenges methodologically. In addition, there are books that engage with specific theoretical positions and the implications for carrying out empirical research (in particular for the connection between new materialism and methods, Fox and Alldred (2015), but also for non-representational theory, Vannini (2015)). This book is the first book to explicitly engage with the methodological implications and possibilities of researching materiality as well as researching with things. It does this by bringing together a wide range of methods for understanding material culture, by offering a critical reflection upon existing methods as well as exploring more recent innovations.

The lack of literature focusing on methods and materiality does not do justice to the wide range of innovative and thoughtful methods that are carried out in practice. As these ways of doing research are often not reflected upon or written about, many of these methods are not 'named'. The process of writing this book has involved reading research that has employed material methods but does not discuss them, and thinking through the traces of these methods and analysis in what is written. Writing this book has also been a process of drawing together at times quite seemingly disparate projects and methods, as well as 'naming' some of these methods. I have drawn from a wide range of disciplines, such as sociology, anthropology, geography, history, design, archaeology. While there are of course disciplinary specificities in how things are approached (see Hicks and Beaudry, 2010), theories already move across disciplinary boundaries, as material culture is an inherently interdisciplinary field. Thinking through and across disciplines has allowed me to see connections between ways of approaching things, which are simultaneously theoretical, empirical and methodological. Throughout the book I will note the discipline that specific approaches come from, as the heritage of methods matters. However, I have also found it very productive to think across disciplines, and to put disciplinary methodological approaches in dialogue with each other to advance thinking about material methods.

What kind of book is it and who is it for?

Thinking about things and the material world emerges from an engagement with that world; it is impossible to theorise materiality without thinking about stuff. This book situates material methods at the intersection of theory, the empirical and the methodological as the three cannot be separated. In the next chapter , I raise and explore questions of how you can understand what things and objects are; these questions animate the chapters that centre on specific methods (Chapters 3 –7). In this book I understand 'the empirical' as an engagement with the material world: defined in this way, the empirical runs throughout the book (not as separate to theory or methods sections) as each chapter is centrally concerned with methods for thinking about that engagement with the material world. The methods can help us to understand the material world, as well as being generated through an engagement with the empirical. In the 'methods' chapters (3 –7), specific empirical case studies are central to the exploration of how methods have been used to answer different research questions to highlight the principles and possibilities of each method. Given that often material methods are not written about or reflected upon, this is particularly important to show ways in which researchers have approached the material.

The book aims to introduce you to the possibilities of different material methods; it is not reducing particular methods to specific disciplinary or theoretical stances. Instead, through examples, I will show you the ways in which people have used methods and, by juxtaposing different approaches, I will tease out the possibilities these methods have. There are no 'right' methods for different questions, as methods allow you to do different things – no method can capture everything (Bhattacharya, 2009) – but exploring different methods can allow you to think about the material differently. I have written this book with the intention of provoking you to think creatively about how you could approach your research.

While the book is for anyone who wants to read or use it, it is anticipated that it will be of particular use and interest for those of you who:

- are carrying out research specifically into material culture and materiality and want to reflect upon current methods and explore alternative methodological approaches;
- encounter things/objects in doing your research and want to think about how to approach and understand them;
- wish to expand the possibilities of your methods and to understand what material methods can offer;
- want to know about and understand what things/objects are, and what place they might have in your research.

For all those who read the book it is intended to provoke you to think differently about your methods and the material world.

The content of the book and how to use it

The book covers the whole stage of thinking about research:

- How to orient yourself to things.
- The role theory has in setting up your empirical research.
- Specific methods – their potential uses as well as limitations.
- How to analyse data generated.
- How to present your research.

It, therefore, leads you through the entire process of research and can be read as a whole. It is also a book that you can dip into, if you have an interest in a specific method, or you want to think about how to analyse your data. Chapter 2 sets up some of the core issues that run throughout the book as well as key issues and debates around what things/objects are, and as such is a useful starting point even if you are planning to read about a specific method. There are threads that run through the book, such as how you can attune yourself and become attentive to things. If you do not already carry out research into materiality you may not notice the role the material has in your research field, and if you do, it can be challenging to understand the material, given how dominant social science methods are people-centred and privilege verbal accounts. As a consequence, what it means to attune yourself to things, and how you do this, runs throughout the book, in terms of specific methods as well as data analysis. Other key ideas running through the book (that I have already introduced) are the vitality of things and the ways methods and things can be provocative.

In **Chapter 2** , I outline what it means to orient yourself to objects and things in your research. I start the chapter by addressing key questions that you have to engage with when using material methods, such as *what are things, objects and material properties* ? Thinking about them as objects, things or as entangled materials are not just questions of terminology but fundamental questions about how you understand what they are and how they work. This question will draw on different theoretical traditions to open up different ways of thinking about things and the implications that this has for how you frame and approach your research. As part of how you understand things, the chapter then moves on to think about what *effects things have* . Drawing upon the emphasis upon the relational in many theories of materiality (albeit differently conceived), the chapter extends this to the methodological and empirical question *where do things end and how do you draw the boundaries of what you are researching* ? As a whole, the chapter sets up a way of orienting yourself to things as I outline what a material-oriented ontology might look like: things or materials are central to an understanding of the world (this will be returned to throughout the book). Throughout the chapter I address the relationships between theory, methods and the empirical that underpins the book.

In **Chapter 3** , I introduce object interviews as a material method. The questions that animate the previous chapter are extended here to show that how you understand what things are will impact upon how you think about and do an object interview. Seeing something as a thing or an object is both a theoretical question (discussed in Chapter 2) as well as a practical question as to whether to keep the item in its original context or carry out an interview in a separate setting (where people bring objects along). I develop the idea of an object interview as a space of encounter and/or space of connection to look at different ways of approaching object interviews. The differences and similarities between object elicitations and interviews are introduced to explore the potentials for the method. The chapter engages with how you can approach interviews as a material method and how you can centre objects which involves engaging with what types of things you use in interviews and how they can provoke responses in participants. As material relationships are understood as embodied and practical rather than verbalised, I outline the ways in which the verbal can be used as a way to understand the material world. The chapter finishes by discussing some practical considerations and useful techniques for thinking about doing object interviews.

Chapter 4 explicitly picks up the ways in which material methods draw upon the provocative capacities of things by introducing cultural probes and arts-based methods. The previous chapter on object interviews opened up the ways in which you need to pay heed to the materiality and material properties of things when thinking about interviews as a method of drawing out and eliciting responses. This chapter expands how methods can be material provocations through the examples of cultural probes and other design-based methods (such as speculative design) as well as arts-based methods (such as collage and play-based methods). Taken together, these methods are understood as drawing upon the playful and open-ended possibilities of things, as they can produce unexpected responses from participants. The methods discussed in this chapter have in common that they are developed within design and arts-based disciplines but exported more widely, as well as that they are often not discussed as material methods. In this chapter I explore the implications of methods crossing disciplinary boundaries as well as building upon the ideas from Chapter 2 to think about how you can frame, think about and adopt these approaches as material methods.

Chapter 5 engages with the questions of how you can think about and research material relations, that is, things in relationship to each other. This picks up the key question introduced in Chapter 2 – *where things end* – as a theoretical and empirical concern. Even if things are understood as always being in relationship to other things, materials, contexts and people you have to empirically decide on where you draw the boundaries of what you are researching. This chapter focuses explicitly upon both methods to understand collections/assemblages/sets of things as well as thinking about sets of things as methodological possibilities in themselves. It explores methods you might develop if you either have a particular theoretical stance on the relations between things (such as assemblage theory) or if you have a particular empirical interest in a collection/type of thing (such as music collections or a museum collection). It also interrogates what ways of thinking can be opened up if you develop *things-in-relations* as an empirical and methodological approach. The particular methods the chapter explores range from probate inventories and catalogues through to collection interviews or observations.

Chapter 6 outlines follow the thing as a methodological approach to research that centres things as they move temporally and spatially. Follow the thing is an analytical and methodological approach to your field of study rather than a specified method/set of methods. I introduce thinking about things and how they move as a provocative method, which can provoke you as a researcher to think differently about your empirical field. Akin to the previous chapter where collections are introduced as a method for allowing researchers to think differently, follow the thing is explored as an analytical strategy that can open up how you develop your research questions and empirical research. The approach ranges from global commodity chain analysis through to smaller scale empirical sites where things are followed within a particular space. As such, it can be adapted to a number of different scales, empirical topics and methods and some of these potential routes are explored in the chapter. Here I pick up on the questions introduced in Chapter 2 in terms of thinking about what things are (here addressed as what you are following: materials, things or relations), and where they end as you try to delineate the boundaries of what you are following.

In **Chapter 7** , I explore how ethnography has been developed for research into material culture and materiality. Although it has been used much more broadly than research into material culture, it has clear potentials and possibilities, which this chapter expands upon by explicitly thinking about it as a material method. The ways in which ethnography de-emphasises the verbal and focuses upon practices allows the material to be centred in methods, empirical examples and theory. The chapter picks up on the idea of ethnographic 'openness'; this openness is empirical as well as theoretical as it entails being open to what you may find out, what objects and material relations are in a specific context (rather than deciding this through a pre-determined theoretical stance). The theory of what things are can emerge from fieldwork. Although ethnography is an approach and not a set of prescribed methods, the chapter outlines some of the specific methods that are used and how they can be adapted to think about materiality (such as observation, visual and artistic methods and participation).

Chapter 8 (the final chapter) looks at the phase of analysing and presenting your research. I introduce the importance of connecting your 'data' back to the contexts in which it was produced and strategies to get yourself excited about your data. As material methods often generate multiple forms of data, the chapter will explore how to deal with your data set as a whole, as well as dealing with multiple forms of data. I encourage you to remain open to what you may find in your data, as well as open to how the material world emerges in your research. The phase of analysis is explored as an active, creative and imaginative part of the process of doing research. One of the key challenges it takes up is how to attune yourself to the material world, as well as how to retain the vitalities of things. This is true for analysis, as well as the processes through which you present and communicate your work, as the chapter explores ways of writing with data that foreground the material world, as well as alternative forms of presentation such as photo essays or exhibitions.

The book as a whole is trying to get you to be open to the possibilities of researching with things and to retain this openness throughout all stages of the research process: in how you orient yourself to things, your methods as well as how you analyse your findings. Using things as part of your methods can provoke people to respond in interesting ways as well as also provoke you as a researcher to think differently about your research area and what things are.

2 Orienting yourself to things

- *What are the methodological implications of approaching things as objects, things or materials?*
- *Where do things end and how do you decide on the boundaries of what you are looking at?*
- *What is the relationship between theory, methods and the empirical?*

This book develops ‘material methods’ to suggest ways to understand the material world, as well as routes into developing methods which engage with the capacities of things and materials to develop provocative methods of generating data. You may, therefore, be thinking about these methods as someone with little knowledge of what your theoretical framework might be or you may have a clear idea of what theoretical tradition you want to think methods through. Whichever perspective you approach these methods from, you need to think about what the ‘material’ means. In this chapter, I outline ways of orienting yourself to things, by engaging with a number of different theoretical perspectives within the fields of material culture and materiality. I engage with these theories inasmuch as they help to explore different approaches to understanding what a thing is; for example, whether it is better understood as a set of relations or whether you can think about ‘things’ as objects. The chapter is not, however, led by particular theories but is instead led by concerns that you will have as researchers in the fields of material culture and materiality, such as: what is a thing and is it different to an object? How do things have effects? Where do things end and how do you draw boundaries around what you are looking at? These key questions are introduced in this chapter and run throughout the book as methods pick up and address these questions in different ways.

Using material methods means understanding what is meant by the material, and so, this chapter will first unpack what is meant by terms such as things, objects, materials and materiality. I will draw upon theoretical debates to think about what counts as a thing and then move on to a discussion of how things can be understood to have effects (or ‘agency’ as it is often discussed in the literature). Having established the different approaches to what things are and what makes them a thing, the chapter will move on to think about where things end (what relationship they have to other things and the contexts they are found in) which also implies engaging with how you delineate empirical fields of research as well as units of analysis. The chapter will then outline what I define as a material-oriented ontology, which works from the premise that things are not passive but are active, and entangled components of everyday worlds. This involves engaging with the question of how to orientate yourself to things. For those of you unfamiliar with material culture research, this can involve ‘tuning in’ to the often-unnoticed role things have in your research area. Things and material relations (Law, 2004; Henare et al., 2007) are centred in how you theorise, analyse and orientate yourself to empirical research as well as how you carry out your methods. I will also here discuss the role that theory has in how you come to develop your methods and challenge the assumption that you need to start from a defined theoretical perspective and then generate your methods. Instead, I suggest a more open and iterative approach to the relations between theory, empirical questions and methods. The purpose of this chapter is to get you thinking critically about what it means to study things, how can you approach them and what role theory has in this process. These will pave the way for engagement with the possibilities of particular methods in later chapters of the book.

Are you researching with things, objects or materials?

This chapter concerns itself with how to orient yourself to things. This involves engaging with what you think things are, whether you see them as objects, materials that coalesce, becomings, processes or sets of relations. If you are engaged in either researching *about* things (and so with a substantive interest in things) or researching *with* things (using things as a way to generate responses and data) then you need to engage with what things are, and what possibilities and potentials they have. Whether you write about things, objects, or constellations of materials is not just a question of terminology, but these words imply that you are taking a particular ontological position. In this section I am not going to suggest that you 'should' use any particular word, or to adjudicate between different theoretical positions, but instead to explore how words such as objects can frame how you then approach and orient yourself to them in your research.

Objects may seem to be self-evident, they just 'are'. If you are not someone who has previously done research with material culture, or read the literature on materiality then it may well be you have never given much thought to what an object is. Miller (1987) talks about the humility of things, that is, how the things which frame our everyday worlds, actions and relations are often unnoticed. We are surrounded by things as they form the fabric of many of our everyday environments, and yet when we start to think more closely about them the question of what they are becomes more complex. In thinking about the limitations of the term 'objects', Ingold (2010) says that while his office is self-evidently filled with objects, when he goes outside and looks around he asks are trees objects? When they have algae on them is algae still part of the tree or is it a separate thing? Thinking about trees shows the limitations of thinking about the material world in terms of just the made world that surrounds us and extends our thinking to include the wider environment in which things are situated. In the following section I will discuss in more depth the question of where things end, and their relationship to other things.

Here, I want to elaborate on what it means to talk about things, objects, materiality and materials, as well as asking: what counts as a thing? You might take a CD to be self-evidently an object, but what about music? Thinking about the example of music as a thing challenges many of the assumptions you may have about what things are: that they are bounded entities, something you can touch and that they are solid. If you were to frame music as material it would involve interrogating it in terms of how it is connected in relation with other things (music players, speakers), what the substance/materiality of music is (the sound waves, the air) as well as the effects that it has: such as, how it makes people feel and how they move their bodies (see Bartmanski and Woodward, 2015 on vinyl). Approaching music as material opens up new ways of thinking about it, as well as how you think about what an object or a thing is.

Perhaps music or trees are best not thought of as 'objects'. Ingold, along with other writers, has suggested that the word object shouldn't be used at all as it implies something closed off from and separate to the world. Objects stand in our way (Ingold, 2010) rather than being part of the flows of materials that make up our worlds. Instead, he suggests using the word thing, which he takes to mean a 'gathering of the threads of life' (2010: 4). A thing invites us in to participate, as it is part of the flows of life. Take a house, for example: for Ingold it is not a finished object that stands opposed to us, but instead we are part of it, as we continually repair and live in it. Ingold defines a thing as a 'gathering of materials in movements…and to witness a thing is to join with the processes of its ongoing formation' (Ingold, 2012: 436; see also Hicks, 2010). When things are understood in this way they are always becoming within changing environments; in this framework what people do with things – practices – are part of the things themselves.

The definition of things as changing and emergent is in part a reaction against the taken-for-grantedness of things – their presumed solidity. However, you might be doing research that leads you to want to think about the endurances and solidity of things. In many instances, we are not always invited in as Ingold implies; things also resist us. Following Henare et al.'s (2007) suggestion of taking things as they are, if things are encountered as 'objects' then you must pay heed to this and understand them accordingly. An object is made of multiple materials and being an object is only a phase within the longer trajectories of the flows of materials which is contingent upon relations with other things, the air and the surrounding environment. Nonetheless, this period of its life as an object may be the period that your research is most directly focusing upon. Olsen (2010) suggests that focusing on things as relations (discussed below in more depth) means that their properties and the effects these have may be undermined. Think of a table; it has been created from materials and will be broken down into them, it exists in relation to other things and its environment and may be repaired and change over time. It is still, however, identifiably a table for a considerable period of time, and its existence as a table matters. Ingold (2007) suggests that as no object lasts for ever, materials 'win' over objects or materiality. Using terms like 'winning' not only fails to account for the fact that even if its life as an object is short this does not mean that it is unimportant, but also 'winning' implies that one term is better than the others. Instead, you need to think about what you are interested in, how you are defining your terms, which also entails engaging with theoretical and methodological approaches.

Objects and things come to appear as opposing within the discussions I have introduced so far, and yet it may be that you find yourself sympathetic to both approaches and that you want to find a way to design your research that allows for both perspectives. Fowler and Harris (2015) offer a useful way of thinking about how to understand how things endure over time as *things-in-themselves* as well as being *bundles of relations* . They use the phrase things-in-themselves rather than objects, but their article is useful in showing that you can do research that considers the persistence, endurance and material qualities of a particular object while still acknowledging that the object is produced through historical relations. This is important, as many theorists would suggest that seeing something as an object and as a thing (as historically emerging through relations between materials) are incompatible positions.

Fowler and Harris (2015), by drawing on Barad, suggest that you can modulate between ways of seeing things as entities in their own right as well as emerging through historical relations. They use Barad's discussion of electrons (Barad, 2007) about how electrons are entities at the boundary of being a wave and a particle. Waves are disturbances of media; they intersect with each other and are diffracted as the interaction of waves produces an effect. A particle, in contrast, is a thing localised in space. You cannot see the electron clearly as both a particle and a wave at the same time. This is not just about different perspectives but importantly, is a **configuration** : through your research, methods and how you frame things, things are configured in particular ways. And so, if you approach, theorise and use research apparatuses to see something as 'becoming' or as a wave in Barad's sense, then this is what your research will produce. The same is true for seeing something as an entity. And so, you can understand it as both becoming and as being, but to do so you need to shift between different research configurations, which may involve using different theories and methods.

This is a question then of *terminology* (whether you refer to objects, materials, things), of *ontology* (seeing things as bundles of relations or as bounded things which you encounter) and of *methods* (what you do to configure an object as an object). Rather than see one terminology as 'correct' you need to be aware that how you think about things/objects is part of the process through which things are configured. And so, to think about something as an object allows you to see and to understand how they are bounded, how they have properties and how you may encounter them as objects that may resist you. Switching and modulating between positions is feasible within one research project as Fowler and Harris (2015) show in their example of a Neolithic chambered tomb. They adopt this approach to understood this tomb as both an entity in itself as well as historically produced through relations in ways that are not contradictory.

Within the literature there are different formulations of this way of doing research that both acknowledges the 'object-ness' of something as well as how it is multiple. For example, Mol's discussion of the disease athero-sclerosis (Mol, 2002) which emerges though her ethnographic research highlights that the disease is both assumed to be a coherent entity (what might be termed its object-ness) as well as being materially multiple. This multiplicity is evident in the multiple material manifestations of the disease, which are configured through multiple sets of practices (so, for example, the symptoms described in a GP surgery and then examined by a doctor, an angiogram, an ultrasound). Law (2010) suggests you need to understand how things are ontologically multiple (that the disease is created and exists in these multiple material forms) as well as how the coherence of the whole as 'a disease' is achieved. To do this, you need to approach the disease as a coherent thing (even while being aware that this coherence is achieved), and through ethnographic exploration explore the material multiplicity as well as how this coherence is produced. Even if the apparent object-ness of something is contradicted by multiplicities, you can do research that considers how the object-ness and coherence are achieved and assumed. This can be done by either applying a different theoretical lens (as per Fowler and Harris) or by seeing the object-ness as an achieved coherence.

Material culture, materiality and materials

When you are engaging with things in your research or methods, you also need to think about the 'thing-ness' of those things. A route into thinking about this can be asking: what makes one thing different from another? If you are doing research into memories and ask people to bring something along to talk about, how their memories are materialised through an old perfume bottle with traces of scent left in it or a photograph would be very different. The objects may have different meanings, but there is also something particular and different about what these things are, what they do and the impacts they can have. If you are going to take seriously the things that are part of people's worlds, then you need to engage with these issues in planning and carrying out your research. Put another way, you need to engage with them as material culture, with their materiality, their material properties as well as the materials that constitute them. Different theoretical approaches emphasise different terms (or have different takes on the same term). Which word you use has implications for how you draw upon things in creating your methods, as well as how you understand the role that things have in your research.

I will introduce some of these key terms now to indicate how they have been used as well as to help you think about which ones you would use yourself and their differing connotations and implications. These terms are also useful routes into thinking about the different aspects of the 'thing-ness' of things that you need to think about when researching with things. Material culture is a term that has been used to suggest that things are not 'just' things; they are not separate to cultural or social relations but are an integrated part of them. Things are not passive, onto which humans assert their will or impose cultural meanings, but are instead a key player within which people's lives and worlds are mutually created. The term also refers to a field of scholarship (material culture studies/research) that has developed since the 1980s, particularly within anthropology that tends to explore ethnographically the ways in which people and things are co-constituted in different settings. Like many of the words that I introduce and discuss in this section it is a contested term; however, given that this rehashes many of the divisions already discussed between focusing upon things/objects or materials I will not go into that further here. The phrase material culture serves to bring together culture and the material and, therefore, challenges the idea that culture is either just symbolic or that it is a separate sphere to the material world. Instead, in taking a material culture approach, you are committed to exploring how culture is materialised in different contexts.

Materiality is a term that is used across a range of different theoretical perspectives, and while it is again a contested term it is a useful one to think through what it means in relation to your methods and research area as it allows you to start to attune yourself to the material world. Materiality in a basic sense refers to what the properties and capacities of things and materials are, and how these can lead to objects having particular effects. Take the example of the table I have already introduced. Part of its materiality is what it is made of; for example, it may be made of wood, which allows it to be sturdy as well as to be treated with oil to make it less susceptible to water damage, and to be carved in designs to make it an aesthetically pleasing part of someone's kitchen. Its materiality is also its design, which is both aesthetic and functional, as the table has both the possibility of things resting on it as well as things stored beneath it. These facets of its materiality do not determine what it is, what it can do or how people interact with it; however, they encourage and lead towards some uses more than others. Materiality cannot, however, just be reduced to thinking about material properties, but also things like decay (DeSilvey, 2006), affective or dazzling charges of things (see Hicks, 2010, for discussion of these).

How you think about the capacities of things, their material properties and the impact these have depends upon what you are researching, how you are using things in your methods as well as what analytical angle you are taking. There are many different theoretical approaches to materiality to help you think about how you will approach the thing-ness of things. I will introduce two theoretical approaches here to show how different theories to materiality can be useful when orienting yourself to things. The first is an approach that I have used within my research into clothing: Miller's theory of objectification, which attempts to overcome the dualism of subjects and objects. Miller (2005) sees materiality as incorporating 'the ephemeral, the imaginary, the biological and the theoretical' (2005a: 4) and so not just the materials an object is made of. Drawing from Hegel, Miller's theory of objectification positions the objects of mass consumption as a central part of the development of the self and of culture. The subject externalises itself in objects (such as when you see yourself in things), which is then re-appropriated as the self is subsequently changed through our interaction with things. It is a dynamic process of 'becoming' (Miller, 1987: 33), which happens continually as it is never 'resolved' as the subject and culture are progressively developed. Subjects and objects do not pre-exist the process of objectification as 'the very act of creating form creates consciousness or capacity such as skill and therefore transforms both' (Miller, 2005: 9). It is a theory that allows us to engage with the interrelations between people and things and does not place them in opposition. I have found it very helpful in thinking about how people refer to an item of clothing as being 'me', or are unable to part with clothes that effectively externalise relationships to others.

Another approach to materiality that has been very influential is found within actor network theory (ANT) approaches, where materiality is a relational effect (Law, 2010; see also Yaneva, 2013): materiality cannot be separated out from the enactment of relations. Law suggests that in highlighting the 'relational character of materialization' (Law, 2010: 180) this is ANT's most distinctive contribution to understanding materiality as it can be observed in practices. Although developed in laboratory studies, this approach to materiality can be applied more widely. Materiality can be understood in different ways and which understanding you use then affects how you frame the research you do. In Miller's work, materiality is dialectic emerging through the relationships between people and things; in ANT, it emerges through practices and the relations of things with other things. While they are very different takes on materiality, what these perspectives have in common with other ones – such as new materialism or assemblage theory (see Edensor, 2011) – is that materiality does not concern itself with the fixed properties of things that determine how things will behave/how people will interact with them. Rather, materiality is emergent. You cannot just seek to find out what the properties of an object are, and then claim to understand its materiality; instead, which aspects of the material matter, as well as how they emerge through processes and relations, are also important to understand. This is not to elide the differences between positions, as the application of a position like Miller's might lead to a focus on the interaction between people and their things, whereas an application of Barad's new materialism (2003) leads to an emphasis upon the 'intra-action' of elements through which things and matter are formed. However, a key point to take from this is *you cannot take things and what they are for granted* .

You can neither take things (such as a table) for granted, nor can you take the properties of things for granted. To think about materiality entails a consideration of both the **materials** of what things are made, as well as the material properties of things. The historical disciplinary division between the natural material world and the social sciences means that the study of materials has been a separate area of the natural sciences. As a consequence, the properties of things have historically been interrogated through a range of scientific methodologies. More recent developments within the social sciences point to the ways in which material properties are not fixed but instead are emergent (see Drazin and Kuchler, 2015, for a discussion of this). Barad (2003: 821) talks about 'matter' (like materials) having an 'ongoing historicity', as she focuses on the processes through which bodies and matter are formed. It is worth noting that seeing the properties of things as changing and emerging is questioned within some of the literature by those who see some properties of materials as absolute and other properties as emerging in particular contexts. What is for certain is that you cannot take material properties as read or fixed; even if you are not doing research that follows or focuses upon materials, you still need to be aware of material properties and propensities when you use things in research.

Thinking about material properties involves thinking about what they are made of and how they are designed as well as the specific contexts of their use. These context specificities include the environment, cultural contexts as well as the bodies that interact with things. One way of thinking about this is offered in Gibson's (1979) discussion of the relationships between medium (e.g. air) substances (such as rock) and the surfaces of things. The affordances of things call forth relations between bodies and things in particular environments. The implication of this position is that material properties do not stand alone, but exist in relation to other people, the environment and how people perceive them. For example, a table has the possibilities for you to put things on it and for chairs to be placed next to and under it. This can offer a useful way of thinking about things in research contexts as it opens up the relations between things, people and the environment/context they are in.

What can things do? What animates them?

One of the key principles discussed so far is that things are not passive; we cannot just impose meanings on things. This section will engage specifically with this question of how things have effects; one way this has been discussed in the literature is through the concept of **material agency** , which helps us to think about things in terms of what they do rather than just what they mean. This is exemplified in Gell's discussion of artworks (1998) in terms of what the artworks do, not just what they mean. In thinking about how objects have agency, Gell distinguishes between primary and secondary agents; objects are examples of secondary agents as they lack intention but have causal efficacy. However, the intentions of humans can be distributed through them. So, for example, if someone was designing a shoe they couldn't just impose sexiness upon them, but instead through working with the fabrics and shapes, the shoes come to carry or externalise the maker's intentionality. The shoes can have effects as people may see them as sexy. At the same time, moving beyond Gell's position, the shoes can, in Latour's terms, act back, and if the heels fall off, or their shape gives your feet blisters, through the materiality they have thwarted the externalised intentionality of the designer and the wearer (see Woodward, 2003, for a discussion of this).

Although agency is conceived very differently within Gell's work and within ANT or Barad's new materialism – they all share an understanding of how agency is not the 'possession' of an individual, but in Barad's terms (2003) is a doing, or a performance (Pickering, 2010) emerging from the interplay of humans and non-humans. This allows you to focus in research on what people do with things, and what role things have in those interactions. While Gell introduces the idea that agency cannot be reduced to human intentionality, ANT positions extend this further to imply even more radically that agency doesn't have to imply intentionality (see Harvey and Knox, 2014). In Latour, material configurations shape relations and can thus be understood as social actors; Latour's position on agency is well illustrated through the example of the Berlin key. The shape of the key and of the locks means that you have to lock the door behind you; this example usefully shows that things and material arrangements (such as locks and doors) have effects on how people are able to act. In ANT, the focus is not whether things have agency but instead starts from the premise that people and things exist in relations and are defined and produced through those relations. Agency emerges from these networks. In this formulation, it is impossible to divide up what is human or non-human agency. Even though the processes of purification that accompanied modernity sought to present the human and the technological as separate (Latour, 1993), in practice human and non-humans have always been entangled.

Agency is a useful way of thinking about:

- what effects things can have;
- how these effects emerge from how people and things are connected to each other;
- how you can attune yourselves to the active role that things play in the world.

These are issues for how you orient yourselves to the empirical content of your research (to think about how objects have effects in particular relations and settings) as well as the materiality of methods (for example, as will be discussed in the next chapter , an object interview will involve you thinking about the potential and actual effects particular objects might have).

Agency is a contested concept within the literature as other writers instead focus upon what animates things and materials (Ingold, 2010) and what makes them vibrant (Bennet, 2009). Ingold suggests that the word agency is only necessary for researchers whose definition of things/objects has involved severing them from the contexts that make them alive. Instead, Ingold (2007) suggests that we are all swimming in a world of materials, as what enlivens things and people is the generative flow of materials. If you understand things as being 'in life' (by which he means part of the entangled flow and movements of materials) then you do not need to look for life in things (Ingold, 2007) in the form of agency. If, in designing your research, you were to orient yourself towards the flow of materials then you would be focusing upon how materials come together to form things within particular environmental contexts. When you think about what effects things have, you need to think about which perspective you would adopt as this – along with what you understand things/objects to be – impacts upon how you frame your research.

It is worth noting that even though you need to think about how you understand things and what their effects are, this does not necessarily mean deciding in advance between whether you are looking at material agency or how things are animated by the flows of materials. Many theories of agency effectively bring these two aspects together and so offer another theoretical route. For example, in Barad's position agency emerges through the relational effects of elements and things intra-acting. Indeed, Bennet – although coming from a different position to Barad – discusses vibrant matter in a way that exemplifies this, as she suggests that material formations and matter are vibrant. This vitality is defined as the 'capacity of things… not only to impede…the will…of humans but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own' (Bennet, 2009: vii). When thinking about these different theories, you need to think about which theory fits with what you are trying to find out. I have here only been able to offer a brief introduction to a complex theoretical area, which has aimed to introduce you to some of the possible routes for thinking about the ways in which things can be understood to have effects.

The relations of things: where do things end?

Running through much of the discussion so far is the importance of thinking about relations between things, people, materials and environments in understanding the material world. Thinking about how things relate to other things, to people or how materials relate to each other is important in thinking about how you orientate yourselves to things, as well as how you define what your empirical field is. Even if you take a position that things only exist in relations and that these relations are infinite, you still need to draw a boundary around what you will be focusing on in your research. To put it in more familiar language, you will have to define your field of study and units of analysis. This can be one of the most challenging things to do in designing and carrying out empirical research – limiting and placing boundaries on what you are researching – and this issue is one that will emerge throughout the book.

This involves thinking about the boundaries of things themselves. Returning to the example of the tree that Ingold introduces (2010) – is the algae on the tree part of the tree, a separate thing, or is it a hybrid thing? DeSilvey's work (2006) on an abandoned homestead in the USA (which will be discussed in depth in Chapter 8) asks some of these questions through the things she encountered, such as items that are decaying, where mould cannot be separated out from the thing it is on. This is true for less obviously hybrid examples; take a jumper that has an oil stain on it that can't be washed out. The oil stain is part of the jumper. Through the histories of the jumper, how it was worn, its relations with other things, the jumper has been materially changed: an oil stain that cannot be removed is now part of that thing. When you consider this in terms of the histories of a thing, you can see that things themselves – like an item of clothing with an oil stain on it, or a tree with algae growing on it – have emerged from relations between things and materials. The jumper hangs in a wardrobe alongside other items of clothing and the tree with algae on it stands next to some grass, a fence and myriad other things. They both, therefore, exist currently in relation to other things. This is dynamic and shifting as items of clothing are moved, selected for wear or repaired or a fence decays, grass is cut and new flowers grow.

This example of clothing (see Woodward and Greasley, 2015 for more discussion) highlights both things *as* relations as well as being *in* relations with other things (see Harvey and Knox, 2014, for a full discussion). The relations between things and elements is a key pre-occupation within many different strands of the literature as material relationality is at the heart of ANT, non-representational theory, new materialism and assemblage theory. The approach you take has implications for what you focus upon empirically:

- If you were to approach things *in* relations, you might develop a research focus on how people relate to objects as well as how things relate to other things.
- If you were to approach things *as* relations, then you might think about:
    - What the relations are that have produced the thing. What are its material histories?
    - How are the relations between materials happening now? This might involve observations as these relations unfold.

The precise way in which you explore the relations between things or things as relations emerges from which theoretical route you take – as I have already suggested, material relationality is a key aspect of many theories, all of which have different methodological implications (see Chapter 5 for an elaboration of some of these). As I suggested briefly with the example of clothing, thinking about *things as relations* or *things in relations* are different approaches you can take. You may also find you are developing an approach that attempts to take account of both. And so, a wardrobe could be approached as a set of relations between things, as well as things that are relations.

One of the things you need to think about then is what your empirical focus is, and what is (are) your unit (or units) of analysis. These decisions are based upon how you want to approach the phenomenon in question, which will be influenced by your theoretical framing. So, for example, Boyer and Spinney's 2016 research into new motherhood focused upon the analytical units of an entanglement (between the new mother and non-human elements) and affective engagements (between baby, mother and the material world) as a way to understand the process of becoming a new mother. Having clearly defined units of analysis meant that the research offered new insights into motherhood as materially constituted. The issue of how you think about and frame your units of analysis is one that will be addressed throughout the methods chapters (with a particular emphasis upon this in Chapters 5 , 6 and 8). Your units of analysis may be directly following from a defined theoretical position (see Box 2.1 for some examples of this). What is important to think about is that understanding what your unit of analysis is, is a process through which you:

- frame an issue as material (so, for example, new motherhood as in the above example could have been approached through just interviewing people about their experiences);
- frame the material in a particular way (so, for example, if you carried out research into bridges as material infrastructure, you could take the approach of seeing the bridge-as-relations and in doing so you reframe the solid and enduring material structure as changing, and as a material achievement not as a solid ‘given’).

Material-oriented ontology

This chapter has so far been led by some of the core questions you will have to think about when researching with things; in doing so, I have drawn upon different theoretical positions as a way to consider how you can think about what things are and how they have effects. In this section, I would like to more explicitly address the role that theory has in the process of orienting yourself to things in your research. Before thinking about the implications of different theoretical positions for doing your research I will first outline what I am calling a **material-oriented ontology** . An ontology can be defined in a basic sense as what you think the material and social worlds are that you are researching – how you understand the world. I am using the phrase material-oriented as, whatever theoretical perspective you draw upon, when researching with things you are orienting yourself to the material world. Adopting a material-oriented ontology means according a central role to things/objects/materials in the world/particular phenomena you are researching. Broadly defined, a material-oriented ontology is one which positions things and materials as an integral and entangled part of social relations and worlds. People, relations and things are all co-constituted as things play an active role in the uses and meanings that they come to have.

A material-oriented ontology is one which does not prioritise people or 'the social' or 'culture', but instead sees social relations as being simultaneously social and material and things as playing an active role in the materialisation of personhood and culture. It is centrally concerned with critiquing a dominant humanist ontology that centres people; this humanist ontology sees objects as passive things onto which people impose meanings: they are acted upon rather than helping to constitute and frame actions as well as acting back. A material-oriented ontology critiques but does not reverse this; that is, people are not considered peripheral to objects but instead materials, things and people are entangled. The emergence of a human-centred ontology is one which has been linked to disciplinary separations between the natural and social sciences, where the former is the domain of the material world and the latter the domain of culture, society and social relations.

While there are different theoretical positions that might all broadly be defined as centring the material they can be understood as having different material ontologies (see Box 2.1 below for a summary of some of these), which have epistemological implications (your understanding of what counts as knowledge). Box 2.1 is not comprehensive but instead aims to give you some sense of the variance (as well as similarities) between widely used theoretical positions. Even within specific perspectives there are contentions over what particular terms mean or how things are approached (for example, see Muller (2015) on the similarities between ANT and assemblage theory or Harman (2009) on the similarities between ANT and phenomenology).

Box 2.1: Ontological stances and epistemological implications of key theories:

New materialism (see Barad, 2003; Fox and Alldred, 2015)

- Ontology: all matter is relational; matter has the capacity to effect. Things do not pre-exist these relations as entities are relationally produced through relations to each other.
- Epistemology: configurations of matter which include different material elements (even non-humans and the research apparatus); assemblages (there are clear connections to assemblage theory outlined, which is often seen as part of new materialism).

Actor network theory – ANT (see Latour, 2005; Sayes, 2014; Law, 2007; Baiocchi et al., 2013)

- Ontology: the social is not an entity but is something that is assembled, de-assembled and reassembled (Latour, 2005) through human/non-humans in relation to each other; action comes from how humans and non-humans are in relations with each other.
- Epistemology: the process through which humans and non-humans come together and interact; practices (material), observations of how actors emerge and move.

Non-representational theory (see Lorimer, 2005; Vannini, 2015)

- Ontology: the world/body cannot be read through or reduced to texts; core concept of affect is understood as the body's capacity to be effected and to be moved and to move/affect.
- Epistemology: doings/practices/bodies and affective dimensions (not just representations).

Assemblage theory (see Deleuze and Guattari, 2004; DeLanda, 2016; Bennet, 2009)

- Ontology: multiple heterogeneous forms come into relations to each other. The capacity to affect/have agency emerges from the assemblage. Relations change and are tenuous.
- Epistemology: how elements come into relations with each other, how these relations are maintained, and what effects they have. Things as assemblages as well as being in assemblages .

Ecological/entanglements perspective (see Ingold, 2010)

- Ontology: the world is made of flows of materials that are entangled. This is as true for people, things and environments as we all come to live through the entanglements of materials.
- Epistemology: materials, how they flow and connect; things as entanglements of materials.

Objectification (see Miller, 1987, 2005)

- Ontology: the relation between people and things is processual, dialectical and co-constitutive.
- Epistemology: how people interact with things (use, store, make, dispose of).

Phenomenology (see Merleau-Ponty, ([1945] 1962), Adams and Thompson, 2011)

- Ontology: centres the world as we experience it (prereflexivity); things are part of our bodily and emotional experience in the world (perception of the world is also how it invites us to act).
- Epistemology: how things/technologies habituate and shape actions and how people perceive the world.

These theoretical positions are all different ways of orienting yourself to things; and if you use these to carry out your research these will have different implications in terms of how you define your empirical area, which methods you use and how you carry out your analysis. I have already introduced some of the challenges of defining your units of analysis in the section on the relations of things; one route into developing and defining what your unit of analysis is can be through theory. For example:

- If you are drawing upon assemblage theory (this is picked up in more depth in Chapter 5) you might focus upon an *assemblage* as your focus/unit of analysis. Edensor (2011) uses assemblage theory (deLanda, 2016) as an approach to a church in Manchester. This allows him to think about the church as an assemblage, the entities within this as assemblages (such as a door) as well as being part of larger assemblages (such as the city) .
- If you are drawing upon ANT, your focus might be on *heterogeneous entities* . For example, Yaneva's (2013) research into architecture approaches the building as heterogeneous, which entails focusing upon (among other things) the sounds,

people, shadows, qualities and forces of the building and its materials, practices and events.
- If you are drawing from new materialism, such as Barad's emphasis upon the intra-action of elements (and not inter-action of discrete things), you might then focus on a *configuration* of the world (2003: 814) including your own position as researcher and research apparatus.

What are the links between methods and theory?

While theoretical positions may lead to analytical routes of approaching things, the relations between theory, analytical routes and methods are not pre-determined or fixed. This is particularly notable when you consider the relations between theory and specific methods, as there is no match between particular methods and theoretical positions. So, for example, even though actor network theory approaches often entail researchers using ethnographic methods, alternative methods can still be used within the same theoretical framework (for example see Nimmo, 2011). Throughout the book, I will introduce specific case studies of research projects that are explicitly situated within some of the theoretical positions mentioned in Box 2.1 above to show some of the possibilities for how people have developed research and adapted methods.

One of the implications of which theoretical position you take can be that they highlight the limitations of current and dominant methods. If the world is understood to be fluctuating and at times disordered, many conventional social science methods are unable to deal with this as through data generation and analysis they produce worlds that are ordered and coherent (Law, 2003, 2004). Methods produce understandings of the world, as well as absenting other possibilities; conventional methods, such as the semi-structured interview, centralise people and their accounts and as such can make things absent. If you ask questions that centre people's experiences, opinions and meanings then the ways in which objects play a critical part in how people experience their worlds may be made absent. While some new methods for thinking about the material are needed, existing methods can also be rethought and adapted (for example, see Chapter 3 on object interviews).

Methods do not just access what you are trying to understand but also enact the world; Law and Urry (2004; see also Law, 2004) in their discussion of the methods-assemblage outline how the methods you use help to create particular realities. The sense in which methods are performative is also mirrored in other discussions (such as Barad where methods are part of the configurations of what you are researching). Law and Urry suggest that methods (2004) create the substantive fields you are looking at. Methods are not just an afterthought that 'unlock' a social world of phenomenon but are also pivotal in producing the phenomena you are studying. The materiality of methods is a central part of this methods assemblage. In this book, I am not just acknowledging and reflecting upon how methods have effects but instead the materiality of methods is something that I am encouraging you to explicitly draw upon as a way to generate data.

Much as there are multiple material ontologies there are also multiple epistemologies. When you are thinking about your epistemology, you are thinking about what counts as knowledge about materials or things. Even within a broadly categorised theory such as new materialism, there are many theoretical differences and nuances. So, for example, I have used Bennet's version of assemblage theory (see Woodward and Greasley, 2015) in interpreting my research into wardrobes, but there are clear differences between how Bennet thinks about assemblages to how DeLanda or Deleuze do for example, whom many of these ideas derive from. It can be useful to think about the genealogy of a theory – that is how it has emerged in relationship to other theories – and seeing how it is categorised can help you understand it and its implications for empirical research more. However, getting too caught up in how theories are categorised and the often very subtle differences between theories within a particular category can cause you to lose sight of what really matters about that theory or what you are trying to do with it. I used Bennet's theory because when reading it I felt that it helped me to think analytically in a new way about my research into clothing. I also found her ideas around the vibrancy of things was at the heart of what I was trying to do in my research into dormant things within the home.

It is also worth noting that you may engage with material methods and not identify your research as fitting within any of the theoretical categories outlined above. This is not only because it is not an exhaustive list, but also the categorisation of ideas into 'theories' or schools of thought often loses some of the nuances or subtleties of particular theories or ideas. The important thing to think about is to make sure that you critically engage with what your ontology is; that is, how you are understanding things and their place in the world. Some of this involves questioning and critically engaging with what your assumptions are about what objects are, whether they are objects at all, and what place they have in people's lives.

It is important to reflect upon what place theory has within the process of developing your research topic. There are a number of different routes into how you think about and develop a research topic; there is often a presumption that you start with the theory which gives you your ontology – such as you read some Barad and go on to develop your epistemology and methods from this. However, this is only one route, and even in practice if you start from theory with an interest in how this helps us to understand the world, then you will often find yourself modifying this, shifting between ideas as you come to think about this in a substantive context. In my own research, which has predominantly been into different aspects of material culture, I have never started with 'a theory' but instead have often been struck by something in the world. This is informed by things I have read, but the selection of particular theories comes after, as a way to help me develop research questions, to think about what it is I am looking at. So, for example, when I did my research into women's wardrobes, I was struck by the ways in which the literature on fashion reduced it to 'fashion' rather than as clothing, which seemed so far removed from my own observations and experiences of how people kept, wore and passed on clothing. As I started to hone the research project and thought about what I was looking at I drew on the theories of Miller (1987) and Gell (1998) to think about how I could see clothing as material culture. It was only after I had done the research that I started to think about how Bennet's theory of assemblages would be a useful route of analysis (2009).

Box 2.2: Some ways into a research topic: theory, methods and empirical observations

Some possible routes are indicated here that shows how theory, methods and your substantive areas might connect. When you read academic articles that include empirical research, academic convention determines that they are presented sequentially starting with the theory, the methods and then the empirical data that is subsequently analysed. This can give the impression that our research starts always with theory. Instead, I want to open up the possibilities of different routes into thinking about materials. The list below is not exhaustive and none are 'better' than the others:

1. theory – how you see the world (ontology) – develop empirical focus – develop methods – theory helps us analyse this.
2. substantive interest/notice something particular in the world – theory to develop your thinking or to frame what is interesting – honing substantive area – methods – analysis.
3. sense of what the world is – your ontology (often influenced by academic literature you have read) – theory to help you frame it – methods and substantive.
4. empirical field – ontology – theory (see discussion of Henare et al., 2007 below).

The routes outlined in Box 2.2 are all intended as sequences (to show the 'starting point' in each different scenario) but are also by definition *iterative* as you will move back and forth between things you read, what you find out about your topic, as well as ideas around methods. The routes are, therefore, all simplifications as, in practice, you may spend a lot more time going back and forth between your example, your theoretical perspective and your data and your methods. In addition, as academics or students we have already read numerous theoretical and empirical studies, which may implicitly frame how we see things. Methods and theory cannot be separated out from each other; the shift away from methods that centre human experiences towards recognising the human and non-human entanglements is both a methodological as well as theoretical shift (St Pierre, 2011; Fullagar, 2017). Hence, in this book, although this chapter outlines how to orient yourself to things, theoretical positions emerge in different ways in the 'methods chapters', as it is impossible to separate them out.

Your understanding of what things/objects are may also emerge from your research. This is explicitly formulated by Henare et al. (2007) who propose not having a predetermined idea of what artefacts/objects are before starting ethnographic fieldwork but instead understanding them based upon how they are conceptualised, used and talked about within particular contexts. Instead of taking the material world as universal (such as that trees are trees or houses are houses and so on) and that people have different interpretations and representations of these things within cultures, they suggest that your starting point for understanding what things are should be how things are understood, used and interacted with in a particular context. You should *take things as they are* . Empirical research does not come after theory but instead you can use it to think about the possibilities of and potential inadequacies of our pre-existing theories as well as how to define them. What you find in empirical research starts a dialogue with theory, where theories both help explain what is happening, as well as the data helping to modify of existing theories.

Conclusion

This chapter has encouraged you to think about how you can orient yourselves to things. This involves thinking about what things are – whether you think of them as objects or things or entanglements of materials, or entities in relations. These are not just issues of terminology but also of ontology as they are central to how you understand things and how they are part of material and social relations. Although this chapter has introduced and drawn upon a number of theoretical debates, these theories are centrally concerned with, and useful for, how you understand and approach the material in your research. It is concerned with:

- what you think things are;
- what effects you think they have;
- where things end;
- what your unit of analysis is.

These are key issues that you will need to bear in mind throughout the book and animate many of the discussions of specific material methods. In the rest of the book each chapter introduces a particular method (along with connected methods); whatever method you are interested in exploring more, you will need to think about how this would look depending upon how you define and understand things and what your analytical or theoretical angle is. Different theories or approaches do not always mean you follow certain methods as, for example, you could employ a method like ethnography or object interviews from a number of different perspectives. This chapter has sought to provoke you into thinking about what things are, what they could be and how you might approach them. These questions still animate the rest of the book as I introduce and develop specific material methods; these methods continue to open up the possibilities of how you can think about and approach the material world.

The material methods that I discuss in the following chapters are not just tools that you can employ once you know your perspective. Instead, the methods are part of the process of provocation – they provoke us as researchers to think differently about a particular phenomenon, as well as provoke different responses from participants. I do not want you to read this introduction and think that you have a definite idea of how you see the world – your version of a material-oriented ontology. Instead, the material methods I discuss are a key part of helping us to develop this. Methods are not secondary but instead are a way of allowing the material to be part of your understandings. The materiality of methods and the materiality of the world can cause you to think differently. Different theoretical perspectives can open up how you see things and the role they have in your lives – so too can methods.

3 Object interviews and elicitations

- *How do things provoke people to respond?*
- *What kind of knowledge do object interviews generate?*
- *How do the words people use help us to understand material relationships?*

The questions introduced in the previous chapter , around *what objects are* and *what effects they can have* , animate the discussion in this chapter about the possibilities of object interviews as a method to get people to talk about things. How you understand what things are impacts upon how you carry out object interviews – as these questions about material ontology are also methodological, empirical and practical questions. Object interviews are a method that can both help us to understand materiality – and so may be helpful if your research question arises from, or centres upon, the entanglement of subject-object relations – and can also be used as a way to be creative with standard interview techniques.

At first glance, object interviews appear to be one of the most accessible methods for researchers looking to explore creative methods, as interviewing is a method already familiar to many researchers. However, researching *with* things means you still need to understand how different things can have effects in different ways. So, for example, if you are doing an interview on familial memory, then participants will respond differently to a photograph of their family, a bottle of their mother's perfume, or being asked a question about memory without reference to any objects. Doing an object interview means critically engaging with the materiality of particular things as well as how people and objects interact in material, sensorial and embodied ways.

This chapter will start by outlining what object interviews and object elicitations are to think through the commonalities as well as the subtle differences in focus and what this can afford. I will develop a way of thinking about object interviews as *encounters* as well as *spaces of connection* . It will then outline the connections between what your theoretical approach is to how you ask empirical questions in an object interview. The chapter will move onto some of the practicalities of carrying out an object interview, starting with key questions to consider when planning an interview (such as what types of object you use or whether objects are discussed in context). The chapter will end with a section on useful techniques for carrying out the interviews. As a whole, the chapter aims to arm you with a critical awareness of researching with things (how you frame things, how to understand this as a material method), as well as techniques that may help you in carrying them out.

Object interviews and object elicitations: spaces of encounter and points of connection

In its most basic sense, an object interview is an interview that incorporates objects into the process of doing an interview. They might be self-selected by participants – a more common practice – or ones that you bring along yourself as the researcher (Sutton, 2011). Object interviews may explore things 'in context' where interviews may take place in people's homes looking at things in situ, in a museum touring the collections, or they may be in an 'interview context' where participants are asked to bring objects with them. The types of objects used may vary from being personal objects (that people own), belonging to other people they know, or owned by an institution. You may be asking people to respond to individual objects or whole sets of them depending upon the type of objects you are interested in, or what your research interests are.

Within the literature, you may find the terms object interview (Woodward, 2015a) or object elicitation (Iltanen and Topo, 2015; Bell,

2013) being used and find yourselves wondering what the difference is between the two. Although the terms are often used interchangeably, there are some subtle differences in what these terms evoke. One of these differences lies in an object interview being framed *as an interview* and the other framed *as an elicitation* . An object interview may be an interview that is adapted to incorporate objects (such as Woodward, 2001) or an interview that centres an object(s). As a form of interview, knowledge is co-produced (Kvale, 1996) in the interchanges between the interviewer and interviewee, in a particular context (setting, timing). For object interviews, the object(s) that the interview centres on are an integral aspect of the interactions that constitute the interview. Rather than knowledge being produced inter-subjectively as assumed in the conventional semi-structured interview (see Nordstrom, 2013, for a critique), it is produced in the interchanges between interviewers, interviewees *and objects* in the interview setting.

Box 3.1: Example: things as active participants in interviews

In my research into dormant things (things people keep but are not using any more, Woodward, 2015b), I asked people to show me and talk me through things they are keeping but not using any more. The interviews were, therefore, led by the objects that people had as I asked them to tell me about them, and then if people were not forthcoming prompted them to say more about the objects in terms of how long they had had them, if they had ever used them and so on. In one interview, a woman opened up a box of things from her parents' house from her childhood; she opened out the cardboard box things were kept in and rummaged through, unearthing things. As she took some items out of the box she talked about them to me, and I asked her follow-up questions about them. The things themselves had effects on what she talked about – as the participant was surprised at what was in there and items made her talk about, remember, and feel reconnected to her childhood experiences. As objects in there were ones she did not often see, the interview was an occasion for her to re-encounter them as they *affected* her in the interview – she felt nostalgic for childhood practices, times she spent with her sister. She picked up the items, showed them to me and I also joined in the dialogue, asking questions, commenting on the item itself. How she responded to a riding hat or a handmade cover for an audio tape (with a music album on it) was very different. Designing, carrying out and analysing the interview involved critically engaging with these objects and how they provoked responses.

Object interviews centre both how interviewees respond to the objects as well as the dialogues around an object between participant and researcher. Often, some of the most interesting issues emerge in the discussions around objects, rather than just the narratives that participants produce in relationship to objects. The interview is an interchange between objects, participants and interviewers and interactions are both verbal and material (as you touch, pick up and engage with things). Central to your design and analysis of object interviews is a critical engagement with what role things have in generating responses, dialogues and silences.

An object elicitation derives in part from the method of photo and image elicitations; as an established method (see Rose, 2016), photo elicitations are often cited as a model for how object elicitations can be adopted by researchers. To elicit means to draw out, to prompt or to excite – all of which are useful ways to think about how objects can be used in elicitations. To elicit can also mean to 'extract'; this has been rejected more broadly in the literature on interviews as it implies that knowledge exists in people and that the 'right' method can access it (Mason, 2018). Instead, object elicitations can be helpfully thought of as a way of *drawing out* narratives, comments or experiences that would perhaps not have emerged otherwise. For example, Iltanen and Topo's research (2015) used object elicitations to explore how the visual, tactile and embodied dimensions of clothing could get people to talk. Hanging up clothing in rails that could be tried on or engaged with in other embodied ways as people's verbal responses then emerged, meant that this was a route into understanding the materiality of clothing in terms of design and practices of wearing. An object elicitation engages with materiality in a full multi-sensory way.

This is also true of an object interview and so rather than see these as different methods (as, for example, the dormant things I discussed in Box 3.1 could have also been framed as an elicitation) the comparison is useful for teasing out the differing emphases on *interactive and co-constructed knowledges* in interviews and the *drawing out of responses* in elicitations. I will now consider the literature on photo elicitations to explore how this can help us think about what kind of knowledge object elicitations can generate. Photo elicitations are used to evoke a different kind of response (Harper, 2002), such as more emotional talk (Kunimoto, 2004) or unexpected talk (Rose, 2016), as photos seem to capture the 'impossible: a person gone, an event past' (Harper, 2002: 23). The same could be said for objects, although objects engage you in ways beyond the visual, as you may be able to touch, smell or pick them up. Photo elicitations can also be used as a form of object elicitation as some object elicitations are based upon photographs of objects (as people may not have the object anymore or are unable to bring it along). For example, Hodgetts et al. (2007, cited in Rose, 2016) carried out photo elicitations with homeless people in London, including photographs of objects. A photograph of a can of cider was a route into discussions of wider drinking cultures and experiences of homelessness. A photograph of an object may be responded to as if it were that object itself. However, when you are using photographs of objects as a form of object elicitation, you need to think about photos as material culture and how this might affect the process of reflection. You are considering both the photo of an object and the photo as an object.

Harper has suggested that photographs can be the basis for shared understanding between the interviewer and participant or when participants and interviewers have different understandings photos can '*jolt'* participants (Harper, 2002: 21) or *'break the frame'* (Harper, 2002: 20). For example, in Harper's research into farming the initial photos used in interviews proved ineffective at generating insightful talk. He then took some aerial photographs which were much more effective at getting the farmers to reflect upon and explain practices that are often taken for granted by them. So too for objects – seeing an object in a different context (such as not at home on the kitchen table but in an interview setting) or asking different questions of them, or getting people to discuss each other's objects, can allow for different narratives and understandings to be articulated. This is particularly useful for thinking about the mundane; visual methods such as photo elicitations (such as Wills et al., 2016) or indeed object interviews can be a way of getting people to reflect upon things and can cause people to step back and see things differently.

The object interview is an occasion to get people to engage with objects in a different way, in terms of the setting, as an object is separated off from others, as well as with the questions through which you prompt people to respond to it. This can be framed through the ideas discussed in Chapter 2 as an engagement with something as an object and not as a thing. In the previous chapter , I discussed ways of understanding objects as something that may stand in our way (Ingold, 2007, 2010), as separated from the contexts in which it operates. If this is extended to the object interview, it can be framed as an *encounter* with an object: encountering an object in an interview involves standing back, reflecting upon and engaging with something that may not be noticed as part of its everyday life. This is particularly useful for research with the mundane and everyday, as this can allow the method to generate reflections upon the unnoticed role that things may play in everyday life. Even within an object interview, an object can be understood as connected to the contexts that give it life, as people may touch it and pick it up, and in turn be connected back to how it is used, or the other people that a participant is connected to through it. An object interview can then be a *space of encounter* (of seeing the object differently as you step back and reflect upon it) as well as a *point of connection* (to the thing, the contexts and people it connects with).

Key features of an object interview/elicitation include:

- Objects are participants in the generation of talk and responses in the participants' and interviewees' interactions.

- Objects have effects and can be understood as drawing out responses from people.
- An object interview is an encounter, as the object (see Chapter 2 for full exploration) is interacted with in a different context and seen through a different lens.
- An object interview is also a space for connection as participants talk about and experience a connection to themselves, other people, contexts and things.

Words and things

At the heart of this method is the generation of words from things – whether this is through getting people to talk about, to write about, or to talk to each other about an object(s). As such, it is important to think further about the interrelationship between objects and words (and in many instances images as well; see Wills et al., 2016 and Rose, 2016). The question of how words relate to things is one that will be revisited in the chapter on data analysis; I will here engage with how the relationships between words and things impact upon the planning and carrying out of the object interview.

Much has been made in the literature of the inadequacy of words in understanding material relationships (Miller and Woodward, 2012), whether objects are seen as a form of symbolic communication in the absence of words (in the wake of Barthes, 1972 and Baudrillard, 1988) or that things and words operate so differently that our focus should be upon things and how they are circulated (Appadurai, 1986). There are clearly limitations of language in understanding the full complexity of the material aspects of the world. One of the limitations of relying upon language in material culture research is that some relationships may be, by definition, non-verbal (such as habitual or mundane practices). Sometimes, people cannot find the words and say things like 'you know what I mean' (Wills et al., 2016), or 'I don't know' or pause and fall silent. Objects may frustrate you in an attempt to elicit talk about them; while you may try and adopt other questions and other approaches to generate talk, it is important to pay heed to these material resistances. Words must always be understood in relationship to silences, as you can observe how people interact with things, how they touch them as they talk (as will be discussed later, note-taking in interviews or video recording can be a useful strategy).

However, instead of seeing interviews as somehow deficient when it comes to understanding the material, it is important to become attuned to how words refer to and evoke the material; this involves understanding how people describe objects or invoke the material in their discussions. So, for example, in an interview someone may talk about the smell of perfume, or the scratchy sensation of a rug, or sounds. You also need to think about how to ask questions of objects to get people to talk. In my own research into denim (Woodward, 2015a), I explored how, in object interviews, words can evoke materiality. In life-history interviews, specific material memories, or experiences, are harder to access (with the exception of when things 'go wrong' such as a pair of jeans that splits or are uncomfortably tight). In interviews that were based on a pair of old jeans, in engaging physically and sensorially with the jeans, people spoke of the material (in describing it, referring to specific parts and relating memories attributed to material details such as tears or stains). Interviewer and participants engage with the objects together.

One way in which words can connect to the material is through discussions of how objects represent or symbolise something else. Discussions of representations and symbolism are often taken to be immaterial, where the signifier is 'arbitrary', and yet this depends on which semiotic approach you take. Keane (2003) develops a semiotic approach that draws from Pierce to explore how words refer back to material properties as he connects the linguistic sign back to the material world (2003: 432). The object interview can be an occasion to explore what the object represents, as language refers to the material. And so, the fact that a car represents status connects back to the materiality of the car itself, its shininess, the branding, and the shape. Interview questions then centre not only what it represents, but also how it does this materially.

One way of thinking about things outside the limitations of literal language has been to think about things as material metaphors (Tilley, 1999). Tilley argues that metaphors are central to how we make sense of the world and make connections, as we work from the known to the unknown. Metaphors are not just linguistic, but also can be material. Taking the example of canoes in Vanuatu, Tilley makes the argument that canoes are a way for people to talk about themselves in ways they cannot through literal words. Things allow them to think and communicate in ways that words can't. Shankar (2006) has extended Tilly's assertion that, 'material metaphors play an essential role in the description, definition and redecoration of those realities' (Tilley, 1999: 271) to see how language can 'recast' material culture. Words you use about things then can be understood as things themselves as well as an integral part of the objects. Shankar (2006) in his study of consumption among South Asian American families in California explores how you can approach 'objects with words, rather than instead of words' (2006: 314). What people say about an object is an important aspect of how people understand things as well as affording you insights into the objects and the people. How people talk about an object becomes an important mediator of people's relationships to objects as well as their relationships to one another. So, for example, in Shankar's research how people within the community talk about a high-status car is more important than the object itself because the 'talk' circulates more widely than the object itself. People have a relationship with the object through talk. Therefore, getting people to talk about things in an object interview can be part of how they already understand and live these objects and make connections to others. The interview can be an occasion to elicit these kinds of talk as well as generate new ones.

Theoretical approaches and empirical questions

How you think about the relationship between the words people use and objects is informed by your theoretical approach. The theoretical approach impacts upon how you see the object and why it matters as well as the kinds of questions you ask of participants. This is a question both of what you think things or objects are, as well as what *lens* you are approaching things through. And so, as will be explored in this section, approaching an object interview in terms of, for example, a narrative approach means drawing from theories that suggest that things have their own narratives as well as being an entangled aspect of participants' lives. In turn, empirical questions asked would aim to elicit narrative responses. I outline here a few examples of theoretical perspectives that have been taken in projects using object interviews to highlight how these approaches work in practice. This is not a comprehensive list, nor are these perspectives always distinct, as a project may take, for example, both a narrative and material culture approach.

Box 3.2: Approaches to research and empirical questions

If you were to adopt an approach that foregrounded experience and meanings and were using objects as a prompt then you might ask interview questions such as:

- What does that object mean to you?
- What is the significance of it?
- In what ways does it matter to you?
- How does that object make you feel?

If you were to adopt a narrative approach, you might ask:

- Tell me the history of this object (including prompts such as when you got it, how its uses have changed, imagined or hoped-for futures for the object).
- Tell me a story about the object.

- Tell me about how your relationship to the object has changed over your life-course.

If your research centred social practices, you might ask:

- What are the main activities you use the object for?
- Can you describe each of these activities and the role the object has in them?

Objects as an 'anchor'

Within some research in the object elicitation tradition, objects have been seen as an 'anchor' for people's accounts; the research centres not upon the objects themselves but upon how the objects help to understand people (see also de Leon and Cohen, 2005). For example, Willig's research within the discipline of psychology (2015) adopted a phenomenological hermeneutic approach to research with people living with metastatic cancer. People brought their own objects and were invited to talk about the meaning and significance of each one as a way of making the interview data less generic and to provide 'in the moment' reflections. Research from a phenomenological approach centres experiences and perceptions, as people may be encouraged to give accounts of their own embodied and multi-sensory feelings and experiences. Auto-ethnographic approaches can also lend themselves to this approach as they come from the position of the person who is experiencing; for example, Sayre (1999) explored personal perspectives on plastic surgery using her own objects such as a year book and old glasses to 'elicit memories tucked away' (Sayre, 1999: 100). Questions here, as in Willig's research, centre upon experiences.

Seeing objects as a way to anchor an account has been criticised as it presumes that things will allow us to access certain forms of talk or ways of thinking, as if you just need the objects to 'tap into this' (see discussion of Nordstrom below for a critique). Objects are then not considered in and of themselves, but are a means to understand what the researcher is really interested in.

It is important if you are taking this approach of objects as ‘anchoring’ accounts to think about how you understand the place of the material. Within a phenomenological framework (although there is of course no inherent link between this theoretical perspective and seeing objects as anchors for accounts), things are an integral part of how the world is encountered and experienced and, as such, this awareness needs to extend to the questions you ask and how you interpret what people say. Whatever framework you are adopting, and however you are approaching object interviews, you need to ask yourself:

- how are you understanding objects and what effects might they have?
- what role do they have in the phenomenon in question?

It may be worth revisiting the discussion of a material-oriented ontology and things/objects/materials in Chapter 2 , which introduces the ways in which things can be approached. This is as important for research *into* materiality as it is for researching *with* things, such as doing an object interview.

Whatever theoretical approach you take, you need to engage with the materiality of the objects that are part of the interview. So, for example, doing interviews about gifted objects may be a way of getting people to talk about their relations to other people in a different way, or foreground feelings or memories that wouldn’t have otherwise been present in an interview. However, to do this properly you need to think about how relationships to others may be externalised through different types of object in tactile, embodied and sensory ways. You then need to think about how these things are made manifest in an interview setting, as you may look at how people talk after touching, stroking, smelling or materially engaging with objects in other ways.

Post-structural approaches

Nordstrom (2013) explicitly discusses how her post-structural approach, influenced by Deleuze, impacts upon how she approaches the object interview and the kinds of questions used. She sees the interview as a space where the subject and object are entangled and co-produced. She suggests that conventional qualitative enquiry invites you to use objects to find out about subjects (see above where objects are an 'anchor'), which implies that both objects and subjects are fixed and bounded. Instead of seeing an interview as an occasion to 'access' what people think, what they think or articulate depends on what you ask and how people and things interact in the context of the interaction between people (in her research the interviewer, interviewee and dead ancestors) and things. Given her interest was in how people connect to their ancestors through things, she asked people to talk about connections rather than what things mean or their experiences.

Post-structural perspectives also emphasise the multiplicity and the situatedness of knowledge; using an object interview approach can allow an exploration of these types of knowledge to explore differences or shared knowledges (see Gondwe and Longnecker, 2015). Buchli (2002) suggests that material culture approaches can allow an exploration of the subjugated and the silenced. Taken through the example of colonising discourses, Bhattacharya (2009) explores the interactions between colonising discourses and attempts to resist them. From a transnational feminist epistemology, she explores the interrelationships of knowledge, as there is a need for multiple moments of decolonisation and a multiplicity of methods. Object elicitations are one of the routes into decolonising that she adopts as part of a mixed methods approach, by focusing upon the dialogues around the objects.

Narrative approaches

One of the approaches taken within the literature that uses some form of object interview is to explore the role of things in people's narratives (Woodward, 2001; Bell, 2013). Hurdley's study of mantelpieces in the UK (2006) focuses upon how people construct narratives around objects on the mantelpiece. She focuses upon interactions between people, things and visuals by undertaking 30 in-depth interviews with people talking around the mantelpiece (from a questionnaire of 140 people) in Wales. She uses narrative methods to explore how past and present and future identities are articulated through mantelpieces. The interview was an occasion to ask people to tell stories, whether to give a *context to things* (housing histories) or to give a *narrative history of an object* (such as a clock or ornament), or an object may give rise to discussion of other narratives (such as a childhood memory) and so *narratives of people,* which are inseparable from things themselves. Importantly, objects were not only 'props to life histories but essential players' (Hurdley, 2006: 721) mirroring Nordstrom's discussion (although from a very different perspective) of the context specificity of the object interview. Indeed, Hurdley notes that: 'Although the artefact on display remains materially the same, different stories, or different versions of the same story, can be related to it according to the specific identity its owner wishes to invoke in an interaction' (2006: 721).

Taking a particular theoretical perspective impacts upon how you frame your research and the questions you ask but is not deterministic. For example, another project taking a narrative approach adopted a different set of methods. Rowsell (2011) in research with African-Caribbean American school children in New Jersey, USA who were all living under the poverty line, used objects as a way into getting young people's stories as part of a multi-methods project (drawing on multi-modality and ethnography). The project aimed to explore how objects mediate the process of making meanings for the students. When young people talked about the objects they often told stories they did not usually have a chance to articulate. The kinds of questions researchers asked of participants included: 'tell me about' or 'what do you like about it' or 'where do you keep it' as they were interested in how people make meaning and mediate identity and family narratives through objects. Asking people to 'tell me about' their objects is a question that is encouraged in qualitative research to adopt an open-ended approach to interviewing and, as such, can be useful even if you are not adopting a narrative approach.

The following section looks at key questions to think about in designing an object interview.

Object-centred interviews or objects as one part of an interview?

An object-centred interview is one where an object/a set of objects are taken as the basis for the whole interview – such as an interview which starts from a mantelpiece. A good starting point for an interview like this is to:

- Ask participants to tell you about this/these things
    - This is a good question to follow up with prompts depending upon what your research is trying to find out .
    - If people have self-selected their object/s, ask them to tell you why they have chosen it.
- Ask participants to describe the object
    - This can be a useful question to get people to engage with the materiality of the thing/things.
- Pick up/touch/engage with the object
    - Physically engaging with the object may get people to respond. Or you may comment on the object – its colours, weight, feel, what it could do.
- You may also choose to say nothing
    - For example, in the research I carried out into women's wardrobes (Woodward, 2007) the 'wardrobe' interview was the starting point for the ethnographic research and on many occasions as they opened the wardrobe, women

would start putting out items of clothing and talking without being asked. By virtue of engaging with the objects in the context of another person, they started talking. Your role as interviewer is then to draw discussions and reflections back to the topic you are exploring.

Where objects are a smaller part of an interview, you might adopt some similar approaches, depending upon how the object is made part of the interview. It may be an unplanned aspect of an interview (if you are, for example, interviewing in people's homes and they start to talk about an object). If it is planned then you will have already briefed participants on what kind of object you want and why, which will frame the kinds of questions you ask and the kind of talk that people will be expecting. In these instances, be clear on whether you are using object reflections as an elaboration of the main interview themes or whether you are exploring a different angle. Having an object interview at the start of an interview can be a way to get participants to open up in different ways; having it at the end may cause them to reflect differently upon the interview so far/the object. Think about *when* you ask about it as well as *how* .

Objects in an interview context or in their 'usual' context?

The context of an object interview matters in particular in terms of whether you are seeing objects within their 'usual' context – such as a doing an interview about mantelpieces in the home and therefore looking at the objects on the mantelpiece (Hurdley, 2006) – or whether participants bring along an object to an interview setting. Where an interview takes place may be a question of convenience and so if context matters to what you need to know, consider getting people to photograph things in the context of home to allow for a discussion of where things are. It may be that if you are not doing an interview 'in context' then people will bring a photo of the object itself (often true if an object is too large, or if it is delicate). In this case, you will need to adapt your questions; however, they need not just be of the visual dimensions of objects, as you can also ask people to ‘think about’ or ‘remember’ how it feels to touch, or how it smells if you want to access the sensory aspects of the object.

One of the challenges of doing an interview ‘in context’ is how to focus on one object. At times, the interviewee will get distracted by other things. If you find this, then moving the object to a different space (such as a table) will allow a shift in focus. This may be useful if you are looking at a mundane ordinary object; interviewing with objects in an unusual context is a very different *encounter* with things as already discussed. It is an occasion for people to reflect upon and engage with an object in a way they do not ordinarily. It may cause them to think about it in a different way. The occasion of the interview ‘in context’ as opposed to ‘in a different context’ produces different kinds of data; which you choose may depend upon practicalities and convenience, yet also depends upon what you are trying to find out.

- Objects in context will allow for an understanding of the relationship between different things in everyday practices (for example, Metcalfe et al. (2012) researched how people’s relationship with waste changed over time. They explored how things ‘end up’ in the bin in relation to other practices.
- For a separate object interview, seeing an object out of context can, as in Harper’s discussion of photo elicitations (2002: 21), ‘jolt’ participants to new understandings. When disconnected from its usual context of other objects, an object can move from the background to the foreground, as the interview is an occasion for explicit reflection and engagement.

Objects can lead to unexpected responses, even those that participants have selected. In my Dormant Things project, I found that people have been surprised at the potency of an object and its power to make them remember or to feel emotional, as they reflect upon it in an interview. There are attendant ethical issues with doing object interviews in this way as objects have multiple meanings and even if an object is selected for an interview as it fits with a theme of, for example, autobiographies through things, it may also be linked to a distressing memory from childhood that people had not thought through until they were faced with the object and asked to reflect upon it. As objects have agency, they can affect participants in ways that they or the interviewer may not have anticipated. While many of the ethical issues of carrying out object interviews are similar to those for carrying out semi-structured interviews, this is one that is perhaps particular to carrying out object interviews. Being aware that this might happen, being prepared to pause an interview, and giving people the right to withdraw (all or some of) their participation are all things you may need to do.

What kind of object or objects will be the basis for the interview?

If you have a particular interest in how photography is used in the creation of family memory, or how knitting baby clothes materialises gendered relations, then the kind of objects that you choose will be self-evident. In many projects, the objects will be participant led, in that you will ask them to bring along any object that fits with the theme of the research (e.g. Rowsell, 2011). You will, in these instances, still need to think about how many pointers you give participants; you might want to indicate examples, or give them a category of object to choose from. Where participants select objects themselves they will usually be personal possessions, but in other instances they may be choosing an object from an institution (especially true in museum research). In my own research into old jeans, I have got people to use other people's possessions to 'imagine' the history of the object and the person who wore it (Woodward, 2015a). This can be a fruitful avenue to get people to engage with things differently; however, this also raises ethical issues about how people treat and respond to the possessions of others, not only in terms of care of the object. Briefing participants in advance of the ethical implications by reminding them that it belongs to someone and might be cherished and, as such, needs to be respected, is important.

You will also need to think about whether you use one object in an interview or several. If you are interested in the relations between things, and between people, then you will explore a set of objects – this will be discussed in Chapter 5 in more depth. Doing an interview around one object can allow for in-depth reflections and can be useful for object elicitations.

Some useful techniques for doing object interviews

How to generate talk about things

The kinds of questions you can ask to generate talk about objects have already been introduced in the previous section . The questions you ask also depend on *what kind of* object it is. Some objects you will find require almost no prompting for generating talk. An object that is considered to be 'special' or 'significant' in some way may be one people talk about easily. For example, in Woodward's research (2001) into taste and aesthetic choice in Australian houses, participants introduced objects into interviews. These objects are what Woodward terms 'epiphanic' or 'pivotal' objects (Woodward, 2001: 116). In contrast, an object that people do not give much thought to or does not have any special significance may prove more challenging. People may feel self-conscious about it (for example, old tracksuit bottoms) or not used to talking about it. These kinds of objects may require more prompts, such as the following:

- What do you do with them?
- Where are they from?
- What is the history of the object?
- Does it remind you of/connect to other people?

- How has it changed?

Some objects resist talk, as they are not straightforward conduits for getting people to talk. Moreover, generating a long verbal narrative from someone in response to an object is not necessarily the most appropriate data for many research projects. As I will pick up on in the analysis chapter, a narrative that is resonant with ‘meaning’ about an object may not provide you with what you wanted to know about an object in the first place. Objects that resist may require a number of strategies, such as those discussed below. It is important to note that silences are also useful and interesting, and also that there are no ‘right’ questions.

Get people to write about objects

Getting people to give a written response to objects, or photos of objects, is perhaps a less widely adopted method than object interviews. It can be a useful way for getting people to tell you stories, if you are adopting a narrative approach. As is evidenced by the Mass Observation Archives, writing can be useful for accessing a different kind of data as it may encourage people to be more reflexive, as they can do the writing when they want, often alone and perhaps after they have already had a chance to think about it. In Bell’s research on family memory (Bell, 2013; Bell and Bell, 2012), Bell and her sister both produced a written autobiographical reflection upon an object, and then responded in writing to the other person’s reflection. In this instance, the initial written response generated a dialogue with each other as they found out about things they didn’t know or hadn’t thought about before, either through re-encountering an object through writing about it or through the other’s response.

Observations of material interactions within interviews

While observations are the foundation for methods such as ethnography, they can also form an important part of object interviews as they allow insight into how people interact with an object, how they touch it and how these sensorial and embodied interactions connect to what they are saying. One route into this is to take notes during the interview, to note how people interact with an object, how they touch it, when, when they don't and other embodied interactions with the object. In addition, it is often useful to note how this connects to what they are saying, as this is an important resource for analysis, as you can connect how they talk with sensorial observations.

Another strategy is to take photos or to video record the interview. Video recording is particularly popular as a method where walking interviews are also done. In Everett and Barrett's research (2012) using guided tours of a museum, participants did a tour of their 'favourite objects' as they were seen within the museum context. The tour was unscripted with the premise being that the interviewer 'discovered' the objects with the participant. They were interested in participants' feelings about objects and how they interacted with them. Video recording (along with some photos and audio recording) allowed them to document facial expressions, embodied interactions and how these connected to verbal comments. Sarah Pink (2004) has used video recording in several research projects as part of an interest in the sensory home in the UK and Spain. Although these are not explicitly focusing upon material culture per se, in the video walking tours of the house, objects are part of how people narrate their homes and themselves. Video recording in this instance allows for a more comprehensive view of what participants show you in the course of the walking interview. Rowsell's work (2011) in the USA adopts the use of video recording for static interviews as a route into exploring material and sensory interactions with artefacts that participants brought along. Video allowed them to explore the performative dimension of how people interact with objects.

Methods such as participant-led tours gives agency to participants to direct what is important to them; getting participants to take photographs or do drawings (Hurdley, 2007) is another participant-led method that can form part of an object interview. In Hurdley's (2006) research into mantelpieces, she gave participants cameras to take photographs of the mantelpiece as it changed over the year. This was a way to see changes in this over the year, as well as a way of exploring the mundane. The photos that are generated by participants are then a useful resource for an object interview as it is not just a source of elicitation but also opens up a discussion about what the mantelpiece is and how it changes and is used throughout the year. Images are used to open up a discussion.

Introducing activities in object interviews is also a way to get people to engage with things in different ways, and to generate discussions. Gondwe and Longnecker's (2015) research with 171 young people (12–16 year olds) in Australia got them to categorise objects with an aim to explore different types of knowledge. Participants had to assign photos of objects into a Venn diagram of scientific or cultural knowledges categories. Only one object – a beaker – was classified by all participants as scientific, whereas everything else was contested, so discussions between participants were audio recorded to explore the process of how different categorisations were arrived at. Introducing activities are well established in methods like focus groups and there is scope for them to form part of object interviews, as a different way to get people to talk or engage with objects.

As part of a mixed methods project

Although this chapter is focusing upon object interviews, it is worth noting that they are often used as part of a mixed methods project (such as Sheridan et al., 2011; Hurdley, 2006; Woodward, 2015a). Mixed methods approaches are often presumed to mean a mixture of qualitative and quantitative methods, but can mean a combination of different material methods, such as object interviews and ethnographic observations. Bhattacharya's (2009) qualitative project on female Indian graduate students in the USA used interviews, photo elicitations and object elicitations. For each method, there was an emphasis upon dialogue and discussion to explore cross-cultural boundaries. The elicitation methods were participant led as participants chose objects that highlighted experiences of graduate school. As this was a more unfamiliar practice she noted that participants found this challenging but discussions were developed that did not emerge through the other methods.

Conclusion

Object interviews are appealing for researchers looking to dip their toe in material methods, not least due to their apparent familiarity as a form of interview or elicitations. While many of the considerations of interviews and elicitations are useful in helping us think about object interviews, this chapter has outlined how important it is to engage with the things themselves. You need to engage with:

- the materiality of the objects in the interview (what they look like, what they are made of, what they do, what possibilities they have);
- what role these things have in everyday contexts and how this might change in an interview setting;
- what effects they could have.

These questions are ones to ask as you plan an object interview, think about as you are doing the interview, and when you are performing the analysis.

Object interviews are useful methods in allowing us to explore experiences and knowledges that may not be accessible through other routes. This matters for research that aims to explore facets of social life that are embodied and materialised as well as part of research projects with a more explicit political agenda, such as to give voice to that which is usually silenced, or to decolonise research methods (Bhattacharya, 2009). Taking an in-depth approach to specific objects can allow for very reflexive thoughtful interviews, as well as meaning that people talk in more specific ways as they respond to the object. Doing object interviews offers a way to think about aspects of life that are not verbalised but are just carried out, such as everyday practices. People may surprise themselves with their responses to objects in interviews – even if it is an object they themselves have selected – as objects may generate an emotional reaction. Things have effects as they provoke participants to respond. The following chapter will discuss methods that more explicitly centre the capacities of things to provoke responses.

4 Provocative methods: cultural probes and arts-based methods

- *In what ways do arts-based and design-based methods draw on the capacities of things to have effects?*
- *What kinds of knowledges are produced through provocative material methods like cultural probes?*
- *What are the implications for exporting and developing arts- and design-based methods as a broader form of social enquiry?*

As I outlined in the previous chapter , object interviews draw upon the capacities of objects to generate responses in participants. In this chapter, I explore methods which much more explicitly take up the possibilities for objects to provoke, whether via methods encouraging people to respond to designed or customised objects or getting people to engage with processes of making (such as building models or collage). This chapter explores *how things may have effects* (introduced in Chapter 2) through the particular lens of the unexpected, playful and uncertain possibilities of things. The methods are all ones that originate in disciplines such as design- or arts-based research, which have been exported and adapted more widely as a form of social enquiry. This chapter will focus upon them as material methods, to think about how they, in different ways, draw upon the playful capacity of things to invite people to interact, respond and join in. This chapter builds upon the possibilities of researching *with* things and is of particular interest to those who want to think creatively about methods. It is also for those whose research centres sensory, material and embodied ways of knowing or experiences. These are methods that lend themselves to developing open-ended or unexpected insights. Despite being object centred, participants are an active part of these methods as they respond to the probes in, often, unexpected ways.

The chapter will first outline cultural probes, a method originating in design, which encourages people to respond to a pack of customised or designed objects (such as a camera, map or 'dream recorder') that is sent to them with tasks attached to the objects. In the previous chapter I discussed framing object interviews as 'encounters' as you present participants with an object out of its usual context in a different self-reflexive space. In this chapter, probes will be explored through understandings of *things as open-ended and unpredictable* in terms of their effects. While the act of customising is an attempt to bring particular material propensities to the fore (such as playfulness), it also involves a recognition of the agency of things (see Chapter 2), as things provoke responses in unexpected ways. The chapter will explore the types of projects the probes have been used in, as well as possibilities for extending the methods.

The chapter will go on to explore arts-based methods, including collage, and play-based methods, such as model building with Lego, where creative practices are reconfigured as social research methods. These methods are explored in this chapter as an extension of the possibilities of methods as *material provocations* . As participants physically engage with materials through Lego building or doing collages, these methods can tap into ways of knowing that are more attuned to material, embodied and multi-sensory ways of being in the world. The chapter explores the challenge of how these can explore sociological or other questions without losing their sense of openness and creativity.

Cultural probes: playful and open-ended provocations

What are cultural probes?

Cultural probes were first developed by Bill Gaver, Tony Dunne and Elena Pacenti in the Presence Project, which aimed to develop techniques to ‘increase the presence of the elderly in their local communities (Gaver et al., 1999: 22) in three different sites in Europe. As this project was the first use of cultural probes, I will outline it here to show how the method and its epistemology developed, before exploring the wider possibilities and applications of the methods. The approach was exploratory and open ended (rather than to explore solutions for pre-determined problems or needs) with an aim of producing designed objects that they hoped would create new ‘pleasures’ or ‘forms of sociability’ (Gaver et al., 1999: 25) for their participants. They developed the method of cultural probes to help them find out about their participants in a new way as well as participant-led understandings of the research sites (Majorstua, Oslo; Bijlmer, near Amsterdam; and Peccioli, outside Pisa). In order to ‘get to know’ the participants, they used cultural probes to challenge pre-existing stereotypes of the elderly to explore the possibility that they could be playful.

Inasmuch as any specific methods you adopt as social researchers are informed by a methodological approach, cultural probes are informed by what Gaver et al. (2004) have termed ‘probology’, which is a methodological approach that encourages ‘subjective engagement, empathetic interpretation and a pervasive sense of uncertainty’ (Gaver et al., 2004: 56). Rather than presuming to know people, places, or even what the ‘problem’ is, it values what matters to people – which may be unexpected. Probology informs the design of the cultural probes, in much the same way your methodological approach and what you are trying to find out influences how you would construct questions for an interview. The design of the cultural probes involves engaging with questions of materiality and effects – such as aesthetics (colours, styles) and function (what participants could do with it). In Gaver et al.’s study (1999) they designed the packs to be personalised and informal rather than overly professional and framed them as ‘gifts’ (1999: 22). In Gaver at al.’s 2004 study, the design drew from surrealist practices of the unexpected juxtaposition of images as a way of getting people to think about the everyday as well as the aesthetics of play, and surprise. These aesthetics fit with the way cultural probes value ‘uncertainty, play, exploration and subjective interpretation’ (2004: 53).

The probes include a series of objects which all have ‘tasks’ associated with them. So, for example, the probes in Gaver et al’s initial study included:

- 8–10 postcards with images on the front and questions on the back, such as: ‘Please tell us a piece of advice or insight that has been important to you’ or ‘what place does art have in your life’ or ‘tell us about your favourite device’ (Gaver et al., 1999: 22). Being associated with informality, postcards engaged people in a different manner to more formal requests for responses (such as a questionnaire). The questions were designed to open up ‘possibilities’ (Gaver et al., 1999: 23) and different ways of thinking;
- 7 maps each distinguished by being printed on different paper with accompanying questions and stickers (included unexpected and provocative questions such as where you would ‘like to daydream’ or imagine ‘if Peccioli was New York’ and given stickers to get people to think differently about the place they lived in) ;
- a disposable camera which was repackaged in order for it to fit with the probe, as well as to appear personalised with a list of picture requests on the back such as ‘something desirable’, ‘your home’ or ‘whatever you want to show us’;
- a photo album where participants were asked to use up to 10 photos to ‘tell us your story’;
- a media diary where they recorded their daily television and radio use (including whom they were with and when) as well as phone-call details, such as who from and what they talked about.

If you are thinking about using cultural probes as a method, then the above list is intended to introduce you to the possibilities of what can be included, rather than a list of things to copy or that ‘should’ be in a probe pack. It is an opportunity for you to think creatively about what type of object and task will generate interesting responses in relation to what you are trying to find out. It might be that you want to include a more conventional object (such as a camera) but have unexpected questions or tasks on the back, or you may include a mixture of objects like cameras or maps (which are commonly used in probes) with more experimental and unexpected objects.

Why do probes?

While some researchers may feel slightly daunted at the prospect of including a dream recorder in their research, others will feel excited by the novel possibilities of the method. However, cultural probes are not just a way to spice up your research methods; you need to engage with how you are thinking about things and what they can do, as well as what kind of knowledges you are looking to produce in your research. Through the process of customising a probe object (such as covering a disposable camera) or designing an object, you are explicitly engaging with and intervening in what material effects these objects might have. And so, decorating an object in a particular way may make people see it as 'fun' and therefore engage with it in this way: you are engaging with the material possibilities of things, as well as acknowledging that these are just possibilities. How people interact with things and how things have effects on people cannot be determined. People live with things and may interact with objects in the pack (and the pack as a whole):

- as 'objects'; in the last chapter I introduced the object interview as an 'encounter' as people think about objects at a distance, reflexively and self-consciously. This is something that the process of design can encourage as, for example, the decorated camera makes participants look at the everyday object as unfamiliar .
- as 'things' in the sense introduced in Chapter 2 where they are part of the contexts and relations of things. Probe items may be placed in participants' homes and become part of the everyday domestic environment. A note pad placed by a phone may

become something a participant unselfconsciously doodles in when on the phone. The placing of the thing, how it is designed, as well as tasks (or an absence of them), may encourage participants to engage with the thing in this way.
- as both things and objects; in Chapter 2 I introduced the ways in which as a researcher you can shift between framing your research focus as an entity in itself (object) and as a thing (in contexts, as relations). So, too, participants may shift between how they engage with things – it may change over the course of living with the probe as well as participants responding differently to the range of objects within the probe pack.

Probes are well suited for open-ended research projects that are exploratory and are often employed in projects that aim to explore participants' experiences and perceptions. An emphasis upon participants' own experiences is found more broadly within qualitative research projects, yet what is different about probes is that they celebrate the playful and the unexpected. Cultural probes are ideal as a method if you are trying to get people to think, respond and reflect in ways that other methods do not allow (Mattelmäki, 2005). Part of Gaver et al.'s rationale (1999) was that the statistics and demographic information of the places they were researching was not enough to help them design for people's lives. The probes encourage people to reflect or respond in unexpected ways, as this provocation is an *opening up* rather than a process of determining a response. They are not aiming to generate systematic data, nor to capture things 'as they are', but instead to provoke people to think and to respond in a different way. For example, in Gaver et al.'s 2004 study the friends and family map in the probe pack had images (such as Dante's heaven and hell) on it to get people thinking differently about their relationships.

Probes are a participant-led method, as:

- people document their own responses, although the method is slightly different to other participant-led methods as people are seen as ‘active enquirers’ (Crabtree et al., 2003) not just straightforwardly or systematically recording;

- people can refuse to participate in different aspects of the probe in a way that would be unlikely within an interview (so, for example, only responding to one of the probe objects) ;
- participants are also able to decide when and how they respond. Although there are other methods that allow an understanding of people’s experiences and lives in their own setting (such as ethnography discussed in a later chapter), probes have the advantage of allowing people to participate without the presence of a researcher and in their own timeframes.

There are clear parallels to other forms of participatory research, such as getting people to take their own photos in visual research. However, cameras are employed differently dependent upon the method: when used within a probe pack they would usually be customised and personalised and include questions on the back which may be straightforward, playful or obscure.

Box 4.1: What kinds of knowledge and data is produced through cultural probes?

It is important to reflect upon the types of data that cultural probes can produce, as this is not only something to think about when you do your analysis, but this impacts upon the planning of research, including how you design the probes.

- Data is not comprehensive, but rather ‘fragmentary’ (Gaver et al., 1999: 22), often forming unexpected insights (as participants can respond as they wish, they may not do all tasks). Even if all the probes are responded to, the data they provide on people or their lives is not comprehensive. This is not surprising when you consider that one probe pack may include objects such as a ‘listening glass’ (where an ordinary drinking glass carries instructions of using it to listen for sounds when placed on a wall, see Michael, 2012), a map and a dream recorder (where people record their dreams).

- These methods may produce unusual or even troubling findings. It is this which is perhaps the most exciting possibility of the methods as well as the most challenging, as much of what academics do in empirical work is try to 'make sense' of data, and yet you are here generating data which will not necessarily 'make sense' .
- Michael (2012) sees instead that these methods might allow us to explore the nonsensical and unhinged aspects of everyday life, for which more conventional social scientific methods are not equipped.
- Gaver et al. (2004) see cultural probes as a way of telling stories about people empathetically, as you may do in everyday life about people you know. These stories give a 'feel for people, mingling observable facts with emotional reactions' (Gaver et al., 2004: 54).
- Through combining observations of what people do with more idiosyncratic responses, the method works to both make the familiar strange and the strange familiar. In this formulation, you could design a cultural probe, which includes specific objects to allow people to record activities they do, as well as ones that might perhaps generate emotional responses. Given the range of objects in a probe pack you can try and do different things with different objects within the pack.

How to do them?

Once you have decided that cultural probes are a good fit for the kind of questions you are exploring, you will need to think about your participant pool as well as access (as in any empirical project). The subsequent stages of research design are unique to this method, and although the contents of the probe packs and how they are employed varies, there are a series of stages that tend to be involved.

1. Design of the probes. They are designed with the project's aims and the types of participants in mind; so, for example, in the Gaver et al. (1999) study already described above, they wanted to explore the possibilities of seeing older people in a different

way, such as being playful – and so designed the pack with a playful and yet professional design. Design includes consideration of: the pack's overall aesthetic, the aesthetics of each individual object, as well as other facets of their materiality – what things do or what people can do with them, how they feel to hold and so on. Familiar objects may be repacked to fit with the desired type of response, such as repackaging a disposable camera to make it appear less familiar and encourage more reflection from participants (Hemmings et al., 2002). Objects come with instructions that are not prescriptive but allow participants to respond as they want. The questions can be open, informative, creative or even cryptic (Hemmings et al., 2002) .

2. Probes are delivered to participants, which often happens in person, in order to explain the packs and deal with initial questions. Delivering in person can help generate an initial rapport with participants and sets up the dialogue as well as enthuses them about the project.
3. Participants live with the probes for a defined period of time (such as for a month) as researchers wait for the data to be returned (for example, using pre-addressed postcards with stamps) or arrange a date to go and collect the probe pack – completed or not. In many projects, there are additional phases of research, such as carrying out follow-up interviews with participants (these will be discussed later) or a designed object is produced (based upon the probe data) which participants are given to live with.

Development and applications of the method

Cultural probes are a method that originated in design although they have been adopted in a wider range of projects from different disciplines, notably within the field of human computer interaction

(Boehner et al., 2007). This has often involved a reframing of the method from cultural/design probes to technology probes (Hutchinson et al., 2003), domestic probes (Gaver et al., 2004), empathy probes (Mattelmaki, 2005) and informational probes (Hemmings et al., 2002), to name a few which highlight either particular spaces used, or types of responses the probes were aiming to elicit. Given that the probes are tailored to specific questions, projects and participants, then the variety of ways in which they have been adapted is hardly surprising. Boehner et al. (2007) have suggested that the main elements to be picked up within most applications of the method have included:

- material form (as a package containing a series of objects with instructions);
- provocative element;
- playful and experimental facets;
- participatory dimension (although other methods are participatory there is a much stronger element of opting in or out of individual elements of the probes);
- as a form of data collection.

While there are clear possibilities for how you can apply probes in different disciplinary contexts, criticisms have been raised that in translating them to different contexts and research questions, they have lost the meanings, openness and originality of the original probes. One of the main criticisms is when they are done in a ‘recipe’-type way, when a pack of objects are used to generate data in a research project but in the absence of the ‘spirit’ of the original method (see Boehner et al., 2007, for a discussion). Just as methods rest upon methodology and a solid epistemology and rationale, so, too, probes require probology, and you should not just then apply a quirky map-based method without wanting to, for example, understand how people themselves experience or understand their homes and neighbourhoods or allow participants to think differently about where they live. This use of probes is analogous to carrying out an object interview just to make your methods snazzier.

One way of sidestepping these problems is to frame probes (and interviews) as a *material method* to ensure you engage with what things are (as open ended, a potential encounter or connection) and what effects they might they have. In addition, it is worth noting that many of the criticisms of the probes are ones that pertain to an attempt to generate systematic and objective data, or to rationalise and validate research findings. However, there are still clear possibilities for the application of the method in more open-ended qualitative enquiry where the research questions are open ended and exploratory.

Possibilities of adapting the method beyond design-based disciplines

Using probes in conjunction with other methods as a form of data collection is perhaps the formulation that lends itself most closely to other forms of social enquiry. You may use probes as a supplement to other social scientific methods, such as when used as a follow up on interviews or they are followed up with interviews (Kjeldskov et al., 2004), which allow participants to develop and reflect upon their responses to the probes after they have been filled in. Using probes with other methods can allow for holistic understandings of your research area as well as keeping the open-ended and subversive spirit of the probes. Hemmings et al. (2002) used the probes to generate information but also to promote dialogues. Their project looked at how technologies can help with care in the community predominantly for former psychiatric patients living in sheltered housing. The research involved observations and technological tours as well as cultural probes for this hard-to-reach group (as observations were considered to be inappropriate for people with paranoia). The probes were used to supplement ethnography and to start a dialogue; so, for example, the probes included a Polaroid camera, stick-in album with notes to fill in on why images were taken and how participants were feeling. A project like this highlights that even when they are used to get ethnographic-type information, the objects can still be used to provoke and be participant led. In instances where follow-up interviews were used it is possible to keep these open and exploratory.

When cultural probes are taken up in a different discipline, as discussed above, the challenge becomes that of remaining true to the methodology (probology) which is to provoke and inspire participants to respond in any way they wish, while still addressing questions from other disciplines, such as within the social sciences. Probes become a form of social enquiry (such as Vesterlind, 2003 cited in Robertson, 2008) and are often used in combination with other methods as they aim to mix the informational with the unexpected and playful. The methods need to be adapted and repurposed for different disciplinary contexts. Many of the methods are similar to ones used in ethnography or other qualitative research (such as diary methods, mapping or participants taking photographs) yet the ways in which they are used is very different in terms of both the objects themselves (such as types of map or camera) as well as the tasks asked of participants.

Box 4.2: Case study of the adoption of cultural probes methods in sociological research

Robertson (2008) used cultural probes in a sociological project on the experiences and transnational connectedness, of international students who applied for residency after their studies in Australia. The project included 20 participants from 13 different countries (all had a degree and had applied for residency) ranging in age from their 20s to their 40s. Starting with a qualitative interview and diary-based study, Robertson subsequently employed cultural probes to allow participants to be more reflexive as well as creative in their responses. The probes were used to supplement data gathered through other methods (including follow-up interviews) so they could remain playful.

The probes included maps and labels (for ‘places I have lived’, where ‘I have friends’, etc.), a camera (with prompts like ‘your favorite meal’), communication logs (noting who they spoke to and how it made them feel) and postcards (with questions like ‘I feel homesick when…’) with instructions and suggestions for use. Although the aim was to generate some data, they were designed such that it was not just direct reporting; so, for example, the postcards had images on them which were ‘whimsical’ and cartoony aiming to amuse or inspire participants. The packs were given one month prior to the interview, with a suggested time spent of 5–10 minutes a day. They were designed to be aesthetically appealing and informal (as the researcher had no design expertise, the design was kept simple). The researcher included her own examples of how she responded to the probes (such as the maps with labels on), which aimed to bridge the distance between participant and researcher.

The probe packs produced varied responses – reflexive, of-the-moment responses, verbal, non-verbal, documentary, and more piecemeal data. There were surprising responses; for example, one participant gave the camera in the pack to her children to take photos of the neighbourhood. In this project the benefits were:

- the playful style of the probes made participants more relaxed in participating;
- they offered an in-depth understanding of people’s lives at home without being intrusive;
- participants could engage in sensory, creative ways;
- the researcher is forced to engage with the research questions in different ways through the design of the probes.

The limitations were:

- people may feel alienated and would prefer a standard interview.

Participatory design and prototypes

In its original formulation, cultural probes involve both giving packs of objects to participants to respond to, as well as using the resultant designed object as a tool for exploration to see how people interact with it in their lives. So far, the method of cultural probes has been discussed in terms of the 'packs' that are sent out to people to live with as this has been the most widely adopted part of the method, as well as the one that lends itself most to non-design-based research. Using designed objects not just as an output but as a form of generating responses from people is a less widely adopted method outside of design; however, as part of an interdisciplinary research project, it has potential as a provocative material method. Designed objects can build upon the earlier stages of probe design and continue to be objects that excite interest and playful interactions (Akama and Pink, 2014). People and things are understood as emergent (Akama and Pink, 2014) through the dialogic and interactive process of design and living with designed objects.

The idea that people and things are emergent is theorised by Michael through Ingold's understanding of affordances (drawing from Gibson, 1979), which refers to both the material capacities of things and also the corporeal capacities of people (such as having hands that can hold things). As people and things interact, they can change each other – a process which opens up new affordances. And so rather than the designed object being the end point of the process, this is part of continued interactions between people and things in generating and provoking new understandings and relations.

I have discussed object interviews and cultural probes as provoking people to respond through their design, aesthetics and material properties; speculative design can be understood as an even more explicit intervention and 'disruption' (Akama et al., 2015), particularly within the sphere of participatory design. For Jönsson et al. (2015), participatory design is understood from an actor network theory perspective as a socio-material collective of humans and non-humans. Participatory design often involves people gathering round a set of materials (rough ones such as cardboard, foam, clay to ensure everyone can get involved; see also 'doll scenarios' where people are given dolls and materials to customise them). The process of making or designing is also a process of people coming together and discussing. Through material engagements people are able to engage with the research issues in a different manner (this is extended in the arts-based research discussion below).

Design interventions can be a form of ‘critical enquiry’ where you create ethnographic (or other forms of) knowledge. Interventions generate responses and, in turn, research data. While all methods and objects bring about effects, this material performativity is explicitly engaged with through experimental prototypes (Jönsson et al., 2015) or speculative design (Michael, 2012). This is best illustrated through an example; Jönsson et al. (2015) discuss two experiments they undertook as part of an Urban Animals and Us project in Denmark, where design was a method to generate new interspecies relations with the elderly. Working with elderly participants, they wanted to expand the possibilities of how people can ‘have a stake’ in research, beyond verbal discussions, as being involved in research cannot be reduced to linguistic capacities. The two designed objects they developed included Phototwin and Birdflute and both were designed to generate interactions between people, the object and the environment. Birdflute makes a series of sounds, including different bird calls, that play on a speaker placed on the balcony of a retirement home. The residents of the retirement home blew the flute from the living room in response to a dove on the outside, and then started to interact with the dove, such as through giving it food. This artefact allowed new relations to come into being, between the residents, and between them, the birds, and the designed object as it excited wonder and openness to the environment around them. The method is one that foregrounds sensory, embodied and material ways of knowing and ways of being. The designed object acts as a disruption in the ordinary interactions that take place in the retirement home, as the subsequent interactions produce interesting research findings.

Objects can be disruptive and provocative and they can also be ‘idiotic’ (Michael, 2012) as they force you to slow down and reflect.

Michael suggests that they are idiotic when they ‘misbehave’, that is, they act in ways you had not anticipated or intended, which has the effect of making you slow down and question your assumptions and encourages you to become inventive. These capacities are enhanced in speculative design (drawing from Gaver et al. and cultural probes). Design is speculative as it is not looking at ‘what is’ but at ‘what might be’ as it is a method that celebrates uncertainty. Michael (2012) explores the designed prototypes that result from cultural probes that have these characteristics of openness through the example of threshold devices (Gaver et al., 2004), which gather information on homes in unexpected ways. For example, he discusses a local barometer, which looks out from the home to gather information on how the home is connected to its proximate environment. It had six devices with images on them that were taken from a buying and selling website (Loot); which image is visible on the screen of the barometer depends upon the strength of the wind. If the wind blew strongly, the images were from Loot adverts placed in locations that were further afield. As the participant lived with the device, over time, he started to see his local environment differently and make different connections between places, and between himself, those places and the weather. He also started to read the weather through what was being advertised as the barometer opened up ‘a space of strange encounters’ (Michael, 2012: 179) between the weather, the local area, advertising and community. While these methods have been used in social scientific research, it is worth noting that to do a speculative design project you would need to collaborate with a designer/design team.

Arts-based methods

Most speculative design and cultural probes methods are ones which foreground the researcher as the designer of the probe packs (even if just through customising objects) or the designed object that participants interact with. The final range of methods this chapter will explore predominantly involves participants engaging in processes of making. This dovetails with some of the discussion in Chapter 2 of materiality as a process that emerges from relations between materials and people.

Arts-based research practices are methodological tools that use creative arts to address social research questions (Leavy, 2015) and range from poetry, music and dance to visual arts. Like design-led methods in the previous section , arts-based research encourages an openness to the ‘spontaneous and unknown’ (2015: 20). Arts Based Methods (ABM) can be understood more widely within the remit of creative research methods (Kara, 2015), which can refer to the process of reframing or thinking differently about qualitative interviews; it can also involve the ‘borrowing’ from other disciplines’ methodologies and repurposing them to ask new questions. This practice of reframing is often at the heart of material methods and involves you thinking about either a method in terms of materiality (the objects used in research) as well as the methods as routes into framing a research area as material. So, for example, a photograph or an art work can be understood predominantly as image; however, when you reframe the photo as material culture, you need to understand the frame, the materiality of the print, the paper, where these are displayed and stored. This can involve a process of *reframing a method as a material method* ; so, for example, arts-based methods already exist and centre materials and their transformations. While there is a well-developed literature on these methods, they are rarely discussed as material methods, so including them here in this chapter means I want to think about them as methods which centre materials and objects as part of a creative, embodied multi-sensory process. In some of the methods described here this involves moving an activity from a non-research practice to a research context – seen in the example of model building (discussed later).

Akin to cultural probes, creative practice privileges ‘play, intuition, serendipity, imagination and the unexpected as resources for making sense’ (Kara, 2015: 22). Although design-led methods are rarely discussed within the rubric of ABM, the synergies between ABM and design-led methods is clear: first, both involve people engaging with things processually; second, both centre the unexpected and remain attuned and open to different possibilities; third, both raise the question as to whether the use of these methods in non-arts-based disciplines requires a researcher who is also accomplished within arts/design/creative practices. In cases such as speculative design, collaboration is clearly important; however, in other examples there is some suggestion that what matters instead is the purpose and research question (see Kara (2015) for a discussion). When you are thinking about using methods like these you need to engage with how able you feel to customise a probe or lead a collage activity in a way that will allow you to use these methods in productive ways.

As material methods, ABM offers a wide range of opportunities for researchers (all expanded below), including that they can:

1. be evocative and provocative;
2. be inclusionary;
3. position participants as active;
4. encourage reflexivity;
5. empower and engage participants;
6. help to understand non-verbal, sensory, kinesthetic, material and imaginary ways of knowing.
    1. Evocative and provocative: Akin to many of the other material methods in this book, they draw upon the capacities of things and material practices, to be evocative and provocative. In Chapter 3 , I wrote about how object interviews can provoke or ‘jar’ people; ABM can similarly be a site of transformation (hooks, 1995 cited in Leavy, 2015) as it can ‘jar’ (Leavy, 2015: 228) people into seeing differently. So, for example, through the juxtaposition of images in a new and unexpected way, hooks has seen this as an ‘aesthetic intervention’ (hooks, 1995 cited in Leavy, 2015: 228) through the analysis of the art of Emma Amos who

reimagines and juxtaposes images of the Ku Klux Klan to expose dangerous histories.

2. Inclusionary: The method is one that can be inclusionary of different groups; in part this is due to a shift in the relationship between researcher and participants that the methods entail – akin to design-led methods – as these are methods where dialogue and reflection between participants and researchers are built into all stages of the research.
3. Active participants: As these methods also take time, they can be more reflexive (particularly when carried out with interviews, or other methods that give voice to these reflections). Gauntlett and Holzwarth (2006) discuss how with ABM you may return to the activity, or take longer in your engagement with it unlike traditional methods that are often about the 'now', such as interviews, which is then preserved as data .
4. Reflexivity: These methods see participants as active rather than passive recipients of, for example, media (Gauntlett and Holzwarth, 2006), and the range of ABM allows people to be active participants in research as they are engaging in an embodied, material way. Although their participation is framed by particular questions or prompts, these methods are often participant led. Gauntlett and Holzwarth (2006: 84) have conceptualised visual methods like model making, collage or taking photographs as 'enabling methodology'. These methods work with the presumption that participants have interesting things to articulate and creative and material methods may enable this participation.
5. Empower participants: ABM has been taken up in projects aiming to empower and engage participants, such as with young people. Lyon and Carabelli (2016) worked with 16–21 year olds in the project 'Imagine Sheppey' and after being frustrated by the shortness of written pieces that participants produced, they used ABM to try to engage participants more actively. They developed a series of artist-led workshops in four different spaces to interrogate different themes, such as

a factory to interrogate the theme of work. Participants were given objects and tools to transform and inhabit the space and think about activities that could take place there, as they imagined potential futures for themselves. Despite the advantages of the method in engaging participants, the researchers note that engagement does not always mean meaningful data, as they weren't always able to reflect upon them in useful ways to think about their future.

6. Non-verbal knowledges: ABM centres the non-verbal, sensory, kinesthetic, material and imaginary ways of knowing. Drawing from a phenomenological perspective where perception and thus ways of knowing are rooted in the body in its engagement with the world, then employing methods that just elicit the verbal fails to explore a large area of human engagement and understanding. People's material and creative responses to things matter so you need methods to access them. Ways of knowing that do not privilege the verbal are particularly useful for working across language barriers (Kara, 2015) as well as drawing upon culturally specific means of articulation or experiences. For example, O'Neill's research with transnational refugees (2008) involved a collaboration with professional artists that allowed people to tell their own stories that informed policy. The methods were conceived of as 'ethno-mimesis' – a combination of ethnography, biography and ABM. O'Neill worked in collaboration with asylum seekers, refugees and artists as she aimed to create a space for people who are often misunderstood in media and policy representations to speak for themselves. The artistic methods were drawn upon as they do not just reflect people's lives but can also make visible their hopes and experiences (O'Neill, 2008: 8). The different groups were able to choose which art form, such as photography, they wanted to use and how they would generate it as dialogue was part of the process of making the art .

Reframing everyday material practices as methods

While ABM encompasses a broad range of methods and practices, I would like to focus in the last section of this chapter on two specific methods: collage and play building (in particular Lego Serious Play). They are both material creative processes that happen in non-research, everyday settings that are reframed as methodologies for research. When I introduced material methods earlier in the book, I suggested that one avenue for new material methods was that the material world and the *substantive* focus of our research can be developed as *methodological* approaches. And so, as will be discussed in the next chapter , a wardrobe is not just a substantive focus but can become a methodological approach to explore things in relation, including things in use and not in use. The examples of Lego and collage are, in different ways, approaches that emerge from a critical engagement with an everyday material practice.

Collage

Collage can be defined as the practice of cutting and altering images/materials and combining them with other images/materials. It is an artistic practice that is used by professional artists, as well as being a creative practice that children or the non-specialist can engage with. As such, it has potential for being adopted as an inclusive ABM (Chilton and Scotti, 2014). Collage often brings together disparate visual and material elements where the practice of making a collage relies upon making connections as well as contrasts. This process allows for surprising findings, as well as those that are ambiguous or uncertain. Sayer (2015) explores Surrealism as a form of social research and discusses the possibilities of collage as a method inspired by surrealist principles, where the incongruous juxtaposition of objects can be understood in Ernst's terms as a 'systematic bewildering'. Other methods such as photography, as well as collage, can reveal the uncanny in the everyday as the familiar appears different where unexpected objects or images are placed together. Although some of the possibilities for unusual juxtapositions are particular to the practice of collage, it clearly carries some of the potentials of other material methods, where it can 'jar' people into seeing or thinking differently.

This process can take place through the practice of doing a collage as well as getting people to respond to collages through discussion. For example, in Finley's (2002) research into imagery and gender identity she wanted to create a dialogue with teachers about how they unintentionally reinforce gender stereotypes. After having carried out media analysis of magazine images she categorised these images into their potential impacts and then remade the bodies by putting together torn-out images of body parts in discordant ways, as a means of getting people to see differently as the basis for a dialogue. Chilton and Scotti (2014) used the methods of making a series of collages and reflexive and dialogic letter writing over a 4-week period to explore the possibilities of collage as a research method. They suggest that rather than just thinking about the visual product of a collage, instead the material, tangible and embodied processes of cutting and gluing are important in the kinds of knowledges and way of thinking that can be generated. The material process of making matters as much as the final collage. Seeing collage making as a form of embodied cognition allows embodied, material and multi-sensory ways of knowing to be foregrounded. Mannay (2010, 2016) used collage making in conjunction with mapping and creating photographs which formed the basis of later elicitation interviews as a way to both make the familiar appear strange and to depart from preconceived understandings of place and space. These mixed methods were, for her, a way of provoking a 'subject-led dialogue' (Mannay, 2010: 33) and getting people to see their worlds differently. So, for example, by creating their own visual representation of their environment proved to be a way to get to unseen or forgotten elements, such as by drawing the night sky people remembered things they had forgotten about.

Play/Lego Serious Play

The second and final method I will discuss is play/model building. It is another example of a creative method than involves the reconfiguring of everyday creative practices as research methods. To explore the experiences of non-traditional students, Mannay and Edwards used sand play therapy (2013, 2014) where people create worlds with models in a sand tray. The method centralises participants' subjective experiences; models often use metaphors to explore experiences as people are able to thoughtfully engage 'at the level of affect' (Mannay and Edwards, 2013: 70), in a material and embodied way. Again, the emphasis here is upon the reflexive process of making as a means to allow people to refine and rethink the material metaphors used. Elicitation interviews afterwards allowed people to explain the model and the metaphors used. The method of Lego Serious Play adopts a similar principle, although with the exclusive use of Lego. It was developed by designers at Lego and researchers and is a method that allows people to be reflexive and creative in the ways they respond in a material and embodied way. Like Mannay's discussion of sand play therapy, here too Gauntlett (see Gauntlett and Holzwarth, 2006) used Lego Serious Play to allow participants to build metaphors of their identity. He adopted the method as a way of gathering sociological data, which is 'worked through' and then reflected upon rather than 'of the moment' as in an interview (Gauntlett and Holzwarth, 2006: 86). People do not only make their models but also reflect upon and interpret them, which they subsequently explain to researchers (rather than researchers 'interpreting' the meanings of the models).

Hinthorpe and Schneider (2012) adopted the method in research into international development (in Indonesia) as a way to get people within local communities involved and a way of moving away from top-down power structures as the method allowed people to have a space in which they were able to articulate themselves on their own terms. As Lego Serious Play is flexible and creative, it is seen to be a suitable method. Play is active, voluntary and fun, and involves a different connection to other people, as well as to others. Although play has rules, these may be different to wider power structures or rules within society. Play is also a space to reflect and explore new solutions that may involve the subversion of the rules of the ordinary world and a chance for participants to tell their own narratives. Serious play is understood as play with a purpose (Hinthorpe and Schneider, 2012). Like other methods in this chapter it is based upon the interaction of bodies and objects within space that may cause people to reflect upon objects in a different way and draw upon tacit or material dimensions of experience.

Conclusion

The design-led methods and arts-based methods discussed in this chapter are not usually discussed together within the methods literature; this chapter has brought them together to get you to think about them as material methods. There are clear differences between the approaches: design-led methods discussed here tend to centre the design of objects to explore how people interact and respond to it, whereas ABM tend to draw people into creative material practices. Methods like cultural probes are an active intervention in things (through design or customisation), as these designed objects in turn can disrupt and intervene in people's lives. There are also strong commonalities. Both methods are ways of *inviting people in to participate* – whether this is to live with and interact with things or to invite people in to response to raw materials to make things (models, pictures and so on). Objects and materials are understood as open ended which entails the exciting possibility that you cannot predict the effects things will have and how people might respond to them. This openness is also one of the challenges of the methods as people may not fully engage or you may get very unexpected or fragmentary insights. This is best understood not as a limitation of the method, but instead what the method is all about. To adopt these approaches you need to embrace the uncertainty and fragmentary and to see this as potentially insightful.

It raises the issues of what is at stake when these methods are moved between disciplines. It is important to not try to ‘fit’ them into pre-existing ways of thinking and methods, but instead to engage with the ways they have been used to see their potentials. So, for example, they can help with aspects of life not captured through current methods, playful, or other facets of material and sensory worlds. For all the methods explored in this chapter, you need to take the design/set-up stage seriously, and to think through the materials and objects to see what they can do, and what people can do with them. Interdisciplinary collaboration can be an opportunity to fully optimise what these approaches can offer, often as part of a project with many methods.

5 Understanding things-in-relations: surface assemblages, inventories and interviews

- *What kinds of understanding can collection-based methods provide?*
- *How can things-in-relation be developed as a methodological possibility beyond those doing research on collections?*
- *How can you understand emerging and dynamic things-in-relation?*

The previous two chapters centred methods that draw upon the capacities of things to provoke responses from participants; these methods require an interrogation of how you are framing objects (*what things are*) and their potential effects (*what objects can do*). This chapter will focus upon methods that centre the relationships between things and thus entail grappling with *where things end* . As I introduced in Chapter 2 , there are a number of influential theories of material culture which foreground the relations between things (such as actor network theory (Latour, 1993) and assemblage theory (Bennet, 2009)). A theoretical focus on relationality raises the question: what methods can help us to understand these material relationships? This chapter is, however, not just for researchers who have a pre-existing theoretical interest in material relations; it is also for those with an empirical interest in a particular collection of things – such as a museum collection, books or the contents of an attic – who are looking for methodological routes into the collection. In addition, collections are introduced as methodological possibilities; for example, a collection of music (CDs, MP3s, vinyl) may be your empirical focus as you are interested in music as material culture. However, it could also be mined for methodological possibilities: as a way into exploring memories, experience of particular generations and biographies through things. Opening up collections – as a method – is underexplored and can offer new perspectives.

The chapter will start with an outline of how you can approach the relations between things, revisiting some of the theoretical perspectives on material relations from Chapter 2 as well as thinking empirically about what counts as an assemblage or collection. I will introduce the possibility that you can think about things-in-relations as an empirical and methodological approach. The chapter will then explore methods for thinking about collections as material and spatial relations, including archaeological methods of interrogating surface assemblages and depositional histories and how these methods have been taken up more widely. The chapter then explores the use of data around collections, such as probate inventories or sale catalogues and museum databases, to see how these data can be used to develop a relational understanding of things. The chapter shifts from methods based upon pre-existing collections and documentations surrounding this towards how you can use the collections to generate additional, reflexive data, through methods such as assemblage interviews and observations. The aim of the chapter is not to be prescriptive in mapping particular methods onto specific types of collections or disciplines but instead to encourage you to think about how ways of approaching material relationality can be developed in different disciplines/contexts. Furthermore, in widening out the understanding of 'collections', the chapter aims to introduce the relational methods of, for example, collection interviews or inventories to readers whose empirical focus is not 'collections' per se.

What counts as a collection and how can you approach them?

The term collection is one that implies a clearly defined grouping of things, whether this is in the context of a museum collection or a personally amassed grouping of things such as stamps, teddies or any other such collection of a *type of thing* . While collections certainly can refer to clearly demarcated groups of objects, I will argue in this chapter that collections can also be defined, explored and thought about in more heterogeneous and diffuse ways. Take, for example, music collections: although they are a collection of things that are one 'type' in the sense of being music-objects, MP3s and vinyl are evidently materially very different (Magaudda, 2011; Bartmanski and Woodward, 2015). Spatially, the collection extends beyond a CD rack to an attic, someone else's house, a computer and a phone. Each of these technologies for storing and listening to music are, again, materially divergent and extend the 'collection' across different spaces. This chapter will explore some of the ways in which you can approach collections to allow you to think about these diverse materialities. In turn, this can allow you to think about collections in ways that are more fluid than the conventional meaning – as a deliberately curated set of 'like' objects – might imply.

In Chapter 2 , I introduced a number of different theoretical approaches which all foreground the relations between things; while none of these are focused explicitly upon collections, when collections are understood to include the relations between different things (which may be materially similar or divergent) then many of these theories can be usefully extended to the methods outlined in this chapter. Given how central materials in (and as) relations are to many theoretical approaches, it is beyond the scope of this chapter to outline all of the possible theoretical approaches. Which perspective you take has clear implications for how you come to understand your empirical field as well as understanding what your unit of analysis is: such as, whether you are focusing on a collection, an assemblage, a heterogeneous entity or an entanglement. When you are designing your research, you will need to think about what your theoretical approach to material relations is and, in turn, then how this affects what 'unit' of analysis you are using. So, for example, drawing from an ANT perspective, Yaneva approaches a building as a *heterogeneous entity* (2013); Boyer and Spinney (2016) approach new motherhood as an *affective engagement* and *entanglement* (by focusing upon bodies, babies, prams as they move through material spaces). Entanglements can be thought of in different ways from different perspectives, and so from Ingold's perspective (2010), *entanglements of materials* come from the continual flow of materials. Thus, adopting this perspective, things are relations *of* materials, as well as being *in* relation. Adopting these kinds of approaches for thinking about 'collections' allows you to widen out the remit of what counts as a collection and, in turn, offers exciting possibilities for how you can use these methods.

As the term assemblages is one that is used in relation to specific methods discussed in this chapter (notably surface assemblage approaches outlined in the next section), I will discuss this in more depth here as it is also useful in opening up how you think about collections. There are many different variants of how assemblages are defined (such as DeLanda, 2016); but I will outline Bennet's here briefly as it lends itself particularly well to reframing how you think about collections (see Woodward and Greasley, 2015). In Bennet's formulation (Bennet, 2009), assemblages are heterogeneous, including many different elements; she illustrates this with the example of an electricity grid, where the elements are not always discrete objects and include humans, trees, wind, electromagnetic fields and electrons. Assemblages are dynamic as they change both due to actions that people take and also the interaction of the materially vibrant elements. Bennet's ideas are useful in illustrating how you can widen out the remit of what counts as a collection. You could apply this to formal collections in a museum, temporary clusters of things on a table, findings at an archaeological site or the contents of a bin. So, for example, thinking about a pile of clutter on a kitchen table, elements could include papers, pens, phone, hairclips, dust and light. The cluster as a whole has agency as things amass on a table leading to people feeling overwhelmed and unable to sort it out. While collections have been understood as 'special' or separated out from use, applying an approach like Bennet's can allow us to think about many unseen and unnoticed facets of everyday life as a space for thinking about memory, everyday relationships, gender and the organisation of everyday life (see also Arnold et al., 2012, for an example of this). Using theories of assemblages can help open up everyday clusters of things as potential research sites, but this could equally be done by many other theoretical approaches (such as ANT, new materialism or theories of entanglements already mentioned).

The chapter will now turn to some of the more specific methodological routes that can allow us to research material relations, starting with archaeologically inspired methods centring the spatial relations between things; second, using existing data sources about the collections (such as probate inventories, museum databases or sale catalogues); and finally, using collections as a basis for generating new data through interviews or ethnographic methods. Which of these methods is the most suitable will depend upon what kind of assemblage you are looking at, what data is already available around it, what you are trying to find out, and which disciplinary approach you are adopting. In introducing a range of disciplinary approaches here, it is important to pay heed to where methods come from, as well as using these methods to think about how methods can be transported across disciplinary boundaries.

Surface assemblages: archaeological approaches

As many archaeological methods have been developed in the absence of people to interview and observe and often without written records, they have centred objects – their material condition and spatial locations – in relation to each other. Human activity, practices and meanings (the 'having-been-there of the person', Thomas, 2012: 222) are interpreted from material traces and the spatial distributions of things. As a consequence, archaeological methods are particularly useful when thinking about methods that centre things and material relationships. Excavation is one of the dominant methodological approaches within archaeology (Shankland, 2012) and rests upon clearly defined, systematic procedures (sorting, mapping, labelling and categorising) through which all material evidence is placed in relation to each other – often in a chronological sequence.

While excavation is still an important mode of archaeological method, an approach that has wider applicability beyond archaeology is methods for understanding surface assemblages and depositional practices. As I will discuss here, these are methods for both seeing things *in* relation as well as seeing things *as* relations (Harvey and Knox, 2014). Within excavation and stratigraphy, the past is seen as a separate place (with each archaeological layer corresponding to a 'past') (Harrison, 2011a). In contrast, surface surveys look at artefacts in association and particular spatial configurations; Harrison suggests that when you see these associations as 'assemblages', traces of human activities and social relations are part of the assemblage. The collection of things is not one moment frozen in time but instead the past is immanent in the present, as, for example, the meanings of things arise from their histories. Methods for understanding surface assemblages allow an understanding of things *in* relation in particular spaces; methods to explore depositional practices through which assemblages come into being highlight the histories of things, including these things *as* relations.

At the core of an archaeological approach is looking at 'things associated together in space' (Joyce and Pollard, 2010: 291) as an assemblage can be understood as a collection of artefacts and ecological material (that is, animal bones/seeds). Exploring surface assemblages involves looking at the spatial distribution of material culture (including frequency, clustering (Stahl, 2010), what is placed with what) in relationship to the architecture of a building and its situation in the surrounding environment (Alison, 1999), which can tell us about the range and distribution of activities. Natural materials, buildings and objects, as well as human intentions and former activities, are all part of the assemblage. For example, Kent (1999) used this approach to explore the differences between storage and trash areas. By comparing an historical archaeological site with a comparable contemporary site at which people were currently living, Kent systematically documented the objects in different spaces. Objects were categorised based upon material, form and function, and the numbers of objects per category were documented, as well as which spaces they occurred within. Through quantitative analysis of the data, in both fieldsites, the trash areas proved to be less heterogeneous than storage areas, but there was a higher number of objects, as a diversity of objects indicates a diversity of activities. Here, the method of exploring types of objects in spatial locations helps understand human practices and the organisation of everyday lives.

There has been a shift in archaeological methods more recently to look at how these surface assemblages came into being (Joyce and Pollard, 2010) by focusing in addition upon depositional practices; that is, how objects are placed or accumulate in spaces. Focusing upon depositional practices entails exploring the processes through which objects come to be where they are, whether through how objects were used, intentionally deposited (such as burial deposition), temporarily stored somewhere (Lamotta and Schiffer, 1999) or unintentionally as things ‘end up’ in places. Adopting a holistic approach that looks at all things may allow a more nuanced understanding of how an assemblage came into being (both intentional and unintentional deposition practices). Another way of thinking about depositional practices is to think about the processes through which things become bundled or gathered together, as well as the effects of things being drawn or placed together (Stahl, 2010: 156; Walker and Lucero, 2000; Pollard, 2008). This approach looks at how objects and substances, often with different histories, may be combined to produce new connections and histories. There are a number of theoretical approaches that dovetail with this methodological approach, such as the discussion of materials as having histories (see Drazin and Kuchler, 2015), as well as a focus on matter as being produced through configurations (see Barad, 2003).

Contemporary archaeological approaches: wider developments of the surface assemblage approach

These methods have been used in research into the contemporary world (Harrison and Schofield, 2010) within the disciplinary framework of contemporary archaeology; however, the use of these methods within wider disciplines has been more limited. Given the way they centre things in relationships (to other things and spaces) then they have strong potential as a material method to be exported more widely. I will here outline some of the ways in which these methods have been used to point towards how they could be adapted more widely, as well as the kinds of knowledges that they produce. One of the key challenges of taking this approach is to decide on how you define the boundaries of what you are looking at. If all things are understood as being in relation to others (and even things themselves are produced through relations) then you need to decide both what your unit of analysis is and where your empirical research 'ends'. This may emerge from a theoretical approach; for example, Edensor (2011) draws upon assemblage theory (deLanda, 2006) to think about his empirical example of a church as an assemblage. This was applied at a number of different scales and sets of relations, so the church was approached as an assemblage (and made up of a number of elements), smaller parts of the church were defined as assemblages and, therefore, as relations in themselves, as well as the church being part of a wider assemblage (material relations) within the city.

You may decide your unit of analysis (that is, what kinds of relations you are interested in and between what kind of things) by thinking more empirically to start with. I will outline three routes into this:

1. Focus upon a particular type/category of object;
2. Particular space(s) and the objects in relation within this;

3. Comparative approaches between spaces and their things.

First, exploring a particular type/category of object can be illustrated through research into waste as a category of object. Rathje adopted and developed archaeological methods in the development of his long-running garbage project in Tuscon, Arizona (which took place from 1973 onwards). The project explores what you can learn about society and human practices from the things that are discarded (Reno, 2013). The project adopted two main methods: the first was looking at things in landfills and the second involved sampling and sorting domestic rubbish. The study of landfills employed excavation methods, as samples of garbage are extracted from selected strata (Rathje and Murphey, 2001), which then undergo analysis (for temperature and so on). Some samples are then used for full analysis. The method of 'regular sorts' (Reno, 2013) of domestic waste is one that lends itself to being extended to a wider range of contexts. Through sorting, categorising and analysing the contents of domestic bins the projects aimed to elucidate patterns of material use and discard. In total, the project sorted through 199.2 tonnes of rubbish from 20,416 individual households between 1973 and 2005 (Rathje, 2011).

The regular sort of domestic waste occurs in the context of information on neighbourhoods, income and family size. From the bags of waste, item- by-item inventories are produced which is inputted into a database, as everything in the bags is systematically analysed and categorised. Items are sorted into one of 150 coded categories, such as pet toys or household and laundry cleaners. In addition, more detailed information is recoded such as brand, type, weight as recorded on package, where things were from, the date of collection and so on. The method is one that emphasises the systematic collection of material data. Key features of the method include:

- the production of inventories for all items;

- the description of items (details such as weight and other material properties);
- the categorisation of objects (as well as sub-categorisation).

In addition to this, they also used interview or diary methods to get people's self-reports of what they got rid of, although much of this data has been used to show that people's self-reports often do not correlate with what is actually thrown out. While this is a useful observation, this does not do credit to the rich and insightful types of data that interviews can generate around material collections – which will be explored later in this chapter.

The second route into defining which things and relations you focus upon is to select particular spaces and the objects within them; I will illustrate this approach through the example of houses, as this has been a site for research from multiple disciplines. One particularly influential one has been Bourdieu's anthropological account of the spatial arrangement of things in the Berber house (1970), which offers a detailed description of the spaces, activities and objects of the Berber house. This forms the basis for his structuralist analysis of the symbolism though oppositional meanings (such as nature: culture; light: dark; man: woman) as these map onto objects and the spaces within the house. Although based upon rigid structuralist oppositions, the article explores these structural oppositions as material (for example, the wall symbolising darkness is also the wall with least light). It provides an example for how mapping objects in spaces can highlight the links between particular spaces and activities.

This process of describing, mapping and categorising objects within particular spaces has been developed in a more exploratory approach in Riggins (1994) auto-ethnographic approach to his parents' living room. Categories emerge through the process of engaging with things in their contexts. Although I would contest Riggins' objectivist approach to things – as he refers to the 'truth' of people's relationships to things – it is instructive in thinking about how this under-explored method of mapping and material description can be developed. The methods adopted involved:

- photographing to capture the details of objects and where they are positioned;
- describing every object in a space;
- developing categories for individual objects as well as objects in relationship to each other. Examples of these include: active/passive (whether an object is designed to be used or to be contemplated), collective objects (with ties outside family). Additional categories emerge around how things are situated in relationship to other things (including looking at how things are displayed, seeing which objects are around it, if it is 'highlighted' or understated), if objects are clustered or dispersed, or the relative uniformity or multiplicity of styles within one room.

He, therefore, performs a detailed analysis of the objects and spaces within the living room which is also dynamic as it pays heeds to the relations between things such as relative prominence or important of different objects (whether they are background or foreground).

A more developed, multi-method form of Riggins' exploratory approach can be found in a project (Arnold et al., 2012) that aimed to be systematic and comprehensive in the documentation of the material possessions of 32 houses in the USA (all in the Los Angeles area). All of the participants have two working parents, school-age children and self-define as middle class, although there is diversity in ethnicity, house size and incomes. The project adopts many traditional archaeological methods to record the spatial, material and temporal relations of the houses, as well as methods of contemporary material culture studies. The specific methods include:

- mapping of objects;
- photography of all visible objects in the home;
- house history questionnaires;
- self-narrated video tours of the home;

- observations of practices like making food (sampled at timed intervals).

The project aims to produce the same data for each house to allow comparison, as well as to allow for the data to be used for a range of different research questions. The project thus has amassed a range of quantitative data, visual data, as well as audio-recordings of interviews.

Similar to Riggins' (1994) living room research, and drawing from archaeological traditions, the researchers developed a system of categorising and recording information about the objects encountered. Objects were placed in 50 categories (such as furniture or computer equipment) in a database where all objects in a category can be seen together, as well as where they are placed in the house. For all of the visible possessions in each room of the house, they:

- catalogued them;
- documented their uses;
- documented how many these were of each object;
- documented the diversity of objects and where they were placed.

They were interested in looking at the patterns that emerged from looking at how objects are placed together; these included less-researched assemblages of things such as objects stuck to the front of fridges, which are nonetheless central to how family life is organised. The types of objects included: prescriptions, phone numbers, invites, event reminders, children's art and menus. This assemblage is one that is rarely categorised by people themselves, as objects are often dense and layered on top of each other. Analysing an assemblage like this across the 32 houses helped to illuminate the ways in which families organise their daily lives and in conjunction with the wider analysis of the kitchen, objects and practices that occur there is part of the ways kitchens are the 'command centre' (Arnold et al., 2012: 81) of the house. The kitchen is the site of most household activity (ranging from work, homework, paying bills, scheduling, eating). They also suggest that fridge door assemblages act as a microcosm of the whole house regarding attitudes to material possessions and clutter. I have selected this example from the many that are discussed in the book as it highlights how collections/assemblages/material relations can be approached in terms of everything within a space (such as a household, or a room in the house) but this also opens up the possibility of smaller sets of things that are in relationship to each other. Examples of an often-overlooked assemblage of things like a fridge door can be understood in relationship to things in the rest of the house, to illuminate how everyday life is organised.

Third, archaeological methods of surface assemblages can be used in a comparative approach. This route is useful in highlighting the contextual particularities, as well as continuities across specific examples. An example of a comparative approach to surface assemblages can be seen in research into death practices in the contemporary USA (Dawdy, 2013). The methods are archaeological in centring the objects in relations in burial sites, as well as how they may have come to be deposited. Dawdy takes three case studies: Holt cemetery in New Orleans, a rural Californian cemetery, and an evolving Chicago cemetery. In the Holt cemetery – historically linked with poverty and with more recent links to the African-American population – Dawdy outlines how human bones, cloth and artefacts jut out from the soil. Only half of the graves have markers, usually stone or cement forms with scratched texts in them. Objects are left on many graves such as toys, plastic flowers or photos. She documents the things left on the graves as well as the level of care, as some are faded while others are new and clearly tended to. The conditions of the graves are analysed in the context of regulations (bodies can be buried here without a fee but if the grave is untended for 101 days then it may be reused), poverty and local traditions (such as making offerings on All Saints Day). Regular visits to the site by the researcher, as it is still one in contemporary usage, reveal new funeral mounds, on previously used or new sites, often with a memorial t-shirt with a photo of the deceased propped up next to it.

These traditions of personalisation that are evident in the Holt cemetery were historically prevalent in the USA before standardisation of graves and cemeteries became the norm. Dawdy carried out surface surveys of the objects found on the graves of two other cemeteries and found similar patterns of leaving votive artefacts on the graves. In the rural cemetery in California Guerneville community cemetery, the most varied and profuse objects were evident on the graves of those seen to die prematurely, such as the young. By situating her data in other information sources, Dawdy is able to conclude that the placement of objects in the casket has become more common (such as mobile phones). Objects were a key way to personalise the grave and death as these objects are inextricably bound with people. By comparing the three sites' surface assemblages, Dawdy explores material practices around death and remembrance, as well as highlighting both the particularities of different cemeteries and wider trends within US death practices.

Box 5.1: What types of knowledges can these methods produce?

The types of knowledges produced will always be specific to the research focus, context, question and theoretical approach; this approach can provide particular insights into the:

- **spatial** : through exploring where things are, where collections (or assemblages) of things are, how this relates to other spaces (such as the cluster on the fridge being understood in terms of its relation to the kitchen and in turn the whole house) ;
- **material** : types of things (and how you categorise them), material histories including patterns of use;
- **relational** : things in relation to each other, the relation of spaces to each other, relations between people through things. Some of these will be relatively unchanging, others more dynamic;
- **temporal** : how collections/assemblages come into being, how things have histories, futures and how these are part of the present. Temporality also speaks to dynamism of these

collections (such as grave goods changing as mourners visit the graves).

These are co-existing as, for example, spatial elements are also always material and relational. While these are the main types of knowledge, in addition, the examples discussed also allow insight into:

- values (personal, societal, relational and economic);
- cultural specificities (made evident in particular through comparative work);
- societal divisions and inequalities (such as some of the graves in Dawdy's research);
- symbolic dimensions (such as in Bourdieu's example).

Data 'around' things 1: Probate inventories

The methods so far described have predominantly concerned themselves with how to understand the collection of objects themselves; this section moves towards methods to mine existing information around collections of objects. The garbology research outlined involved creating object inventories; here I will move to pre-existing data around objects (Ulvang, 2013 cited in Skjold, 2014). Probate inventories (PI) are one such example and involve a list of household possessions by room (including some material details of the object such as form, function and condition) as well as family members, debtors and creditors (to ensure estates were divided up fairly; see Malan, 1990). Handley (2016) used PI as the main source of data for research into the norms, practices and attitudes to sleep in Early Modern England. I will outline her research here to highlight how PIs have been used as a material method. Her research drew upon PIs that were proved in the Prerogative Court of Canterbury between January 1660 and December 1760. Within this timeframe, it was mandatory to return an inventory of the deceased's possessions to the court registry; the inventories included a list of goods, chattels, money, crops, livestock and debts owed. The limitations of the method – being an incomplete record of household content as they often centred things seen to have a good resale value – meant that Handley also analysed diaries, correspondence and autobiographies of same time period. Mixed methods allowed for a rich and multi-dimensional account of sleeping practices that centred the use and position of objects of sleep.

The inventories were sampled at 10-year intervals to look at long-term shifts in chamber locations and their contents. So, for example, over the time period the PIs show an increase of the number of rooms with more than 1 bedstead being on the upper floor (in the 1600s, 73% of rooms with 1+ bedstead were on the upper floor; by 1758, this had risen significantly and was never below 90%). In conjunction with data from PIs that showed, over the time period, kitchens were used almost exclusively for storage or food activities, there was a shift towards the increased specialisation of rooms for sleep rather than multifunctional rooms as houses were larger. Tracking changes in the objects people own allows insight into shifting material practices, such as the inventories that show an increase in how many bed sheets were owned between 1660 and 1760 and an increase in textile range and quality evidencing regular sheet cleaning and shifting values around cleanliness.

PIs are:

- a *material method* as they centre things in spaces. The material details include how many things, what type of things, as well as the condition and some details of things (what they are made of, for example). The things and where they are located are central to how you understand cultural practices. You can see activities within particular spaces.
- useful for *showing shifts over time* and the shifting relationships between, for example, households. Exploring things like the shift

in the number of things, the type of things and where they are kept is useful in allowing an understanding of how the constitution and activities within households changed.

If you are using them as a method, things to consider include the following:

- You need to clearly delineate your sample, in terms of which sources you will use, how widely you will source these and your overall timeframe, as well as any comparison points within this.
- These are methods that centre things, without you often having access to the things (although in some instance you may do), and as such raises issues around analysis and interpretation through the words used. This is discussed more in Chapter 8 .
- You have to work with the data that is present (as these are incomplete data sets) and thus the use of additional data sources where possible can be insightful. For example, Malan (1990) used the archaeological record of wall footings, and discard and refuse data, as well as PIs, in research into the Dutch East India post of Paradise in Newlands. Multiple methods allowed a richer understanding of changing patterns of ordinary households.

Data ‘around’ things 2: museum catalogues and databases

Given that museums contain multiple collections of objects, whether on display or in storage, there are a range of methods that have been developed within this field that are based upon the objects themselves, as well as on the data sources around collections, such as catalogues and databases. Museum collections are dynamic and incorporate items on display, and those in storage – usually all of which will have been catalogued and labelled (Byrne et al., 2011). A number of practices go into the creation and maintenance of collections, including collecting (Pearce, 1995), cataloguing, displaying, storing and taking care of. Databases and catalogues are, therefore, not just data 'around' the collections but are an important *part of the collection itself* . Earlier in the chapter, I discussed what counts as a collection, and while a museum collection seems to be a self-evident and obvious collection (in terms of being a grouping of selection of objects within particular spaces), the collection will here be conceived of as including catalogues and databases. The collections consist of relations between the people (Harrison, 2011b), the objects, museum and other spaces, as well as the databases and additional records.

Box 5.2: What are catalogues and how do they relate to the collections?

Case study of the John Rylands Library Special Collections, University of Manchester

The methods discussed in this section centre in the main upon museums (of which there is a vast literature) but developing methods to explore collections of diverse material things and the informational sources around them (such as databases) is relevant to considerations of art galleries, libraries and archives as well. The Special Collections housed in the John Rylands building in Manchester is a unique example for these considerations as it includes a range of types of collections – including visual collections, archives and manuscripts, rare books and maps – and systems of cataloguing and categorisation. I was given a tour and spoke to Stella Halkyard (Joint Head of Special Collections and Visual Collections) about the process of cataloguing. Specific collections may include a diverse range of objects; for example, the Walt Whitman collection includes early editions of his books, archival materials (such as letters) and relics (such as the inside of his hat, dried flowers that were in his room when he died and his used ink pen). The collections are catalogued to incorporate this material diversity.

There are many challenges for categorisation; for example, the library has to negotiate where there are international standards for how to catalogue particular types of objects. Visual collections and objects are catalogued by reference to (different) international standards, whereas there are no equivalent standards for manuscripts, which tend to be done by visiting researchers. Even then the process through which categorisation happens is dynamic. Rather than just being an empirical process of filling in what is missing in a record, through which the past is ossified, instead how things are acquired, as well as how they are categorised, is done with potential future users in mind. As objects have the capacity to be understood or interpreted in multiple ways, the categorisations may need to speak to these capacities. For example, the library has an extensive Methodist collection, which is simultaneously of interest to many researchers of literary criticism, and the categories that manuscripts are placed in may be multiple, and shift depending upon current and potential future users. Catalogues and databases that connect to collections are thus dynamic and shifting and never simply a ‘record’ of material qualities and collections. These are important things to bear in mind when you come to use them as data sources.

The first ‘museum’ method I will discuss is the use of auction catalogues. They have some similarities to probate inventories, as catalogues are a part of the process through which goods are valued (Harrison, 2011b), and are not just a repository of information. The types of information in catalogues include images of objects, additional material details such as what an object is, its condition, where it is from and potential value. For example, Torrence and Clarke (2011) analysed three types of sale and auction catalogues over the timeframe between 1895 and 1901. The types of information included: the country/region of origin, type of object, function, size, raw material, decoration and asking price. The image of the object is accompanied by a description (although the length of this varies between catalogues). Catalogues, therefore, provide a wealth of material detail and it is possible to explore what types of objects are listed; how these correlate to geographical locations; how value is ascribed; and change over time can also be explored (depending on the timeframe of catalogues). The catalogues can be used for qualitative or quantitative analysis. Quantitative analysis is possible due to the number of objects included – so in Torrence and Clarke’s analysis (2011) the catalogues covered a total of 71,000 objects, and thus it is possible to look at broader trends over time, develop comparisons across geographical regions or types of material culture. Qualitative analysis may point towards the types of descriptive terms used or analysis of a particular type of material culture or geographic region. For both types of data, they may be supported by additional data/methods, such as ethnographic awareness of an area/type of material culture. This might, for example, point towards objects that are not listed in catalogues, suggesting that either objects were not valued by buyers or that local populations saw them as too embedded in their practices or rituals.

Another method 'around' collections I will consider here is the analysis of museum databases that include contextual information for collections. There is usually one database entry per object which includes information on accession number, where it is from, any associated cultural group, what type of object it is, materials from which it is made and its dimensions. There is, therefore, a wealth of material data, but these can also be read in terms of understanding how the collection was formed. For example, Wingfield (2011) looked at the databases for the Pitt-Rivers museum in Oxford, to interrogate the networks behind, and embedded in, collections. The Pitt-Rivers database includes information on the people through whom the object passes, such as the maker, collector, previous owners and the person the museum acquires the object from. The database can, therefore, be a route into 'unpacking the collection' (Byrne et al., 2011) to see how it is formed, and fits with many of the approaches to thinking about the relation between things as emergent, dynamic and changing. In much the same way that probate inventories and sale catalogues are not neutral records of objects, so too the databases need to be read both through the information provided as well as against the grain in terms of what data in missing (such as less information on the types of relationships that lead to objects being acquired). The kinds of information included, the language used, as well as things that are absent, can all be useful resources.

Using collections to generate new data (participatory methods and collection interviews)

Most of the methods so far discussed involve working with pre-existing data; in the final part of this chapter, I will move towards methods that use collections as a means to generate additional data. This approach fits with the provocative methods of object interviews and cultural probes discussed in the previous two chapters, as the objects are used to generate responses in people. The objects are central to this method as it is through their materiality that things excite responses in people. This aspect of the collection/assemblage-based methods is perhaps the one with the widest applicability for researchers, as it does not require that you are working with a formal collection but can be extended to any set of things-in-relation. There are a number of approaches to this, which I will outline in this final section:

- collaborative approaches to collections and participant co-created inventories;
- assemblage/collection interviews.

Collaborative approaches to existing collections are a way to expand the collections and data on them to include newly generated verbal and visual data produced by participants. For example, Allen and Hamby (2011) discuss collaborations and engagements between the Museum of Victoria in Melbourne and the Yolngu – a group of indigenous Australians. One activity involved taking objects from the collection, mostly body-work such as skirts, to the Yolngu to touch and talk about. In many instances, the museum has no information on contexts of use of the objects or who made the items collected around 70 years ago. The objects were handled or tried on and this provided an occasion to share stories about families or local traditions as well as triggering memories of knowledges by interacting with the objects. These recollections are then added to and seen in relationship to existing documentation. The multi-sensory engagements people have with the objects resulted in the generation of memories and shared knowledges.

While this might seem like a method that is only useful for those working with formal museum collections, the sense that participants may generate data that becomes part of an inventory or information on a collection can be thought about in terms of everyday collections of things. For example, I used a variant of this approach in my research into women's wardrobes as I generated **assemblage inventories** ; that is, the documentation of all of the items of clothing in a wardrobe. Given that these are private wardrobes in people's homes, the wardrobe owners were actively involved in producing the inventories. I drew from archaeological methods of engaging spatially, temporally and materially with objects, where they are positioned, their patterns of wear as well as how many objects with different categories are present. I photographed items women were willing to show (Woodward, 2007), documented the materiality of the clothing itself in terms of its physical condition and so on. However, the inventory also drew upon what women told me about the items, such as how they were acquired, where they were worn, and memories associated with item. People's stories are part of producing the inventory and understanding how things are categorised. In addition, the project adopted diary methods (so women noted what they wore each day including what they tried on but didn't end up wearing) as well as ethnographic observations. These methods provided insight into daily practices as people engaged with the wardrobe, as items that were tried on but not worn become part of the understanding of the wardrobe.

The wardrobe example is one that draws upon multiple methods (and indeed 'wardrobe methods' are by definition multi-method; see Klepp and Bjerk, 2014) including wardrobe-based interviews. I will consider this method of collection-based interviews here as a method in their own right as they have potential to be used in relation to a number of fields of research. These interviews work on a similar basis to the ways object interviews use the physical and sensorial capacities of things to elicit knowledges that are perhaps not verbalised. As I discussed earlier in the chapter, the methods in this chapter focus upon the relations between things, and these material relations do not need to be a formal collection like, for example, in a museum. Examples range from a wardrobe (Klepp and Bjerk, 2014), the emptied-out contents of a bin (Robinson et al., 2015), music collections (Greasley, 2008), a fridge (Evans, 2014) and an attic (Woodward, 2015b). These methods may be ways to understand things-in-relations as well as using the things-in-relations to understand aspects of our research. In Lövgren's research (2015), interviewing older women (62+) about their wardrobes was a point of entry for understanding biographies, experiences of ageing and the changing body. The collection is a method in itself as taking a wardrobe, music collection, fridge door or mantelpiece can be a way to develop research into issues such as memory, changing family relationships and the organisation of everyday life.

The method can be tailored to focus upon specific research interests, such as looking at personal biographies, or can be adapted to explore a particular demographic/group of people. Percival (2002) carried out a series of interviews (60 people in total) to explore older people's use of domestic space in mainstream and sheltered housing. The interviews were focused upon objects and activities within the different spaces of the house. So, for example, questions about eating practices engage with how this relates to the size of the room or the table height in relationship to mobility problems. Interviews that centre things and practices allowed for an understanding of how these were adapted to allow continued independence. So, for example, one participant in the interview discussed how he used the spare room to lay the clothes out on the bed rather than put them in the wardrobe, which, due to mobility problems, allowed him to get his own clothes. Asking about objects and how they are used allowed insight into how Percival's participants negotiated getting older, being independent and the changing capacities of their bodies.

Percival's research highlights the potential of this method to be used not only in the systematic gathering of data (as many of the archaeologically inspired methods do) but also in exploratory, participatory and open-ended ways. An assemblage interview involves using a set of objects as the basis for generating participant narratives or responses. Robinson et al. (2015: 535) use domestic rubbish bins and their contents as a means to generate narratives about daily practices in the home. The rubbish (usually the kitchen bin) was emptied out onto newspaper, and the whole contents and individual items were photographed. The approach to generating people's verbal responses was open ended, and key individual items mentioned by participants were used to elicit richer narratives related to why it was placed in the bin, who had used it and when. As participants are faced with the entire contents of the bin when responding, they draw upon the relations between things in their responses. So, for example, in one household's kitchen bin contents there were several recyclables, which the interviewee noted were there because they had told their children to put them in the bin and they couldn't be bothered to find the recycling bins. In another similar instance, items such as receipts were put in the bin 'out of habit', even though the participant knew they could be recycled. The possibility that there might be dangerous items like razors in there meant that the bins were never sorted through before being put out. Thus, even when giving a story of an individual item, being faced with the contents of the whole bin serves as a context for these narratives and reflections. The bin is a set of things in relations, as well as participants actively making/commenting upon other smaller sets of relations such as 'recyclables'.

This approach can be adopted for any number of things-in-relations and even within an individual interview you can play with and explore the possibilities of multiple types of relations. You can approach this as:

- **existing things-as-relations** : the collection/set of objects that you decide to use as the basis of the interview, such as a whole

bin, or a music collection;
- **emerging things-in-relations** : these may emerge through the interview, as people make connections themselves (or refer back to historical connections between things, such as music that has been gifted);
- **things-in-relations that emerge through analysis** : this is more the subject of Chapter 8 and the discussion of analysis, but highlights that in doing categorisation you in turn may identify additional relations as being significant.

These are phases of research; yet they also show that collections themselves are already dynamic and shifting. Take the example of wardrobes; as new items are acquired, and items discarded, as well as new clothing combinations made, then the relations-of-things within the wardrobe are always shifting. Methods that use collections to generate people's responses are tapping into these material dynamics. An example of methods which pay heed to and draw upon this dynamism can be seen in Skjold's method of 'clustering' (2014) in her research into Danish wardrobe practices. Drawing from Latour, she sees the clusters of things in the wardrobe not as fixed but as 'stabilised' and relational in terms of the connections between human and non-human actants. Clustering is developed as a method during her interviews, as she gets her participants to put together clothes in piles on the bed, such as, particular types of clothes or categories related to biographical moments. By getting people to make their own categories and mini-assemblages, which draw upon the collection of the wardrobe, as a method this both encourages people to be reflexive about themselves as well as getting people to engage with things in a dynamic way. This method involves:

- giving participants tasks in the interview (such as ordering and grouping things);
- observing how they do the task;
- documenting what the ordering/grouping of things is;
- getting them to verbally reflect upon it.

Conclusion

This chapter has brought together a wider range of disciplinary approaches to understanding the relations of things to each other. Archaeological methods are perhaps the most well developed for understanding the spatial relations of things – alongside methods for understanding defined collections (such as within museum studies). I have argued that these methods have rich potential to be extended to a broader range of disciplines to think about the relations between things. If attention is shifted from just looking at conventionally defined collections to thinking about things-in-relations, then this approach has exciting possibilities as a material method. Not only can attention then be turned to the multiple 'collections' of everyday life as fruitful spaces of analysis, you can also think about these collections as being methodological possibilities. Taking a pile of clutter on a table, a wardrobe, the contents of a room, or a bin as the basis for an interview or observations can offer new ways of thinking about your research topic. It can be a way to get you as a researcher to think differently about your research, as well as getting participants to think differently about their own lives through their possessions.

6 Follow the things

- *What are the methodological possibilities and limitations of following an object's biography?*
- *What other analytical approaches allow an understanding of the material, spatial and temporal movements of things?*
- *How do you follow things that are transformed into materials and other objects?*

In the previous chapter I raised the importance of thinking about what your unit of analysis is (such as a full collection, smaller emerging things-in-relation), as this emerges from your theoretical perspective, empirical focus as well as your methodological approach. These issues will be picked up in this chapter in relationship to follow-the-thing methods; in introducing this approach, I encourage you think about how different ways of following things entail different empirical and theoretical understandings of *what things are* . Follow-the-thing methods may involve following:

- one object as it moves through different domains;
- several interconnected object pathways;
- a type of thing;
- a thing as it is transformed into materials or other things;
- materials as they move through different objects and spaces.

All of these have different empirical focuses, as well as being different analytical routes. You need to make decisions over *what* you are following, how you decide on the *boundaries* of what you are following, and *how* you are following things (methods). These are not always straightforward questions, as following a pair of jeans may lead you to its break-down into shoddy as it is then reformed as a bank-note (Olesen, 2012) or following a ship through its break-down and recycling leads you to second-hand furniture (Crang et al., 2013). Follow the thing is an approach (rather than a method) that draws upon different methods, such as ethnography, observation, interviews, visual methods and archival histories. It centres the material (however defined) with an emphasis upon the **spatial** and **temporal** dimensions of things, as the approach entails following objects/things/materials through different spaces and over time.

The chapter is structured around different approaches to follow the things, which mobilise methods in different ways. I will begin by introducing the approach of object biographies, which has been foundational to the development of follow-the-thing methodologies. The chapter will address different ways of following the things (such as focusing upon an individual site, how things move within a site or as a thing moves between multiple sites), the implications of following different things (whether categories of objects, specific objects or materials) and of which direction you follow things in (whether from an object's production to its consumption, or as it moves from an object to discarded waste to new objects). This chapter aims to get you thinking about follow the things as an *analytical approach* – combining practical and theoretical decisions – where different ways of doing it involve thinking about what things are and where the boundaries of your research and empirical sites fall. I want to encourage you to think about this approach as a different lens through which you can see your research topic; it is an approach that can provoke you to think about your research area and about what things are and how they relate to each other and to spaces differently.

Object biographies: introducing the approach

Following the things can be traced to Appadurai's edited volume (1986), which contends that objects 'like persons, have social lives' (Appadurai, 1986: 3). Understanding these social lives can allow insights into the objects themselves, as well as the social worlds they move through. Appadurai (1986) focuses upon a particular type of object – commodities – and how these come to have values that change in different contexts. He develops Simmel's argument (1907) that the value of commodities is not an inherent property of things, to suggest that you need to explore how objects move through different 'regimes of value in space and time' (1986: 4). Understanding the social lives of things involves both a temporal dimension – as objects change values over different periods of time – as well as a spatial dimension – as the values of things arise from different spaces and cultural contexts.

The methodological implication of objects having a social life is that you need to 'follow the things themselves, for their meanings are inscribed in their forms, their uses, their trajectories. It is only through the analysis of these trajectories that you can interpret the human transactions and calculations that enliven things' (Appadurai, 1986: 5). The methodological and analytical focus is the movements of things themselves, their material forms (and transformations) and what people do with them. Although this method centres objects, this quote makes clear Appadurai's position that people create the significance of things and their meanings. Looking at 'things-in-motion' (1986: 5) is a route into understanding these human contexts. As will be discussed later in the chapter, critiques of the object biography approach suggest that if you understand objects as animated by people, they are rendered relatively inert. Subsequent developments of this method explore how following the things can incorporate their material capacities as well as material transformations.

Following the things centres the movements of things through space – as an object is moved into different contexts – as well as through different values and 'situations'. Instead of approaching an object as a commodity, an object in a particular context may be in the commodity situation (Appadurai, 1986: 13). All objects have 'commodity potential' (Appadurai, 1986: 13); some remain in this state for a long period of time, whereas others move in and out of this state more regularly. The process of commoditisation and the counter tendency towards singularisation are ones of 'becoming rather than an all-or-none state of being' (Kopytoff, 1986: 73). A mobile phone goes through the commodity situation when it is valued and exchanged for money but may be understood as a singularised object when it has been customised with a case, has a particular combination of apps on it, marks where it has been used and messages, photos and phone records that are specific to the individual. When the phone breaks down, or a person upgrades the phone, then the phone is returned to factory settings and may once again return to the commodity status as it is valued and considered for exchange.

The 'cultural biography' or object biography method which ensues from this approach has been developed by Kopytoff (1986) and centres upon understanding the culturally specific meanings of an object in a particular setting as it is classified and reclassified in different categories within settings or as it moves between them. The types of questions you might ask when taking this approach include:

- What are the 'biographical possibilities' of the object (Kopytoff, 1986: 66)? How are these possibilities realised?
    - To address this question, you need to think about what type of object it is and what the specific period and culture is that it exists in. This will allow you to understand what is possible for the object in terms of future uses, categorisations and movements .
- How does the object's use change over time?
- What happens when it is not useful anymore?
- What is its career so far?
    - This involves seeing the history of the object, whether this is through past uses or how it was made and transformed from other objects.
- What is its 'ideal' career?
    - What are the circumstances that would lead to an object having an ideal career and what would lead to it failing to live up to this? It may be that this is due to material degradation as an object stops working, or it wears down so

much that it cannot be used. Alternatively, it may be due to societal shifts that an object is no longer deemed desirable or necessary.

Asking these questions of objects may lead you down different methodological routes. So, for example, to look at changing patterns of use over time you may conduct material analysis of the patterns of wear on an object (such as adapting use-life analysis approaches from archaeology) or ethnographic observations of how people use an object, as well as interviews to explore how this has changed over time. To look at an object's career so far you may carry out life-history interviews or conduct archival research. There are no prescribed methods for this approach; the selection of methods depends upon what type of object you are looking at and which historical and cultural contexts.

In some cases, the methods will come from the object itself; for example, an object with embedded software, such as a mobile phone, lends itself to methods that emerge from this digital materiality. A mobile phone forms an example of what Dodge and Kitchin have called 'logjects' (2009) – devices that through embedded software recall and communicate their history of use. These carry distinct implications for research methods. Beer (2010) discusses this in the case of the mobile music device; mobile music players, like phones, record usage and retain these logs so that the object's history is visible through music downloaded and played. Not only does the object effectively self-archive, which means that these records can be used to trace an object's history, but you could also use this as the basis for *provocative material methods* , such as interviewing people with their phones to get them to talk through and reflect upon the music histories. The methods you adopt also draw from the disciplinary background you are approaching the object from. The object biography approach is one that has been taken up in a wide range of disciplines such as geography, sociology, archaeology (Gosden and Marshall, 1999) and anthropology (such as Van Binsbergen and Geschiere, 2005). While there is disciplinary specificity there is also interdisciplinary borrowing of methods as, for example, ethnographic approaches have been adopted for commodity chain approaches. Rather than be limited by what your discipline usually uses, try to be led by what you are trying to find out, and what different methods make possible.

One of the key premises of Kopytoff and Appadurai's approach (1986) is that it is not just people that have biographies but also objects. However, as Gosden and Marshall note (1999), objects not only accumulate biographies but also objects give biographies to people. Although the main focus of this chapter are methods that centre the biographies of things, another approach to biography and objects is that you can centre the biography of a person through things. Both approaches rest upon the same theoretical underpinning, that 'as people and objects gather time, movement and change, they are constantly transformed and these transformations' arise from the ways in which people and objects are entangled and co-constituted (Gosden and Marshall, 1999: 169). The transformations include changes in the material form or condition of an object, its meanings, what people do with the thing – all of which come together to create an object's biography. As people and objects are entangled, changes in people and practices are part of an objects biography – so too people's biographies are also created through the movements of and transformations of things. To look at people's biographies through things you could, for example, look at objects people have had for a long time, or objects people no longer use (Gregson, 2007; Woodward, 2015) as these can be routes into accessing people's stories and memories (Holmes, 2019), as well as something to be analysed materially for histories and traces of use and ownership. Hoskins' (1998) research in Indonesia looks at objects people carry around with them all the time as a route into accessing people's stories. Her research focuses on how people's biography is externalised through things, as well as getting people to tell their lives through their possessions. This can be done through looking at one particular type of object or by looking at a range of objects (see Guy et al., 2001, for an exploration of this through wardrobes).

Thinking about object biographies and the biographies of people raises the question: to what extent can you think about an object biography in terms of the same boundaries of a human life: birth, life and death? This has been one of the critiques of the approach as it adopts a human-centred approach to objects (these critiques will be addressed throughout the chapter). One alternative is the relational biography approach (Joy, 2009) where the object biography is understood not in terms of birth and death, but in terms of the sum of social relations that constitute an object. Methodologically, this involves looking at the social relations that animate or are animated by an object and allows a shift away from a 'complete' biography. As Joy is writing from archaeology, the methods often centre material analysis (in terms of patterns of wear, patina, exploring multiple possible uses) as well as spatial location and understanding. This approach has the advantage of centring social relations, as well as taking away the need to do a 'full' biography. It raises a key issue to think about if you are taking a follow-the-thing approach, which is: how do you draw the boundaries of what you are following? This is a question that is temporal (such as the timeframe you observe an object over or how much of the object's life) as well as spatial and material (as you are thinking about where you follow it and where the boundaries of things fall).

Where and how do you follow things?

If things are defined as relational (in relation with other things and people, as well as emerging from relations) then you need to think about how you draw the boundaries of what you are following. I have raised this question in different ways throughout the book already – theoretically and empirically. When considered in relation to follow-the-thing approaches, one key question is *where* are you following the thing? This addresses specifically the spatial dimensions of the method, as you are thinking about the spatial boundaries of things and how they move. In this section, I will explore some useful possibilities for how you address this issue.

Focusing on specific sites of transformation

Kopytoff and Appadurai centre sites of exchange as a key place for the transformation of meanings and values of objects; Gosden and Marshall (1999) suggest that this approach can be extended to other sites where there is a transformation in values, materials and practices, such as:

- exchange ;
- performance;
- the reinterpretation of objects in different historical periods (often a useful way of researching larger objects that are not easily moved, such as monuments);
- how a biography is transferred between different objects (also useful for larger objects).

Exploring these pivotal sites and activities for changing meanings can open up how objects accumulate biographies. Thinking about these as spaces, as well as practices (things people *do* with objects as well as *to* the objects), allows us to extend these to (among additional points depending upon the object) sites where objects are:

- made;
- sold/bought/acquired;
- consumed/used/owned;
- stored;
- discarded;
- recycled.

You could approach many different types of objects by focusing upon those phases, to unpick the material, social and temporal changes. You could focus upon one particular site or how objects move between different sites to understand shifts in the material relationships between people and things. So, for example, looking at how an object that is in storage moves to being one in regular use (or vice versa). By engaging with these sites in terms of how people interact with objects, you can understand both potential transformations in things and meanings as well as routinised material relationships. Thinking about one of these phases may entail thinking about multiple spaces as, for example, storage may be in the attic, garage, a parent's house as well as a self-storage unit. A site/phase such as manufacture, storage or exchange needs to be understood spatially but is not the same as looking at one space (this approach will be discussed later) or multiple spaces (discussed below).

Following things as they move between spaces and sites: commodity chain analysis

One of the main approaches to following the thing has been to explore multiple *spaces* and *sites* that the thing moves through; in the tradition of commodity chain analysis, this has involved following things from sites of production, routes of shipping and retail through to consumption. Influenced by Appadurai as well as empirical examples that take this approach for particular commodities (such as Mintz's historical work on sugar, 1986), Marcus' outline of multi-sited ethnography (Marcus, 1995) has been very influential in developing the commodity chain approach. Even though following objects is just one of the approaches to multi-sited research, it has perhaps been one of his most influential legacies. Marcus' approach rests on the premise that many research questions cannot effectively be addressed by looking at one place or site, whereas multi-sited ethnographic approaches allow us to address topics which are, by definition, multi-sited. So, for example, to understand the changing values of a commodity, following the object through different contexts affords insights into the commodity as well as facets of the 'world system' (Marcus, 1995) that it moves through. A multi-sited ethnography is a series of ethnographies each located in specific places and cultures, which are connected by following an object or cultural process and entails a focus upon chains, paths or threads between different sites. Although, as Marcus suggests, this approach has been led by media studies on production and reception of media and STS studies, it has been developed in a range of different disciplinary ways, especially in the development of commodity chain analysis.

Marcus outlines a number of different ways that these ‘threads’ or ‘paths’ can be followed between multiple ethnographic sites, which include following the people, the metaphor, the plot, the biography or the things. Following the things involves a series of location-specific ethnographies, which are connected by the movements of particular objects or types of objects between different sites. This approach has been used to follow the whole trajectory of a commodity from its production through to being discarded (critiques of this will be discussed later) or to look at several sites of exchange of a commodity. Although Marcus outlines multi-sited ethnographies, follow-the-thing approaches are not always ethnographic and multi-sited approaches may adopt other methods (such as interviews or archival analysis). One of the reasons ethnographic approaches have dominated in multi-sited research is through their capacity to both allow an in-depth understanding of people, places and practices, as well as being a method that centres empathy for people. Cook (2006) highlights the political possibilities of follow-the-thing approaches that are done ethnographically as they can defetishise the commodity and allow a connection between producers and consumers as well as make visible and give voice to those who are often hidden from dominant narratives (Cook, 2004).

Following the things within one space

Follow-the-thing approaches tend to follow an object as it moves between different spaces but can be undertaken within one place. Following things within one space will not give an understanding of the whole trajectory of an object but can still be a way to understand particular spaces or practices, or indeed objects. It can allow you to understand the subtle shifts in what people do and how things are used. Gregson (2007) looks at how objects become waste within homes; rather than just focusing upon the act of throwing things away, she looks at a range of domestic practices (using, storing, discarding) within the home to look at how items end up being disposed of. These micro-practices of following things within particular spaces can give you a really nuanced and in-depth understanding of everyday life in relationship to the material dimensions of practices. By following the things within domestic spaces, Evans (2018) suggests that this allows an extension of commodity chain approaches, which often fall short of detailed understanding of what people do with things in their homes and how they dispose of them.

The approach to households involves isolating the household as a 'methodological and analytical tactic' (Evans, 2018: 4) and following the trajectories of things as they move through it (see also Gibson et al., 2011, for a discussion of this approach to sustainable consumption). Evans (2018) has adopted this approach in two projects using very different methods: a laundry study (based on a quantitative survey of 1502 people) and a food study which adopted multiple methods (such as getting people to talk through the contents of their fridges and cupboards). The food study also adopted the methods of observations and talking to people about how things are moved (such as from the fridge to the bin); becoming 'waste' is a physical movement into a bin, a shift in categorisation (once something is categorised as dirty it is unlikely to be turned back into food), a transformation in values, and also a material process (once food becomes mouldy). The range of methods within the two studies show that quantitative survey methods, interviewing or observations are all methods that can address different aspects of following the thing within domestic spaces.

Taking one space and following things within it is one way to set up the boundaries of what you are researching. I introduced the importance of deciding on your units of analysis in Chapter 2 ; this is an empirical decision over what you will be researching (as you decide on your field-site and in material culture research what things you look at) as well as an analytical decision as you think about this in terms of how you are *framing* this empirical field (how you theorise things – as objects, entanglements of relations, or as existing in configurations). Follow the thing can be, in and of itself, an analytical approach to a research area. So, for example, if you are looking at domestic consumption practices within families, following the things in use, as they are gifted and borrowed, is an analytical and methodological approach to this research topic. It might be that you haven't thought about doing an approach like follow the things before, but it can open up a new and interesting angle on many different research topics.

Box 6.1: Methods with potential for following things: mobile methods and rhythmanalysis

Ethnographic methods dominate this approach, yet other methods have potential to be used more. 'Mobile methods' (Hein et al., 2008) centre the body as a medium through which people engage with the world in ways that are simultaneously material, sensorial and affective (Hein et al., 2008). It has been used as a way to understand experiences and perceptions of the built environment through the walk-along interview (see Lewis et al., 2018). These may involve multiple methods of recording such as a video recorder, camera, dictaphone or map. It is a method that predominantly follows the person but as it centres the sensorial and material can be refocused to explore the movements of things more explicitly. Tracking technologies, such as GPS, have been adopted as a way to track the movements of people (Shoval et al., 2014), and indeed of the things that the GPS is embedded in. This could be developed to explore spaces (Licoppe et al., 2008) and routes people and things move through.

Lyon's research (2016) uses rhythmanalysis to look at the rhythms of Billingsgate fish market and the movements of people and things within one place. Lyon adopts a number of visual methods, including making a film based on time-lapse photography to capture rhythms, sounds and movement of the market. Real-time sounds were audio-recorded (from audio-recoded 'sound walks' around the market) as well as images being taken from a camera placed up high to capture the whole of the market hall. These images were speeded up (so 1 hour of images shows in 30 seconds) and played alongside the real-time audio recordings. The explicitly artificial construct of time-lapse photography, in conjunction with audio recordings of sound, allows different insights to straightforward video recording. It allows a wider timescale than ‘real time’, as several hours can be condensed into minutes. This could be developed as a material method as:

- the time-lapse method could be adapted to explore the routes and general passages of types of things within a defined space;
- real-time video can be a way to explore small-scale movements of things within practices (sites of exchange like buying fish);
- the audio recordings of a place can be used to make multi-sensory aspects of the material present (for example, squeak of polystyrene and clashing together of the boxes).

One space, multiple things

The previous approach focused upon one space and following things within it, and can involve one particular object, a type of objects or a range of different objects within that space. Another approach is to start with a particular space and follow the things that constitute a set of practices within a space. Although there are overlaps with the previous approach, it is a subtly different analytical strategy. An example of this approach can be found in Hunt’s (2005) research into childbirth practices; within her research, one analytical and methodological angle she took was to focus upon three objects associated with childbirth with Congolese, Zairian and European colonial uses which then entered the field of childbirth practice under the pro-natalist colonial regime of Belgian Congo and Protestant Evangelical setting. The three objects are bicycles, birth certificates and clysters – all materially divergent objects with different material properties and histories, yet which are unified by the place and the practice of childbirth.

Hunt adopts the method of ‘tracking artefacts in archives and practice, memory and senses’ (2005: 124) by following certain objects, what people did with them and how they were used and reused, using ethnographic and archival methods. The chapter starts with ethnographic research into childbirth in the Belgian Congo, from which setting she traces the colonial histories of each of the three objects, which are still in current use in childbirth settings. Each individual object has its own biography and series of revaluations (including cycles of commodification), which are traced and outlined; however, all three objects arrived and were disseminated within childbirth at similar times. By following the entangled histories of three things as they come together within one set of practices, Hunt explores how all three materialise contrasting ideas of promiscuity and fetishisation, mimicry and ambivalence, laughter and violence (2005: 140). The research process moves iteratively between different methods and routes:

- It starts from the set of practices (birth practices) which are observed ethnographically.
- It traces the biographies of three objects (spatially and temporally).
- The set of practices are re-investigated through these biographies to provide new insights.

This example is one that shows the ways follow-the-thing approaches can afford unexpected insights; understanding childbirth practices could have easily been explored by using the ethnographic methods alone. However, tracing the material histories of multiple things – in different directions – not only produced surprising insights but also lead to a rethinking of the initial field-site.

What are you following: things, types of things or materials?

The discussion over what your unit of analysis is here moves to considerations of *what* you are following. This builds upon discussions in Chapter 2 over the theoretical implications of seeing something as an object, a thing or as an entanglement of materials. While follow-the-thing approaches all follow material forms spatially and temporally, you need to explicitly engage with how you are framing these material forms (as an individual thing, a type of thing, things in relations) in terms of how you theorise them, as well as how you select your empirical examples and field-sites, and the methods you use. Part of this decision includes how many things you look at, given that so many objects are interconnected at different points within an object's trajectory (Cook, 2006). Some decisions over what to follow are ones that you may decide when doing your research if your approach is open ended. You may, for example, decide to follow things to where they end up taking you. However, you still need to be reflexive and aware of what you are doing throughout the stages of planning and doing this approach.

Types of objects

One approach is to follow a type or category of object, rather than specific ones. This echoes Kopytoff's discussion (1986) of what the usual or expected trajectory for a particular object is; in part this involves engaging with what happens to a 'type' of object. Hulme's work on low-price bargain store commodities (Hulme, 2015) is an example of this approach and follows explicitly in the wake of Appadurai and Marcus by making commodities and their biographies the organising principle of her ethnographic work. The commodities Hulme's research centres upon are materially divergent but have in common that they are all sold cheaply in bargain stores in the UK. Due to changes and ruptures in the commodity chain it was impossible to follow specific objects, as low-end commodity chains are changeable and therefore 'unfollowable' (Hulme, 2015: xv). For example, she traced plastic Buddhas, one of the commodities she was following, to the factory where they were produced. However, the next month, the same factory had stopped making them. Hulme's solution to this methodological challenge was to follow a 'typical' low-end commodity chain, echoing Appadurai and Kopytoff's 'ideal' or 'typical' trajectories of types of objects.

She followed eight bargain store commodities and, as these objects all follow through the same sites and types of location, she discusses these sites rather than the eight specific commodities separately. Each site is understood as an interconnection and interaction between places, people, objects and practices:

- The first site discussed is Shanghai's municipal dump – which is the start and end of commodities' lives – through the figure of the waste peddler who sorts through materials to find things of value.
- The second site is the markets in Yiwu, the 'commodity city' in China as wholesalers navigate the wide range of objects for sale, such as plastic flowers and mini Buddhas.
- The third site is the container port as items to be sold in the USA and UK are transported.
- The final site is the bargain stores themselves.

Hulme's approach is in some ways a classic multi-sited approach, by exploring the people, things and practices that interact and are entwined in a series of locations that are unified by the movement of particular things. However, it challenges the limitations of following things when they come to appear unfollowable. This approach is useful if you are interested in a type of commodity, or in developing a broader understanding of how and where things move and how material and value transformations take place.

Specific object

The second approach – following a specific object rather than a category of commodity – is exemplified in Knowles' research into flip-flops (2015). In the introduction to this chapter I suggested that follow the thing is not just a methodological approach but can be provocative and opens up new perspectives and angles. Knowles' research is a case in point as following flip-flops is an 'analytical' approach (Knowles, 2015: 240) which opens up new empirical sites and ways of thinking theoretically about globalisation as characterised by uncertainty and precariousness. The routes and methods of following the thing arise from the object itself, as the flip-flop is one of the most widely worn and cheapest forms of shoe globally; the routes the biography takes are into the ‘backstreets’ of globalisation (Knowles, 2015).

Knowles traces the flip-flop’s biography from its material beginnings through to the finished product. Object biographies – even if not traced from their creation – are always material; they are perhaps better defined as object-in-formation biographies as they start with materials and the stages through which it becomes an object. The flip-flop biography focuses upon a series of places, people, materials and practices:

1. It starts in Kuwait, with geologists and the multiple locations of oil.
2. The trail then moves to South Korea to the polymer section of the petrochemical plant where plastics for flip-flops are made (polyethylene). This is situated in a broader discussion of the Korean context as being prosperous through oil but as they don’t have their own supply this also makes them vulnerable – highlighting the ambivalences of globalisation.
3. The next stage is China and the cheap plastic pellets used to make flip-flops through the backroads of globalisation to small factories in industrial villages. The biography focuses upon the material processes to make flip-flops (10 production processes to make flip-flops, such as weighing ingredients and assembling plastic sheets) carried out by 16 to 20 people. Focusing upon this site also allows a tracing of the lives of Chinese migrants from rural places to factories to get work.
4. The flip-flops then move to Addis Ababa in Ethiopia where they are used and reused, sold in markets here, disposed of and, as they have no reuse, become landfill.

The story here follows the trajectory of the object from its birth to death but challenges the conventional movement to consumption in the West, and sites such as the UK and USA, by showing a different circuit of consumption as well as showing the 'back-routes' of globalisation.

Box 6.2: Following specific (individual) objects

Beisel and Schneider (2012) explored the material and social transformation of a German ambulance into a Ghanaian minibus (tro-tro). As the Ghanaian minibus still had the unique ambulance radio number on its side (7/83–2) they were able to trace the specific minibus back to the location in Germany it came from. Beisel and Schneider's example is interesting in terms of both following a unique object as it is transformed over space and time as well as in their use of the 'geobiography' method (2012: 643). The method has a temporal, material and spatial focus in how it looks at the changes the object goes through in different locations.

The tro-tro started as a rescue car in Germany with the Red Cross where, after it had had an accident, it was bought by a Ghananian car trader living in Germany. It underwent a physical transformation, as the stretchers were ripped out, windows were cut into the back and it was renamed 'Dr. Jesus' beginning its life as public transport in Ghana. There were still some continuities – it was still a Mercedes Benz car with the traces of its former name and number on the side. The transformations were not just physical transformations, but also within specific contexts as it moved from the global north to the global south. It went from being an object of safety (transporting people to a hospital) to an object of danger (with very high levels of car crashes of second-hand cars in Ghana). The material changes of putting benches in the back make it more vulnerable to accidents as it is less robust than it was. This fragility is context specific as the car will be travelling on poor roads in Ghana, where drivers want to make as much money as possible, as cars are packed too full and move too fast to speed up journeys. The geographical, temporal and material intersect.

Through looking at one traceable object you are able to see the specific history and obtain an in-depth understanding of material and contextual transformations. This specificity is still situated in the wider transformations and movements of similar objects.

Follow the materials

One of the criticisms of Appadurai's formulation of object biographies is that the meanings of objects are seen to derive from different regimes of value, without making the objects' materiality an integral part of how the meanings and possibilities of objects change. While this is not true of the object-in-formation approach I outlined above, there have been more radical attempts to challenge object biography approached by following the materials (Drazin and Kuchler, 2015). Instead of focusing upon birth and death that is implicit within an object biography, the focus is, akin to a new materialist perspective, on the vitality of materials (see Bennet, 2009 and Barad, 2003) and the effects these have as cultural forms are shaped around them. Materials have no birth and death but 'emergences and re-emergences in reconfigurations of matter' (Drazin and Kuchler, 2015: 27). The lives of objects and materials do not always match as things can endure when materials decay or things fall apart yet their materials endure. Adopting an approach that follows the materials opens up an understanding of the potential discrepancies between the lives of materials and the lives of things. It is both an approach for those who are interested in particular materials, as well as an analytical approach, as following the materials can open up new ways of thinking (see also Gregson et al., discussed in the final section).

The outline of the follow-the-materials approach in Drazin and Kuchler is predominantly theoretical, although it is developed through a series of empirical chapters mostly adopting ethnographic methods – there is no explicit discussion of the methodological implications. The methods are focused on more explicitly in Weismantel and Meskell's (2014) comparative archaeological study of figurines in Catalhoyuk and human effigies of the Formative region of Moche (Peru), which focuses upon both material substances and also material contexts. The two empirical examples are very different, yet were selected for comparison for methodological reasons: to show what the method allows in very different temporal and spatial contexts. In their version of this methodological approach, they focus upon material substances and material contexts; in these examples, this meant looking at how material substances were sourced and how they were turned into, for example, the figurines. Starting with the objects, the authors follow the materials to where they come from; like Hunt's research into birth practices (Hunt, 2005) already discussed, they start in one site and follow the materials out (where Hunt followed the objects) and then back to the site to understand how the site, objects and practices have come to be assembled.

The focus on material contexts meant that they sought to understand the wider context of materials; so, for example, they did not just look at clay in terms of how the figurine was made, but wider contexts of how clay was used in making houses. This helped to shed light on what the capacities and possibilities of a particular material in these contexts were. For Weismantel and Meskell (2014), their approach of following the materials means they shift from the conventional approach of seeing the figurines as representations of people to understanding what people were able to do with these objects/materials or say with them that their own bodies could not. Follow-the-materials approach is an *analytical way of re-framing the object* and thinking about a research area differently.

Which routes and directions do you follow?

Many of the questions around how to define the empirical boundaries in your research and your units of analysis are common to all of the material methods in the book (such as deciding what things are, where things end, how and where to do research). However, the question this final section will address is particular to follow-the-thing methods: how to decide upon which routes and directions to follow a thing. I will outline three approaches to get you thinking about the possibilities of what can be achieved by following the things in different directions. Things don’t always move in a linear way, and so, nor should your research methods expect them to.

Reverse commodity flows

Reverse commodity chains form a challenge to conventional commodity chain or object biography approaches. For example, Crang et al. (2013) in their research on used clothing and broken-down ships, challenge conventional commodity chains by both charting movements from the global north to the global south as well as charting how goods become materials and then recycled commodities. This raises the importance of thinking about where you start your process of following the thing; there is nothing ‘natural’ about starting with materials that are made into a commodity. End points can also be starting points as materials are transformed into other materials, and things are recycled into other things. Recycling and remaking are processes that problematise what you are following as, for example, clothing can be transformed back to fibres and then into upholstery. Norris’ ethnographic work on clothing and recycling (2012) follows unwanted clothes given to charity shops that are recycled in India and turned into aid blankets for humanitarian relief. She traces this process of value transformation in terms of categories of goods (gift-waste-commodity-gift) through detailed understanding of the material transformations. In her research into the recycling of unwanted saris (Norris, 2008), she discusses how the properties of the sari are ‘unbundled’ (the opposite of the process of ‘bundling’ that Keane discusses (2005). Recycling is a process through which the material qualities of the old saris change and are ‘re-bundled’ in the making of new things, such as furnishings to be consumed by an Indian urban elite.

Starting at the ‘end of life’ is also the approach taken by Gregson et al. (2010) in research into ships as they are broken down into materials and reworked into furniture ending up in middle-class households in Bangladesh. This approach questions the object biography approach, which implies a clear beginning (birth) and end (death). When you carry out a follow-the-thing approach you have to decide where you are starting (even if you acknowledge that this is one of many possible start points) and when you stop following an object. The beginning and end are your decision, not a 'natural' or automatic point; designing a follow-the-thing research project means deciding:

- what you are following;
- where to start – whether you start from a commodity, raw materials, recycled materials, an object being repaired. Any point can be a start point for research;
- when to end – as materials do not disappear but may continue beyond the life of an object or combine with other things to become other materials or things. You need to decide when you will stop following the materials/things. This can be practical (in terms of what is feasible to follow), analytical (in terms of how you have defined your unit of analysis);
- what the 'boundaries' are – even if the process is organic and you follow the 'thing' or materials where they lead, you still need to be aware of this.

How you make these decisions arises from what you are trying to find out; it may also be that you want to think creatively about how you follow things and, as such, are making an analytical decision to adopt an alternative route/approach.

In the example of ships (Gregson et al., 2010) in Bangladesh, when they are broken down, meaning is shed from the object rather than acquired (as per a conventional object biography). Instead, the value comes from the ability of the ship to mutate and be broken into different materials. Theories of new materialism, such as Barad (2003), argue that for things to be held together requires work as things are unstable (hence why they fall apart or need to be repaired; see also Graham and Thrift, 2007). Gregson et al. suggest that follow-the-thing approaches, which trace materials becoming finished objects, effectively *stabilise objects* . The methodological approach has ontological implications as objects come to appear stable and coherent. Instead, if you follow the object in the opposite direction, this opens up the possibilities for seeing things as just assemblages of materials that come together or are disassembled. Thus, how you adopt a follow-the-thing method has implications methodologically, empirically and ontologically.

Disrupting linear approaches: circuits and interconnections

The circuit of culture approach (du Gay et al., 1997) takes the example of the Sony Walkman and explores a range of fields and practices. Instead of starting at the beginning of the Walkman's biography and looking at production as the process through which meanings are imparted on the objects, the circuit of culture approach is one that looks at the 'articulation' (du Gay et al., 1997: 3) of numerous different elements. The circuit of culture includes five interconnected cultural processes through which cultural artefacts can be approached:

1. How is it represented?
2. What identities are associated with it?
3. How is it produced?
4. How is it consumed?
5. How is it regulated?

In du Gay et al.'s book, each chapter approaches the Walkman through these interconnected phases; the approach is circular and multi-directional. When they look at, for example, the process of representation as a means of creating meanings, this is connected in to the processes through which, for example, consumption and production also produce meanings for the Walkman. This approach can be usefully developed for projects that do not necessarily need to follow the whole trajectory of an object but are instead interested in the interconnection of different domains.

Object itineraries: lines and relations

The final approach I will introduce is one that explicitly challenges the premise of the object biography approach: that an object's life can be understood through the stages and lens of human lives. Joyce and Gillespie (2015) suggest that approaching the movement of things can be understood as an object itinerary. The object itinerary is a direct challenge to the object biography approach in two ways: first, it suggests that seeing objects in terms of a birth, life and death fails to attend to the movements and transformations of things and second, rather than spaces and cultures giving objects meaning, objects are productive of the space and social relations they move through. They outline the approach as tracing 'the strings of places where objects come to rest or are active, the routes through which things circulate, and the means by which they are moved' (Joyce and Gillespie, 2015: 3). As the term 'itinerary' suggests, it is the mapping of a series of places that things move through and methods thus centre the 'spatialized and temporalized flow of things' (Joyce and Gillespie, 2015: 5). The key features of object itineraries to think about if you adopt this approach are that they:

- may converge at certain points with other itineraries;
- have no beginning, other than a point that the researcher enters into them, nor a natural end, as they carry on, even if a thing is broken down into materials;
- include movements as well as periods of stasis;
- follow the thing itself as it moves, as well as the representations of things which may still travel (such as a photo of an object) which are part of the continuing effects that an object may have. This approach, therefore, allows an understanding that things can be transformed into materials and other things. The continued lives of representations (such as photos) are part of the object's lives.

The potential applications of this approach are vast, not least as they open up that follow-the-thing approaches do not need to follow a full trajectory of things, can incorporate stillness as well as movement, and that as things move in different directions at different speeds you can think about how you pay heed to this. This approach connects well to others already outlined – not least where you follow things within a particular space, or a series of spaces. It also outlines the possibilities that you can trace the 'lines along which things live' (Joyce, 2015: 22), as things are part of the relations between places. Given the potential overlaps with other methods already outlined, I will finish by outlining what the potentially most original aspects of the approach are:

- They lend themselves to a focus upon the circulation of things. How things circulate could be approached in terms of things themselves or also in terms of the technologies through which they circulate (seeing the movements of things within socio-technical frameworks).
- They can be used to understand both the movements of things and of things as they become representations.
- They can be used to look at one space in terms of:
    - where things are, where they came from and where they might go;
    - how things assemble in spaces, how they move into spaces, and how they rest in spaces.

Conclusion

The follow-the-thing approach has been heavily influenced by the premise that objects have biographies; this has been really useful methodologically in opening up a way to explore the lives, movements and transformations of things as they move through different spaces. It has allowed for an understanding of the mobilities, temporal and spatial dimensions of things, as well as shifting valorisations. It has been criticised for its failure to attend to the materiality of things (as meanings of things are reduced to contexts rather than material changes and vitalities) as well as for mapping the parameters of a human life onto objects (which are seen to have a birth and death). There is much to be gained from adopting an approach which follows the lives of things, but in doing so you need to understand how the meanings and vitalities of things are not just derived from how things move or the contexts in which people use them.

Alternative approaches have highlighted that there is no ‘natural’ point for starting and ending your empirical research into following things, as attention must be paid to where you start and when you stop. I have discussed the importance of thinking about what you are following (is it a thing or materials-in-relations?) and how you think about the boundaries of what you are following. This is a practical question, as you need to delineate your empirical field, as well as a decision over what matters most in your research and what analytical angle you are taking. Seeing follow the things as an analytical angle is one of the most useful points you can take from this chapter; it is an analytical angle that you can take to many different research projects. In the chapter, I have shown that this approach does not need to just be taken to global commodity chains, but also can take place within one small-scale site, which means that it has wide potential application. It is an approach that can encourage you as a researcher to think differently about your research topic and what you are trying to find out. Like all the material methods in this book, it can prompt participants to think differently about objects and social relations, and also provoke you as a researcher to think differently about your research questions, theoretical approach and field of study.

In this chapter, I have mostly focused upon different ways to take a follow-the-thing approach, as these approaches draw in different methods. Follow-the-thing approaches often entail an ethnographic methodology that allows researchers to move between different sites that the object is situated in as well as observe the people, practices and objects within specific sites. The next chapter will focus explicitly upon the possibilities offered by ethnography as a material methodology.

7 Ethnographic approaches

- *Which features of the ethnographic approach lend themselves to understanding the material world?*
- *How can ethnographic methods be reframed and adapted to allow a focus upon the material?*
- *How can you attune yourself to the ways in which objects and materials are perceived, experienced, used and understood by others?*

Ethnography is best understood not as a method but as an *orientation* and approach to empirical research which involves drawing upon multiple methods – such as observation, participation, interviewing, photography – that are adapted to suit the particular research question and context. Ethnography is a well-established methodology used for research focusing upon material culture, materiality, or materials and their relations. While there is an expansive literature upon ethnography more broadly, as well as literature on specialist variants such as sensory ethnography and visual ethnography, there is an absence of attention to what I will here define and develop as material ethnography. In this chapter, I will approach ethnography as a material method, which entails asking:

- What are the existing facets of the approach that lend themselves to understanding the material world?
- How can it be developed to foreground material relations more explicitly?

Ethnography is an orientation to empirical research that can help you to think about the material world by attuning yourself to things and their capacities through observations and participating in material practices. It can also be used in a more radical way: by building upon definitions of ethnography as a way of understanding how research participants think through things (Henare et al., 2007), you can also use it as a way of challenging your ontological assumptions about what things are and what they can be.

Ethnography is one of the most widely adopted methodological approaches to material culture outlined in this book; it has a strong disciplinary association with anthropology, with a parallel yet distinct historical trajectory in sociology. Since the ‘material turn’ it has been widely used for research in a range of disciplines for research that foregrounds material relations, such as within material culture studies of consumption (Miller, 1998), craft and design (such as Braithwaite, 2017), and science and technology studies (see Stephens and Lewis, 2017). Whether the emphasis is upon particular objects, relations between things or how things mediate encounters between people (such as Graizbord et al., 2017) the ethnographic approach is one that has been adapted to think about materiality, material practices, material relations and the temporality and spatiality of things. Ethnography is, of course, not exclusively used for material culture projects, but there are ‘material possibilities’ (Geismar and Horst, 2004: 7) of ethnography that I will explore in this chapter.

The chapter will tease out the possibilities and implications of framing ethnography as a material method. I will outline what ethnography is and the key features that lend themselves to material culture study; I will then outline how to orient yourselves to doing material ethnography – including where theory fits into this process. This includes thinking about the ontological possibilities of letting your theories and understandings of things emerge from your fieldwork. Finally, the chapter will explore some specific methods that are used within ethnographic research and the potential these have to help you attune to the material. Overall, this chapter aims to get you thinking about the material possibilities of ethnography and how these can be developed to even more explicitly engage with the multiple facets of the material world. In turn, I want you to think about how this can open up how you think about things and what they are as this *emerges from* your research.

What is ethnography and what are its material possibilities?

Ethnography, participant observation and fieldwork are all terms that have been used interchangeably (Delamont, 2007), although fieldwork is often used to delineate the temporal framework of doing empirical research, and spatial period of being ‘in the field’. Participant observation is a term that captures the core approach of ethnography, which is that it involves the researcher doing immersive empirical work, which takes place over a period of time. In its origins, this meant going and living within a community for a long period – often more than a year – and observing what goes on, as well as participating in the life of that community. This model has looked increasingly tenuous due to both societal shifts, which mean that people do not necessarily live in bounded communities, as well as fieldwork taking place ‘at home’ – that is, anthropologists researching in countries they already live in. The lack of boundedness of people and place is particularly marked in ethnographic work in urban environments. Despite these changes and challenges, there are still some core features of the ethnographic approach which remain:

- It is an **immersive** approach; even if participation does not extend to living with a group of people you still participate in activities in a place.
- It is **holistic** as, even though you will have a foregrounded research question and focus, this is situated in broader aspects of people’s lives. Thus, even if an ethnography is not explicitly aiming to interrogate material culture, it will still retain an awareness of everyday relationships, practices (which are often material) within particular spaces.
- It is **open ended** , wherein the researcher aims to explore fully a site, set of people, relationships and objects and is open to being surprised at what they find.
- It involves **multiple methods** (even if the specific methods differ), involving the observation of what people do as practices

and objects are seen as integral aspects of particular cultures, as well as some form of participation – this may be partial to allow you to get a feel for what people do (Delamont, 2007), or more complete which involves, for example, learning a particular skill that is being done. The core methods are ones which are based upon participation, observation, ethnographic interviewing and impromptu conversations which are jotted down by the researcher. Many projects incorporate photos, videos, and other multi-source analysis, such as archives, oral histories (Atkinson et al., 2001) and so on. The possibilities of specific methods will be discussed towards the end of the chapter.

While these are not comprehensive, they highlight some of the key features of the ethnographic approach; they point towards the kinds of research questions and project the methods may be used for. Given that ethnography is used for a wide range of non-material culture projects, I will here outline how these facets lend themselves to research into material culture in particular as well as how to draw out the potentials of this approach more explicitly. There are four key features of the approach, which I identify here, that lend themselves to being developed as part of a material-centred ethnographic approach.

Non-linguistic and multi-sensory

The methods of observation and participation are ones that centre what people do, and not necessarily what they say. As has been discussed in the theoretical chapter (Chapter 2), theories of material culture do not prioritise a linguistic model of culture but instead often centre practices, processes and transformations. And so, it follows that methods most compatible with a material culture approach are those that do not reduce an understanding of things to what people say about them. Even theories that suggest that material culture can communicate meanings (Tilly, 2001) see this process of communication taking place in a very different way to a verbally articulated language. The meanings of objects may be autonomous from what people say about them. While informal conversations and ethnographic interviews are part of an ethnography, methods of observing what people do with things, where things are and how things change, are also central facets of the method. Understanding things may come from understanding the objects themselves – their materials, design, how things are made, patterns of wear – as well as from observing how they are used, are moved and change over time.

Objects work in a different way from language due to our 'thickly textured phenomenological experience of the thing with which you may engage the full range of your senses: a synaesthetic interaction and knowledge' (Tilley, 2001: 260). Ethnography is well positioned to explore these multi-sensory facets of the material, which are part of our engagements with them in everyday life (Geismar and Horst, 2004). This is so even for ethnographic approaches that are not centred upon the multi-sensory aspects of the material world; given that you are physically present with people in situ, it is impossible not to smell, feel, move with and see people and things around you. These are all implicit ways in which you come to understand the place in which you are doing research. Immersion is by definition multi-sensory. Ethnography is an approach that you can use to attune yourself to the role the senses play in people's lives. In this vein, this chapter will explore what I have termed a 'material ethnography' could look like. I use the term material ethnography as a way to think through ethnography as a material method (and also as a shorthand to emphasise that I am writing about the material aspects of ethnography). This will look very different depending upon what aspect of the material world you are focusing on, as well as how you are theorising it. In Chapter 2 , I introduced some of the competing theories of material culture and materiality which lead to very different ways of understanding what things are, as well as how you frame your empirical field. Despite material ethnographies being multiple and varied, they have in common that:

- they centre the material – in whatever form this is conceived – as part of the research question and focus. The material is the *foregrounded issue* not just a background aspect of everyday life that implicitly informs our understandings of a place/people. It puts a spotlight onto the implicit ways materials frame everyday life (Miller, 1987) and experiences .

- the immersive, observational and holistic approach of ethnography allows us to explore the material world.

Holistic, contextual and relational

Ethnographic research is defined as holistic; that is, although you will always have a clearly defined research focus, you will always situate this in broader local contexts and understandings of what people do. This entails seeing different aspects of people's lives *in relationship* to each other; and so, you may go into an ethnography with an interest in local food cultures, but the fieldwork may involve looking at food practices in relation to how people organise their homes, their living arrangements, technologies, how people interact with each other, to name but a few things. Objects are a key facet of these relations between people and spaces, as well as other objects (Geismar and Horst, 2004). The emphasis upon local contexts allows an understanding of these relationships but does not predetermine what they are. Chapter 5 outlined methods that explicitly centre the relations between things; ethnographic approaches can also be useful ways to investigate material relations. In ethnographic research, objects don't exist in isolation, but are always contextualised. While you could develop ethnographic methods for research underpinned by any number of theoretical approaches to the material world, given the way objects are understood contextually in ethnographies, it lends itself in particular to research using relational theories of things and theories of the relational entanglements of materials.

Ethnographic approaches centre practices, which can be defined in a basic sense as what people do with things in particular places, drawing on related knowledges and skills (Warde, 2005). And so, even ethnographic research, which is not focused upon objects, by including what people do – their practices – will implicitly involve observations of what people do with objects and technologies. A focus upon practices is one that implicitly draws upon objects, and in developing ethnography as a material method this would involve bringing these objects to the fore. As will be discussed later in the chapter, observations of what people do with things, as well as participating in embodied, material practices are already central aspects of ethnographic methods (for example, Garner, 2004). These methods are ripe for development as ways to attune yourself to the material aspects of practices.

Openness

If you are doing an ethnography, you will go into the field with a clear sense of what you are focusing upon; however, you also need to remain open to the unexpected. Being open minded to what you might find is a central part of the ethnographic approach. Rivoal and Salazar (2013) talk about the connections between ethnography and serendipity – the chance encounter – which is of course possible through other methods but is particularly enabled by the ethnographic method (see also Fine and Deegan, 1996). Rather than being a byproduct of the ethnographic process, this is in fact a key orientation, an openness to the possibilities of what you might find, as how you orient yourself to 'the field'. Serendipity also incorporates the ways in which an ethnographer may, through immersion in the field, see connections between things that are unexpected, or have the insight into what fieldwork is 'really' about. These insights may come when you are doing fieldwork or in a period away from your field-site reflecting on the findings or even on a return visit to the field.

While Rivoal and Salazar (2013) are writing about the links between serendipity and ethnography more broadly, this has clear implications for material culture research. Being open to what you will find out (see Halawa et al., 2018, for a discussion of this in relation to household spreadsheets) also entails being open to which things matter and what material relations are like in a particular context. It might also entail being open to *what objects are* – which will be developed in the next section on using ethnography to orient yourselves to things. Thinking in an open way about what you encounter in the field could entail thinking about what a thing is to the people that use and interact with it, as well as drawing unexpected connections between different objects within a particular context.

This openness that inheres to ethnographic approaches fits with several theoretical approaches to things that I outlined in Chapter 2 , such as new materialism (Barad, 2003), where things and their properties are seen as emergent, and also actor network theory (ANT) and its emphasis upon the interrelationships between humans and non-humans. Ethnography has been a very popular method for ANT approaches not least due to this openness, its relational emphasis and the focus upon the messiness of practices which incorporate objects and technologies (Nimmo, 2011; Law, 2004). This openness has been exploited in ANT approaches to decentre humans and focus upon the hybrids that emerge when looking at humans and non-humans together.

Multiple perspectives

When you do ethnographic research you are trying to understand how people experience their social and material worlds and, therefore, taking account of the perspectives of different people (see also Copertino, 2014, for an example of this). This can be extended to think about how people can experience and understand material relations differently within the same setting. For example, in Garner's (2004) research into trees, metaphors and identities in Hatfield forest in Essex, the research centred the trees (their history, morphology and placement) as actants (drawing from Latour) in the productions of a range of meanings. However, this relationship between trees and people differs significantly for visitors, volunteers and the wardens. An ethnographic approach which centres the trees and the forest is able to pay heed to the perspectives, practices, knowledges and skills of different groups through participant observation with these different groups. It therefore has the capacity to explore how things are experienced, understood and used differently depending upon the capacities of the bodies using them, as well as the skills and knowledges that are brought to bear (see Gibson, 1979 as discussed in Chapter 2).

Orienting yourself to things: ontology and epistemologies

Having identified these four key features of an ethnographic approach which lend themselves to a material culture approach, I will here develop these into how you can (re)orient yourself to things and material practices through ethnography. As has been outlined already, the immersive, holistic and contextualised features of ethnographic research mean that objects are often already part of research practices and the data produced. This section will explore how you can orientate yourself to objects within research which can also be a process through which you *frame* a research area/question as a material one.

Box 7.1: Case study: reframing and adapting ethnographic approaches through a defined theoretical approach

How ethnographic methods are adapted for research into materiality depends upon the particular theoretical framework research takes. I will illustrate this through an example that uses a new materialist framework in Schadler's research into parenthood (2017). As was introduced in Chapter 2 , new materialism is a term given to a set of theories (such as Barad, 2003) which taken together suggest that everything is part of an assemblage. Nothing 'causes' or precedes the assemblage (even objects) but rather *become with* it. Schadler explicitly engages with how to adapt ethnographic methods that have been created through other theoretical frameworks through two research projects: one on becoming mothers, fathers and children and the other on the family as nexus of material-discursive practices. As is typical of ethnography, both projects used multiple forms of data collection, such as interviews, observations and re-enactments. Re-enactments were used to allow the researcher to engage with the material experience of participants by using objects people talked about to try to imagine participants' experiences and perspectives.

In keeping with her theoretical framing of new materialism, Schadler drew upon understanding of assemblages that incorporates people, things and spaces to develop her ethnographic interview questions on processes, spaces, other people and objects not present in the interview. For example, in an interview on pregnancy, the interviewer asked the participant how she found out she was pregnant, what she remembered, which pregnancy test was used (including questions around which ones weren't selected), and where the test was done. For observational methods, the practices involved not just observing people and how they interact, but also the physical environments, spaces, objects and how they are used. The researcher then engaged in re-enactments of things the participants talked about to think about and imagine how she felt (using objects to provoke the researcher to think about and imagine how participants would have felt).

These projects have both adapted traditional methods of ethnographic interviews and observations as well as adding new ones (re-enactments) to fit with the approach and questions the project is addressing and to allow a centring of the material.

One of the key challenges I engage with in this book is how to adapt existing methods to allow objects to be centred within the research. As I outlined in Chapter 2 , the theoretical ways of approaching materials and materiality are multiple but have in common a material-oriented ontology. As you develop your research you may have a pre-existing interest in a particular theoretical position, which leads to you reflect upon how you use methods that allow you to foreground the material world. I would here like to outline a different approach to how you theorise things and its connection to methodology: an approach that emerges from, and is specific to, the possibilities of ethnography. As already discussed, the openness that inheres to ethnographic approaches is one that can entail being open to findings which are surprising and challenge and question your assumptions; Henare et al. (2007) suggest that the approach of the researcher is often then to ‘explain these away’. Instead, Henare et al. (2007) propose that an artefact-oriented ethnographic approach would involve you ‘taking things as they are’ (a position I introduced in Chapter 2). They illustrate what this means through the example of Holbraad’s research on aché (meaning powder), which for Cuban diviners in seances *is* power.

- An *analytical approach* to this would start from the premise that people in the ethnography believe powder is power but as you ‘know’ powder to be a material substance, the researcher’s task is to explain how they come to think this. In this model, the world of materials and matter exist but are represented in different ways dependent upon context.
- Instead, they suggest a *heuristic approach* which means seeing powder as power and develop a theory of things that incorporates this. Doing an ethnography is not ‘after’ theory but instead opens up the possibility that existing theories about objects may be inadequate.
- Things themselves ‘may dictate a *plurality* of ontologies’ in different ethnographies (Henare et al., 2007: 7). In the approach that Henare et al. are outlining, there are different ‘worlds’ not just different cultures that represent a universal natural and material world in different ways.

The methodological implication of this is that the ethnographic process allows us to attempt to understand objects and materials as others do.

The ethnographic methodology centres things as they are experienced and understood by people and, following Henare et al., uses this to be generative of theory and understanding (see Reed, 2007, for a good example of this approach). This involves developing ethnographic methods that centre objects and materials. Spriggs’ (2016) work on the uurga – a type of Mongolian lasso – attempts to develop methods to adopt the ‘impossible perspective’ of the object itself (Spriggs, 2016: 408), by following the uurga as it mediates animal and human worlds. The uurga is a wooden pole with a leather loop at the top, which captures an animal, usually a horse, to become domesticated as part of the home. The research adopts the uurga as a material frame through which to understand the environment of the steppe. In Mongolia, there is an animist ontology as objects and animals are understood to have souls; the methodological challenge of understanding this is, for Spriggs, to think through the uurga which is granted an 'ontological perspective' (Spriggs, 2016: 415).

The methods Spriggs developed evidence the openness of the ethnographic approach. The researcher stayed with a Mongolian family and, due to a lack of shared language, carried out observations of people, things and practices, including observations of the uurga, where it rested, when it was used and where. As well as observing the uurga, she did drawings of it for an 'embodied, empathetic form of witnessing' (Taussig, 2011 cited in Spriggs, 2016: 418) as a way to get to knowledge that is not verbalisable. Attempting to get the perspective of the uurga proved challenging as people travelled on horses with it and so she attached a small camera to the uurga and afterwards on watching the videos noted the many different shapes and loops it makes as it moves. It is this confusing lack of fixity of shape that means the horse cannot easily evade it, and the researcher can begin to see it in the ways horses do, as the methods here allowed a shift in perspective.

If you are using ethnographic methods for thinking about material culture, you need to find ways to centre objects as described in the example of Spriggs' research (2016). This may involve you developing new methods, or adapting and refocusing the pre-existing methods. You need to be attentive to things as you generate and hone the methods as well as thinking reflexively about how the methods allow you to attune yourself to things. In other instances, attuning yourself to things involves reframing something as an object; so, for example, in Wright's research into photography in the Solomon Islands (Wright, 2004) rather than approach the photograph as image or representation, his emphasis was upon the photograph's ontology;

that is, what it is and what it does (what effects it has). This orientation then involved reframing what a photo is, thinking about it as a 'photo-object'; the ethnographic practice involved exploring what photography already means to the Solomon Islanders. This impacts then upon how they perceive, use and react to photography now. Wright's approach is one that frames photographs as objects; in other instances, practices may be reframed as material practices. In Hodson's research (2017) the ethnographic process explored abstraction in art as a material process, rather than a symbolic or non-material process as it is often understood. Instead of attempting to understand the symbols and shapes on the artwork Hodson looked at the material practices through which things are made and, in turn, sold.

Methods

Ethnography is a methodology that does not have a prescribed relationship to methods; however, there are many methods that lend themselves to the aims of an open-ended, immersive methodological orientation. I will, in this section, outline some methods that are adopted within ethnographic research and how these might be developed in particular for material culture research. Although many of these are not by definition ethnographic or even material culture methods per se, I will here consider the ways in which methods lend themselves to, and have been used in, material ethnographies. Often in ethnographic research there is a sense of 'seeing what works' or methods that emerge and are changed as the research takes place. However, given the centrality of observation and participation, I will outline these first.

Observation is not only the act of looking and describing but also the act of perceiving or noting something as significant. The ways in which you may do observations differ depending on what your research project is, whether you do observations at particular times, of particular events or around particular themes. You may do general observations of what people do, or more specific focused observations of particular practices.

Observations can involve:

- observing an activity that takes place (or a series of activities in a particular place) and making notes and/or take photographs or videos. Observations in material ethnographies would always include things, as you would observe how they are used and (where appropriate) how they are transformed and moved;
- participant observation, where you are also taking part in an activity in some way, even if it is in a more peripheral or supporting role;
- focusing upon the senses; you will not just be watching when you observe but also listening, talking, touching, or carrying depending upon what the activity is.

The relationship between observing, participating and talking shifts and often emerges organically. For example, in Garner's (2004) ethnography into trees, metaphors and identities in Hatfield forest in Essex, trees are framed as actants. In one material practice he describes how wardens and volunteers clear an enclosed area of coppiced woodland and the physically challenging, sweaty labour involved in cutting back the trees. In between clearing the space, the group sit down for tea/coffee breaks, which offer a chance to reflect on the process. One person said that the trees allowed them space to think, and another person imagined historically people coming and felling the trees. Although the methods are not explicitly stated (as is often the case with ethnographic research within anthropology particularly), it appears that Garner observed this practice taking place, as well as participating in the practice. As part of the process he sat down with people while they reflected on it, as he was able to then get people's reflections in situ rather than in a separate formal interview space.

Observations are one of many methods employed in ethnographic research, but can, like the above example, be carried out in combination with other methods. A key feature of observations entails ‘being there’ and also talking to people, which may be informal conversations to be noted in fieldnotes, or more formalised ethnographic interviews. You might use them to get people’s accounts of what they are doing or in other instances to explore things that are not observable. This is evident in Mohr’s ethnographic research in Danish sperm banks (Mohr, 2016), which was carried out alongside interviews with sperm donors. The research aimed to explore how sperm donation becomes legitimised, to see what work is involved in labs to contain semen’s ambiguous and multiple qualities and attempt to contain it as a reproductive substance and thus make it governable. The ethnographic methods include carrying out fieldwork at several sperm banks, where Mohr observed the practices, as well as talked to people. The fieldwork took place in a series of spaces within the sperm banks (and so this fits also with a follow-the-thing-type approach described in Chapter 6), looking at the practices of managing the sperm, as well as which objects are involved in these processes. The sites included: the registration desk, labs, rooms for physical examinations, as well as interviews with potential donors. Mohr suggests that the containment of sperm involves ‘material-semiotic practices’ (Mohr, 2016: 321), which meant he needed to understand how the lab staff manage and deal with it as well as the language used. His research centred the objects used in this process: cups, pipettes, test tubes, vials and straws.

The ethnographic process within the sperm banks thus focused upon a series of encounters with donor sperm, starting with the giving of donor cups to donors on a papier-mache tray to ensure no sperm is ‘out of place’ and separated from a human body. As the act of donation is not one that can be observed, Mohr carried out interviews with donors where the ethnographic interview foreground discussion of the material processes of containment and sperm ‘out of place’, such as disgust at the magazines, as unlike the computer these cannot be wiped clean. In the laboratories, the observations involved looking at the material practices of quantification, as samples are weighed, motile and immotile cells are counted, and the samples are then stored in vials. Observations, as well as talking to lab staff, makes clear this is potentially messy, as technicians use technical language to refer to the samples, as well as disgust when it is out of place or contaminated. Mohr observed material practices in a range of sites in terms of the interactions between people, things and spaces, as well as talking to people about what he could not observe. This example makes clear that what people say is an important part of the ethnographic process – even if it is not privileged over what people do.

Observations of what people do with things will also involve you observing the things themselves (as they change over time); as part of an ethnography, you will need to contextualise these observations of things within wider understandings of practices and norms within a particular setting. For example, Horst's 2004 ethnographic research on tombs and burial practices in Jamaica adopts the classic ethnographic approach of living within the community, observing what people do, as well as contextualising practices within wider cultural relations. The observations foreground the materiality of the tombs: where they are situated, what they are made of, how they are decorated, as well as the process of building and altering the tombs. The process of decoration marks the family the individual is part of and, as these are left to fade over time, the deterioration of the tomb is the moment when the dead are united with their ancestors. These insights into the ways in which tombs connect the individual to their family and ancestors are afforded through the ethnographic process of observing material practices, seeing material change (of the tombs) over time, as well as attention to the objects themselves, where they are situated and the material practices of modification, construction and decoration.

Participation

Although most observations entail some participation of the researcher, you may develop an approach that foregrounds participation more centrally; this is often an approach taken in material ethnographies of making, crafting or building. Marchand's ethnography (2009) of building apprenticeship is a case in point; as there was very little verbal instruction, he needed to participate and observe how the masons of Djenne, in Mali, learn their trade. Marchand (2009) learns the trade himself, starting as a labourer developing the skills and knowledges to become a skilled builder. As the practice of learning is a material practice that develops through observing others and doing it yourself, Marchard contends that the researcher has to also become an apprentice. Observation and participation are not just research methods but are an intrinsic part of learning to become a builder in this context. Through ethnographic immersion, the research explores apprenticeship and building as a dialogue of a range of practically and situated knowlegdes: 'the so-called traditional black-African knowledge (bey-bibi), Islamic knowledge (bey-koray), technical know-how and basic engineering principles' (Marchand: 2009: 8). These knowledges are not communicated verbally but often through gestures and pointing, and other ways acting bodies communicate through visual, somatic and other multi-sensory means.

Ingold (2000) talks about hunting as apprenticeship, where you do not just copy what is done, but are told what to pay attention to, such as subtle markers in the environment like how deep an animal print is that you might otherwise have missed. Attuning yourself to how others move or act can be extended beyond the learning of a skill (as outlined in Marchand's research above) through to a way of thinking about the ethnographic practice of participation in material ethnographies in a different way. In practice, participation in most ethnographies involves walking with people in a place, or preparing food together, or sitting and talking with people. Thinking about this form of participation as a way to attune yourself to what and how people and things interact in spaces allows insight into what participation involves when you see it as a material method.

Graizbord et al. (2017) see the ethnographer as a mobile observer; this can also be extended to a mobile participant-observer, where you participate with others as you move through your field-sites. Pink's research (2007) on the Slow Cities movement in the town of Mold in Wales focuses in particular on core activities of walking and eating. Neither of these are 'skills' to learn, but both are practices you can participate in and use to attune yourself to the material practices of others. Pink highlights eating as an occasion for the sharing of sensory memories, substances, feelings and experiences through material acts. Therefore, eating together can give you a new form of awareness and way of knowing about other people's worlds. This is true for both ethnographies of food as well as broader ethnographies where eating together is a method of participant observation. The same could be said of walking together, which is similarly everyday and mundane. Walking with someone involves adjusting your bodily movements, speech, sense and ways of being to the person you are with and the environment you are in. This can also be extended to how people use objects or how objects are part of particular practices, as this practice of moving or being with someone allows you to attune yourself to objects and how they are used. For example, if you are observing and joining in with someone preparing food, you may attune yourself to how they use a knife to cut vegetables and how they stir food in a saucepan.

One of the core issues at the heart of participant observation is how you can understand people's experiences and perceptions, as even if you are joining in in activities your experience will never be the same as theirs. In thinking about this through the lens of how you understand things and how they are used within specific contexts, I have found three ideas particularly useful:

1. The 'emplaced ethnographer' (Pink, 2009: 23).
2. The inside-outsider (drawing from Schadler, 2017).
3. 'Co-presence' (Pink, 2009).

First, Pink puts forward the ‘emplaced ethnographer’ (2009: 23) as an alternative to embodied ethnographer as it situates the body of the researcher *within material environments* . Although she is using this to explore sensory ethnography, I will develop here its implications for material ethnographies. Being ‘emplaced’ not only means that bodies are produced and affected by places, but also that they help make places, which are produced through the interaction of people *and objects* in spaces. Pink draws upon both Casey who suggests that places gather histories, people and objects and Massey (2005) who sees places as constellations of people within spaces, into which newcomers (such as researchers) insert themselves. Pink extends this understanding of space and place to ethnographic sites; as a researcher, you are part of this gathering of people and things into places or, in Massey’s understanding, constellations.

Second, this dovetails with Schadler’s discussion of the insider-outsider; while this has been discussed in terms of researcher positionality in ethnography more broadly, Schadler discusses this in relationship to the material world. Schadler (2017) draws on Barad’s concept of ‘exteriority within’ (cited in Schadler) to suggest that the researcher is always part of the object of study. Seeing the site as one form of assemblage, then methods/outcomes/objects/technologies/researchers are inseparable. Through doing the research as you interact with objects and participants you become ‘the researcher’ (so, for example, how you come to refer to yourself as ‘an ethnographer’ through a particular research assemblage). As an ethnographer, you are both ‘inside’ in the sense of being part of this methods/research assemblage, and also ‘outside-within’ in the sense that you are observing and reflecting upon what people are doing. As I have already discussed, in ethnographic research, part of doing research is participating in people’s material worlds; however, if you are doing a material ethnography, part of the process of reflection is upon the material elements of your participation.

Being ‘outside’ is a space of reflection in which you can:

- think about what people are doing;
- reflect upon the things themselves, their materiality and material possibilities, as well as what meanings they may already have inscribed in them.

This space of reflection can be when you are physically outside the field, but also part of the process of observing and participating. One example of a technique to do this can be seen in Balmer's use of sketching in his research into the making of scientific knowledge in laboratories in the field of synthetic biology (Heath and Balmer, 2018). As part of the research, Lynne Chapman – an artist – joined him as they used the method of sketching as observation (see discussion later in the chapter on the specific method of sketching (Heath and Chapman, 2018)). The process of sketching the laboratory – including the machines used and other unnoticed items like stashed-away boxes – meant that he came to see the laboratory in a different way. Not only did things that had been familiar come to appear unfamiliar, but Balmer also noticed the mundane configuration of objects in a way that he hadn't previously. Sketching was a method that gave him a space for reflecting upon the material world of the lab. It may be that when doing research you are able to find these spaces of reflection within the ongoing processes of participation or observation; it may be that you need to provoke this, which may be by adopting another method, such as sketching, photographing or even an interview or probe-type method.

Third, Pink has put forward the idea of 'co-presence' (2009: 370) as a way to try and understand how people experience, practise or perceive from their own points of view and experiences. Co-presence refers to the form of participation that involves you being present with others, carrying out practices with them such as walking or cooking, and centres the skills of empathy and imagination. You are sharing practices and spaces with people, as well as *imagining* the other person's experiences of the practice and space. Pink extends Appadurai's discussion of the imagination as being central to our experiences in the world to the multi-sensory, to suggest that you can imagine in ways that aren't just visual but through other senses. And so, through cooking with someone, as you touch the food, move your hands, smell the food, hear the bubbling saucepan, you can imagine through your senses how other people are also sensing things as you are both emplaced together. Although you can never directly feel as others feel, you 'can, by aligning our bodies, rhythms, tastes, ways of seeing and more with theirs, begin to become involved in making places that are similar to theirs and thus feel that you are similarly emplaced...try to insert ourselves into the trajectories to which they relate and thus attempt to relate similarly to them' (Pink, 2009: 40). You can start to build connections between your experiences and theirs, through your imagination and empathy; these connections are not necessarily verbal but can be constructed through doing things with others, including how you engage with objects in particular spaces. Using this method involves an iterative process of:

- being with other people in the same place and experiencing material practices in multi-sensory ways;
- imagining through these material multi-sensory experiences how other people are experiencing and doing them;
- reflecting upon how you relate to material culture in other environments and how that impacts upon how you may experience material practices in similar/different ways to others.

One of the critiques of some of the sensory methods for thinking about things is that they fail to attest to the material properties of things. And, therefore, I would also add to this:

- observing, participating in and reflecting upon the material possibilities of the objects that are part of the practices.

Box 7.2: Key questions to ask when doing observation/participant observation

What are you observing?

Is it a general observation of a space/activity or a more specific directed observation?
What are the components of the space and activity? Think here about the different objects, materials, people, environmental and spatial factors.

What kind of observation are you doing?

All observations involve multiple senses, but think here about which you will actively employ in your observation. Reflect on what you are looking at, listening to, smelling, touching.

What kind of participation is involved?

Is it complete participation in a material activity (such as the building apprenticeship example) or it is more partial? What insights does this level of participation afford?

How are you attuning yourselves to objects?

How do others use and interact with things? How are you using and engaging with things? What are the material qualities of the thing that play a role in how these interactions occur?

Use of photographs

In Wright's work (2004), which has already been discussed in this chapter, working with photography ethnographically requires an understanding of pre-existing visual cultures. This may emerge through historical research as well as observations of current practices around photographic objects. When adopted for material ethnographies, photos are reframed as photo-objects; images are not just understood visually in terms of image composition and content but also as objects that are printed, stored and displayed. This is an approach that fits with an exploration of both participants' own photographic practices as well as of how people respond to the researcher's photographs. Photographs within ethnographic research can be the basis of collaboration, in terms of people showing you how they want to be photographed (Pinney, 1997). Photos are *informed by* ethnographic observations and are *an integral part of* observations as how people engage with photo-objects can be the basis for observations.

The use of photography within ethnographic processes is often iterative which can involve researcher-led photography and/or exploring participants' own use of photographs. Laurier's ethnographic study (1998) of the making of two heritage boats: *The Matthew* , a major heritage project, and *The Elk* , a hobbyist small-scale boat, draws on both forms of photography. Part of the ethnographic process involved photographs being taken of the ship, as it was being restored, by a professional photographer as well as photos taken by the researcher. In the case of the smaller ship – *The Elk* – which was restored by amateurs, this also involved the researcher using participants' own self-documentary as routes into exploring material practices. To inform the restoration, the amateurs researched into, and did interviews with, the boat's previous owners, as well as extensive photo documentary of the process of restoration. While this is a standard practice by restorers to show how the boat is restored, it becomes an additional resource to a researcher to understand the material transformations as well as a route for further reflection or alternative analysis, such as, in this case, into the relationship between restoration and masculinity.

Drawing/sketching

Within ethnographic research, drawing has been used as a form of observation; Causey (2017) notes that rather than drawing being a way of representing something that you see, you are 'drawing to see' (Causey, 2017: 4); that is, it is an active part of the process of observing and thinking about things. This can be usefully extended to material ethnographies as it allows you to really focus and think about materials. Writing about a collaborative project between sociologists and an urban sketcher/artist, Heath and Chapman discuss how observational drawing is a form of seeing differently (seen in Balmer's research already discussed). Observational drawing is drawing in situ, and Heath and Chapman refer to this as a form of ‘concentrated seeing’, as well as a process of ‘learning to see’ (Heath and Chapman, 2018). You orient yourself to people, things and spaces in a different way if you are sitting with a sketchpad drawing than in more conventional participant observation. Indeed, this form of concentrated seeing means that the emphasis is much more on observation than participation. As I have discussed at several points within the book, this is an example of a method that helps us to *attune ourselves* to objects in spaces.

Drawing is not necessarily concerned with capturing everything in a setting, but perhaps you may draw fewer things, you may abstract these things out from a context and come to focus on particular shapes or colours. In my own Dormant Things research, Lynne Chapman accompanied me on several ethnographic interviews as she sketched the objects as participants talked about them. On one occasion, a woman showed me her understairs cupboard; I took a photo of the space, and the photo appears quite drab, and yet when you consider the drawing Lynne produced – including key words the participant spoke – it seems to capture vividly something about the objects beyond just an aesthetic capture. The drawing allows insight into how the participant remembered and talked about them. The image is vibrant and alive, particular objects are given more centrality and aesthetic components are emphasised in ways that the photograph does not capture. This is not to suggest that drawings are somehow superior to photographs but instead drawings can, on occasion, capture something about objects and our relationship to them that a photograph can’t. A photograph cannot include words, it cannot change the ordering, or foreground particular objects. In a very different example, Spriggs (2016) discusses how drawing can be useful in giving a different perspective in material ethnographic research where she cites the example of an artist that drew the landscape from a falcon’s perspective, altering our way of viewing the landscape.

Sensory methods

Sensory methods within ethnographic research are well developed, but much less so in terms of how the material can be foregrounded. Things are a central part of how people engage with the world in multisensory ways and as such sensory methods have the potential to help us understand things and materials. I will show some of the possiblities for foregrounding the material here by way of an example. Sumartojo and Graves (2018) got people to take their own photographs on an accompanied arranged visit to a state-sponsored memory site in France, as well as carrying out a return interview after the event. The emphasis in the research was on people's sensory perceptions and material encounters moving through the site as well as how they understood the past. Participants were all from the local area and were told to take photos and make notes on the visit; in addition, the researchers took field notes to describe the sites (such as the light, cold, the colours of the objects and walls). After the event, participants were invited back to a videoed interview to explore the notes and photos.

The possibilities of these methods for material/sensory research are evident in an example discussed in the article about one participant's discussion of rust; he connects this back to his own material memories and experiences of his father's workplace and uses these to imagine the conditions of internees in the space. As the man talks about the rust and looks at the photograph he took, he rubs his fingers against his thumb. Through his memory of how dust feels in the air and on the hands he is not just thinking about the site but also feeling it. Asking people to make notes and take photos was a process of getting participants to attune to their surroundings actively, in ways that might not have been possible had they just walked through. The material props are ones that enable this process of attuning – to the environment, to their sensory experience, how they felt as well as the material facets of that experience and environment. In the example of the rust, the participant feels and recalls the immediate material environment, and the dissonance between this and his imaginative process of how internees may have used the site is a productive space for his own material memories to emerge.

Video methods

The above example opens up the possibilities of using video methods as they can capture gestures that people use when they are engaging with, in this example, the images they took. The use of video in ethnographic research is one which can allow for an exploration of material practices as they happen. You may be able to notice things you would not have noticed during an event, as well as videoing being a tool to allow you to attune yourselves to particular things as you do the research. Video and indeed photography are not just visual methods but as Pink (2009) notes they can be used for sensory research, and so too, I would suggest can be useful for material culture research. There are different possibilities depending upon where the camera is held (such as handheld and thus mobile, or set up to one side to capture a whole event/scene), as well as what participants are asked to do. So, at times, video cameras may be adopted to explore things in motion and the camera can become a means of observation. Through video tours of people's homes in research into people's laundry practices, Pink (2009) got people to show her their homes with an emphasis on how they experienced their homes in multi-sensory ways. People touched, smelt and discussed how they assess what makes something fit to be washed. Video tours also capture people's movement, talk and interactions (with others, with you and with things). They can, therefore, be a provocative method – as discussed in the object interviews chapter – rather than just as a means of observing – as may be assumed within traditional ethnographic research.

In line with this, Pink et al. discuss the possibilities for video techniques in generating 'empathetic encounters' (2017: 371). Although I am discussing video methods here, both video and photographic methods are often now inseparable from the digital. Pink et al. explicitly explore how through digital materiality (how the digital cannot be separated from the material), digital-video techniques can generate empathy. Pink et al. (2017) focus upon the digital materiality of bikes that have an integrated computer that uploads to the phone as a way to monitor facets of the ride such as speed and wind strength. As part of the research they used GoPro (a camera that can be fitted to the bike handlebars or cycling helmet) to video record their participants' cycling commute to work in two sites in Australia (Canberra and Melbourne). Participants were selected who cycled to work using self-tracking technologies. The methods of recording and then watching the recording with participants were intended to understand the entanglements between people, bikes, technologies, digital data and environmental factors such as air, weather, etc. and to generate empathy around what it feels like for the cyclists.

This method lends itself to ethnographic research into the sensory, unspoken and non-representational as self-tracking technologies can give 'researchers a sense of being in other people's environments' (2017: 375). When participants and the researcher watched the footage together, they both share the sounds of the ride, tree branches hitting 'you' on the head. The researcher relates this to their own commuting experiences, as well as the participants commenting on the video in relation to what it was 'really' like. These empathetic discussions as well as watching and 'experiencing' the journey together means that although the ethnographer never shares the journey, the digital technology and the discussions around this creates a way of journeying with others (2017: 377).

Conclusion

Ethnography is an orientation to an empirical project and a methodology that comprises a tool kit of methods. It is by definition multi-method, but what these methods are and how they are adopted depend upon the focus of the research. Ethnography is perhaps the dominant method that has been adopted for material culture research, although it is often reflected upon in relationship to material culture. It lends itself to a material culture approach, due to:

- an openness to what you might find, including what material practices are, as your understanding of what things are emerges from the context;
- the way that it considers whole contexts and settings as this means that objects are already a part of that setting. The challenge is how to foreground objects and how to attune yourself to things in the design and carrying out of your research;
- a focus upon practices and what people do with things through the core method of participant observation;
- the fact that it allows for different ways of knowing – the embodied, multi-sensory, material and kinaesthetic, and does not privilege the linguistic.

The key issue throughout this chapter has been how to orient yourself to a material ethnography; that is, ethnographic approaches might lend themselves to material culture, but they have to be reframed through a focus upon things, as these are the foregrounded issue. This is a question of approach, in terms of how you approach the field and how you think about things, as well as how you then adapt methods to allow you to interrogate the material. Drawing and video methods are not inherently material culture methods but can be when they are adapted and reserviced as a means to *attune ourselves* to the material. Although this chapter has discussed how analysis is part of the process of doing ethnography, the next, and final, chapter focuses upon the analysis of data as well as ways of presenting this.

8 Analysing, writing and disseminating

- *What possibilities do different analytical routes have for helping you to attune yourself to the material elements of your data?*
- *How can the process of data analysis be used to interrogate what things are and where they end?*
- *How can you communicate your research in ways that evoke the vitality and materiality of our research?*

Analysis is the process through which you make sense of your data and is a dialogue between different forms of data, theory and researchers. Although it is an iterative process that takes place throughout the research, the phase of 'analysis' is used to demarcate the time after the generation of data where you are most intensely focused upon making sense of what you have found out. The ways in which analysis is part of different stages of the research process have surfaced throughout the book so far, and this chapter is primarily concerned with this intense and focused phase of dealing with and making sense of data. In the previous chapter , I introduced how ethnographic approaches encourage an openness to what you find, including an openness to *what things are* . In this chapter, I want to explore how you can extend this open-ness to what things are and the effects they have through the process of data analysis. Rather than see analysis as a phase where you fix what things mean by putting them into categories or squeezing data into pre-defined analytical routes and strategies, instead I want to encourage you to approach your data analysis with the same sense of openness.

I will outline how doing analysis requires particular skills which are particularly important when you are trying to attune yourself to the material, to allow you to reconnect data to the contexts of its production. This can be achieved through: remembering, using the data to evoke people, things and contexts, as well as imagining what objects are, could have been or could be. After introducing the skills of remembering, imagining and re-contextualising data, I will outline how to deal with challenges and possibilities of understanding the material through analysing different data forms (such as things themselves, or data ‘around’ things such as photos and words used about things). I will encourage you to explore the ways in which you can adapt existing analytical strategies as well as thinking creatively about how new approaches can be developed.

The second half of the chapter will explore the question of how to present your research findings with a particular emphasis on thinking about the ways in which you can use different forms to communicate the ways things and materials matter in your research. The challenge of evoking and articulating the complexities of social lives is particularly marked when you consider that these lives are simultaneously material. This chapter will explore the possibilities afforded by different media in helping you to articulate the material dimensions of your research: written words, both in conventional academic writing, as well as more creative forms, images and photography and exhibitions. Rather than being pessimistic about the limitations of different forms of expression, instead I want to encourage you to explore the possibilities and potential for engaging with ways of evoking the material and of exciting audiences to imagine, remember and connect.

Getting yourself excited about data: skills of imagination, memory and attentiveness

Data is usually taken to mean the things (interview transcripts, photographs, maps) that have been produced through your empirical research; the phase of analysis is what you do with that data to make it meaningful. While this may appear a straightforward (albeit simple) definition, it implies that data comes 'after' the lived contexts of data generation, and as such data is detached from the lived worlds it comes from. These lived worlds are the people and their relationships that animate the context in which you did your research, as well as the things and materials that I have argued are central to our worlds and relationships. Throughout this book, I have emphasised the vibrancies of things and materials; and so, one of the challenges that you face is how to engage with the vibrancies of things when you do your data analysis. These are not, however, just challenges to be faced, or limitations when dealing with data, but are also exciting possibilities. Using things, or data around things, can allow you to attune yourselves to the vibrancies of things, materials and their relationships in order to both animate your data and research as well as to open you up to what role things had in your empirical research. Take the example of my research into Dormant Things for which, at this stage, I have done the empirical research and accumulated a mass of data in different forms but have yet to conduct the distinct phase of analysis. Due to the distraction of writing this book and a period of maternity leave, this data has lain 'dormant'. When I think about the data, it is easy to feel overwhelmed by the sheer amount of data I have, as well as what to do with the page upon page of transcriptions. However, if I start to talk to other people about the research, I find myself getting excited again about the fascinating things I have found in the research. Talking about data is certainly one way to animate your data, to get you to think again about the contexts in which you produced it and what excited you about the research when you were doing it. There are, however, other ways in which you can use the process of analysis to revitalise your data through the contexts in which it was produced, as well as get you thinking about things and the roles they play in this.

One strategy is to think about the different material forms of the data that you have and how you can use this materiality to recontextualise and animate your data again. It may be that reading through the transcripts as a whole (without doing any formal analysis) is enough to start to allow you to reconnect to the people and things in your research. Certainly, I find that when I think about the transcripts for my Dormant Things research, the thought of formally categorising them as a way to begin my data analysis is something that I find very demotivating. There is often an assumption that this formal stage of categorisation should be a starting point for data analysis. However, I think instead you need to consider how to get yourself excited about your data again, as well as connecting it to the lived worlds it is part of. This may be through reading an interview transcript as a whole or it may be through listening to the interviews (if you have done them). Other possibilities may be to do a follow-up visit to your field-site, or to look at other data forms such as photos, videos or sketches as a way to get you excited and thinking about what your data shows.

Different forms of data are materially different and, therefore, have different effects upon you as a researcher. Hockey (2014) has suggested that the process of bereaved people sorting through the material fragments of the deceased's life (photos, clothing, letters) is analogous to how the researcher attempts to make sense of diverse material forms of data. For the bereaved, fragments have an 'evocative capacity' (Hockey, 2014: 95); following Hockey's analogy, you may, therefore, find that interview quotes or photographs have a particular potency and ability to evoke a person, occasion or help produce a research insight. The potency of different data forms and how to deal with these is something I will discuss later in the chapter in terms of analysing objects as well as data around objects (such as photos). I want to think about this here in terms of using the materiality of different data forms as a way to connect you to the research contexts in which you did the data collection. Data has the capacity to provoke you in different ways that in part come from how data forms are vitalised by research contexts. Looking at a photograph, listening to an interview, picking up and touching an object from the field are all ways to resituate and recontextualise the data. The process of analysis does not just take place 'in your head' as you need to engage with the data forms through multiple senses as part of the process of reconnecting and thinking with data. This process rests on particular skills that are important to the process of analysing data produced through material methods:

- Imagination. James (2014) has discussed how imagination is a central part of data analysis as it allows you to think through things that elude your immediate understanding. Research materials (whether these are photos or interview recordings) allow you to re-encounter the empirical context; you may not have objects that are being centred in your research but by listening to what people say or looking at images of what they did you can reimagine and re-engage with them. I discussed imagination in the chapter on ethnography in terms of how to think about how others engage with things, and this can also be revisited when you do your analysis. Use your research data to imagine and reimagine how others used, perceived and experienced things.
- Remembering. This can be a multi-sensory process through which you use the data to resituate yourselves in the research contexts whether you were observing, talking to, or experiencing. This is a key way in which you can reanimate your data.
- Attentiveness (Back, 2012) allows you to notice things that are concealed, unspoken or in the background. Although writing specifically about listening, Back's suggestion that you need to pay heed to silences and that which is implicit, has clear implications for how you can be attentive to things. He also notes the importance of being attentive to the role of the senses, which are often implicit in everyday life; Wilson's (2008, cited in Back, 2012) research into prisons incorporated an awareness of the role of the senses in prison life. The researcher's perfume evoked memories for a prisoner of his life outside; being attuned to the importance of smell opened up an understanding of the role it played in prison life where the smell of the institution was something that prisoners worked to keep out of their living spaces. This can be extended to being attentive to materials, their properties and possibilities; you need to think actively about objects and what roles they had in a field-site, or how people

talked about objects in an interview. Being attentive to things can then allow you to expand how you understand people's everyday social and material worlds: even if objects are not a focus of your research, they are still an entangled part of the worlds that people inhabit. Being actively aware of them will allow you a richer way to imagine, think about and understand people's lives.

Analytical openness. What are you trying to get out of analysis?

Once you have got yourself excited about your data and started to feel it becoming alive again as you reconnect it to contexts and people, then you need to get started on more in-depth analysis. Certain forms of data will seem to call for particular forms of analysis – for example, data on an object's biography may seem to lend itself to narrative analysis; however, there are no prescribed modes of analysis for particular methods. It is possible to do multiple different forms of analysis with the same data (Kara, 2015); adopting a narrative analysis or thematic analysis approach may yield different kinds of insights. How you analyse your data depends on what you are trying to find out, as well as what kind of data you have generated.

When you are planning your methods, you will probably have already thought about how you planned to analyse your data. However, you are not wedded to a specific analytical strategy if you find that your planned analytical approach fails to produce any interesting insights, or if the process of data generation yielded unexpected results. In either case you can be open to exploring other analytical frames. It is not a question of finding the 'right' form of analysis that will unlock the findings, but that analytical approaches can allow for different, often unexpected, insights. Sometimes going against the grain and using an unexpected analytical strategy can open up unexpected insights; so, for example, in the denim project I carried out in an interdisciplinary team (Woodward, 2015), the focus was on a life-history and narrative approach to jeans. This data lent itself to a narrative analysis approach; however, I also explored some additional analytical routes to allow me to think about the different forms of data (produced through different methods) and the materiality of the jeans. One method of analysis involved getting participants in a workshop to look at and examine the old jeans and through these to imagine who the jeans' owners were and what they were used for. This approach allowed unexpected insights to emerge as people engaged with the materials imaginatively rather than seeing them through the framework of the interview quotes.

Being analytically open is important in making sure that you are able to think creatively about the potential of your data. This involves being open about:

- what you might find out;
- what forms of analysis you may try out. You may stick to the kind of analysis you planned at the start of your research, or you may do an additional form of analysis or an alternative form of analysis.

You may find that one analytical strategy is enough, but you may also find that adopting more than one analytical strategy is helpful. This is illustrated by the example of Michael's discussion of the failed interview episode (2004), which entailed a pit-bull dog sitting on his feet, while a cat was pulling the tape recorder around the floor during the interview. Underpinning all three analytical routes he takes is the conception of the 'co(a)gent' as the unit of analysis, a term that combines both *agency* as emerging through hybrid entities (often human and non-human) as well as *cogency* as these hybrids convince us that they are unitary.

1. In the first mode of analysis, he focuses upon the relationalities in the interview (between the interviewer/interviewee and between the cat and the tape recorder) to explore the disruption

in the communication between interviewer and interviewee. This analytic focus highlights what is usually disciplined when gathering interview data.

2. In the second mode of analysis, the micro-analysis focused upon the interaction of two co(a)gents: the 'pitpercat' (hybrid of pitbull, interviewee and cat) and the 'intercorder' (interviewer and recorder). The first hybrid disrupts the intentions of the latter hybrid to get 'useful' data, with the interviewee feeling comfortable in the context of her pets drifting off the interview topic to a tangential discussion of how she feels about her job. What this mode of analysis highlighted was that these heterogeneous co(a)gents and how they interact is part of social exchanges, even if they are often excluded from write-ups.
3. In the third mode of analysis, he focuses upon macro-analysis to explore the broader co(a)gent of the university and of Burger King (that the interviewee evokes). The interviewee declining to talk about the interview focus is a form of refusal of the power of the university as the participant still got the £5 fee. In this mode of analysis, Michael extends the insights about non-human agents to a macro level.

The three modes of analysis are clearly connected as they all develop and work from the theoretical concepts of hybrids, co(a)gents and relationalities of humans and non-humans. However, taking the three different modes of analysis, and then thinking through what each reveals, allows Michael to develop this notion of hybridity on different levels as well as thinking about the ordering and disruptions that take place in the interaction of hybrids.

Approaching the whole data set: dealing with contradictory and contrasting data forms

Doing multiple forms of analysis can be particularly useful when you have a lot of data, especially if that data comes in different material forms. Many of the material methods I have discussed in this book produce multiple forms of data: field notes, transcripts, videos, audio recordings and objects, among others. Later on in the chapter, I will discuss specific methods for analysing particular forms of data; here, I want to help you think about how you deal with the data set as a whole. Your approach will depend upon whether you are trying to document – that is, to think about as a whole what your data shows about a particular phenomenon – or whether you are using the data for moments of revelation and insights. The differences between these approaches can be characterised by the two strategies of triangulation and facet methodology:

- **Triangulation** involves systematically looking at all of your data and integrating different forms of data to consider it as one complete data set. And so, if you have quantitative data and qualitative data or ethnographic observation notes and interview transcripts, you would consider them together in your analysis as you try to understand the whole phenomenon in question. While you may pay heed to each data type on its own first, you will then work towards how the findings corroborate each other. As you do your analysis you will look for the ways in which different forms of data fit together and are complementary. These findings will then be synthesised (see Kara, 2015, for a discussion of this) in the production of your research findings.
- **Facet methodology** (Mason, 2011) uses the metaphor of the cut gemstone to characterise an approach to methods and analysis that offers insight into the multi-dimensionality of everyday life. The gemstone is conceived of as the overall research question, with the different planes of the gemstone being different approaches to look at the same question. It is an orientation rather than a prescribed set of methods and applies to both how you think about methods as well as how you do your analysis. This approach does not aim to produce comprehensive descriptive accounts of a topic, but rather to produce flashes of insight, which may arise through taking unconventional approaches to a topic, or through a combination of approaches. The insights may be unexpected but arise through the creativity

of the researcher in thinking about methods of analysis and approaching the research question. Unlike triangulation, it does not aim to be comprehensive but looks instead for flashes of insight that emerge when different forms of data are brought together. Another departure from triangulation is that facet methodology does not treat all data forms as 'equivalent' but as offering unique potential for revelation and – often unexpected – insights.

Box 8.1: The material possibilities of facet methodology

Facet methodology has many possibilities for the analysis of data from material methods – although these have not yet been explored. I will illustrate this with an example from my own Dormant Things project (see Woodward, 2015); the central research question is how and why people keep things they no longer use in their homes. The project is one that adopted multiple methods including object interviews, mapping of houses and storage spaces, sketching and photography. As I mentioned at the start of this chapter, the data has been generated, but has not yet been analysed. A series of possible analytical routes into thinking about the data include:

- mapping the assemblages of things (drawing from Bennet's version of assemblage theory (2009)), which will involve drawing upon the maps, photographs and interview data to look at which objects have 'come together' in different spaces;
- tracing object biographies, which will draw mostly from the interview data, as well as photographs to look at how things come into the home, how they move through the home and connected practices and people;
- imagining with things, a method I have used in previous projects (Woodward, 2015) to look at how people imagine with objects. In this instance, giving academics from different disciplines the data (photographs, drawings of objects, maps of the home) they will be asked to write about them as they imagine the owners and past stories. This is a particularly experimental form of analysis, but one that allows an understanding of objects not to be solely rooted in what their owners say about them.

Each of these modes of analysis (not yet carried out) are ones which take different analytical approaches to thinking about dormant things within the home, but all offer insights into the central focus. Looking at the analytical strategies in relation to each other may yield additional insights.

Triangulation and facet methodology are certainly not the only analytical approaches to dealing with different forms of data, but the contrast between the two highlights how your approach to a whole data set correlates with what you are trying to find out: whether you want to document systematically or to explore unexpected insights and revelations. These kinds of debates are particularly pertinent for mixed methods projects and the type of approach depends upon what you are trying to find out. The method of cultural probes outlined in Chapter 4 , where different activities within the probe pack provoke participants for responses, is one which would seem to lend itself to an approach like facet methodology for the data analysis (although see Robertson, 2008, who used triangulation). Probes do not try to gain systematic data, but instead are a provocation for participants to respond, and as such the data can be interpreted as insightful.

There are also approaches to analysis that highlight the importance of thinking about tensions and differences between different data forms in the analysis of the data set as a whole. Hurdley and Dicks (2011) discuss the tensions between sensory methods (which centre the embodied as a site of knowledge) and multimodal methods (which attend to how things themselves produce meanings). They suggest that thinking about the contrast between these methods can be productive; a discussion that has clear implications for how you deal with different forms of data. So, for example, if you are carrying out research into how people experience and perceive a particular form of material culture, then you may develop methods that get people to talk about the object (such as through interviews) and also material data (such as photos of the object, details of what it was made of and so on). Your analysis may then include both verbal accounts as well as the object themselves. Part of the analysis may involve looking at connections and correspondences between the verbal accounts and material data, and you may also be looking at the differences between the data forms. For example, in the interdisciplinary research into denim (Woodward, 2015) that I have already mentioned, I explored the relationships between different methods and forms of data through different methods for thinking about the material. Data included a normal resolution photograph of a pair of jeans to show the wear and tear on jeans and a contrasting high-resolution photograph that showed the weave structure. When juxtaposed, the contrasting data forms make the mundane jeans appear strange and unsettle how you see the jeans.

Adapting existing approaches to data analysis

I have emphasised the importance of being open minded when you do your data analysis, which can involve thinking creatively about which methods of analysis you use, and how you think about data sets as a whole. Creativity in data analysis can also involve adapting existing analytical strategies to think about the material elements of your data. I will discuss these here in relation to two analytical approaches – semiotic and narrative analysis – as they have both been used to think about materiality in existing research and highlight the possibilities for exploring the potentials of existing approaches.

Semiotic analysis

Semiotic approaches can be useful when thinking about analysing data produced through material methods as they allow a way for you to interrogate how objects can communicate, and how they have meanings. When applied to material culture, semiotic approaches have tended to work on the principle that things operate in different ways to language, and objects are framed as contextually specific signs (see Tilley, 1999). When linked to a structuralist approach, semiotic analysis involves looking for the underlying principles of symbolism underpinning things, with systematic analysis of, for example, what the decoration of objects means. This approach has been applied to large numbers of objects and has been most widely applied within archaeological frameworks but has also been applied within other disciplines, in particular as a way to think about the meanings of objects within particular cultural contexts. For example, Layne (2000) takes a semiotic approach in her study of how members of pregnancy loss support groups in the USA use material culture to deal with the problem of 'realness' of stillbirth and miscarriages. She categorises the types of objects women kept semiotically through concepts of the index, icon and symbolic.

- Indexical objects are those with a physical connection to the baby (such as a lock of hair).
- Iconic objects are those with a resemblance to the body of the baby (such as baby footprint casts or sonographs of the baby in utero).
- Symbolic objects symbolise more abstractly a connection to the baby (such as a tree or a rosebush planted to remember the baby).

These approaches can be useful if you are trying to analyse the ways in which objects have meanings in specific contexts. However, the challenge of taking these approaches is to make sure that you attend to the materiality of things. Things do more than just convey meanings and matter in a wide range of ways. As Buchli notes (1995), material culture is durable and physical; textual ways of approaching objects cannot access these material endurances and resistances; things resist symbolism or even use value as objects can be ambiguous.

Narrative analysis

A narrative approach centres understanding changes and transformations; narrative can be understood simply as an account of a temporally ordered sequence of events. Adopting this as an analytical approach entails focusing not only upon the content – what is said – but also the narrative structure – how it is said (Lawler, 2002). The approach has been adopted in a wide range of disciplines from literary analysis to social scientific approaches where narratives are seen as central to how people understand their lives. It has been extended to look at visual and performance-based narratives and has clear potential for thinking about objects in terms of exploring:

- the biographies of things (as discussed in Chapter 6);
- how things change over time;
- how they have come to be where/how they are now;
- future trajectories.

Thomas (1995) has developed a narrative approach to things, which he tries to connect to semiotic approaches. He puts forward an adapted narrative approach which traces how things may move between being forgotten and rediscovered and then abandoned. This allows an understanding of how things may change over time or move through different symbolic regimes.

Centring things in your analysis

One of the main challenges you will have to engage with in your analysis is how to centre things and be attentive to their place in people's stories or in your observation notes and other data forms. In the previous chapter , I introduced Henare et al.'s (2007) suggestion that for ethnographies of things, our analysis and understanding should start from the things themselves as they are used and understood within specific contexts. Holbraad (2014) has addressed how this approach to ethnographic methods can be extended to how you do analysis: things should set the terms of their own analysis. No analytical strategy is predetermined, nor is it externally imposed, but instead ethnographic observations of what things mean to people, how they think with them and use them in particular contexts, forms the basis of how you make sense of them. This involves revisiting the question introduced earlier in the book: how do you understand what things are? While you will have already thought about this in planning and carrying out your research, doing your analysis is a time to re-engage with these issues. Whatever material method you have employed, you can still use your data to think critically about what things are within your research and what effects they have.

A good illustration of the benefits of starting from things as they are used and understood in a particular context can be found within Bloch's discussion of wood-carvings on houses among the Zafimaniry of Madagascar (1995). Looking at traditional carvings that are placed on wooden parts of the houses, he suggests that they have been approached by other researchers as 'representing' something, seen in both the questions asked (when people ask what they 'mean'), and how they are then analysed. So, for example, looking at the carvings in terms of symbols – such as a moon – these would be analysed as representing something else. Instead, Bloch suggests the carvings only have meaning when you understand the cultural context and what houses and wood are understood to be. For the Zafimaniry, children are seen as malleable; as they get older, settle down, marry and have children they become less malleable. This process is evident in houses; over time stronger pieces of wood are added to them, as they become less flimsy. Drawing upon this understanding of culturally specific cosmologies, Bloch argues that the house *is* the marriage (rather than just representing it); as the wood used for the carvings added to the houses is very hard, then the act of carving is a continuation of the process of the house hardening and the marriage strengthening. Carvings are, therefore, not representational but part of the materiality of the wood and the house.

This analysis rests upon Bloch trying to understand things as they are used within a particular cultural context, rather than imposing an externally defined representational system upon his data. One of the critiques of Henare et al.'s original discussion of taking things as they are is that they do not pay enough attention to the materiality of things (see Holbraad's revision to the initial position, 2014). Adapting it to be a form of analysis that centres things and their materiality would involve drawing upon the following in your analysis:

- Local contexts of use, meanings and how people understand and think about and with things.
- The materiality of these things: the materials, their properties and possibilities, the object's design, potential and actual uses.
- How the thing is situated in relationship to other things, spaces and people.

Thinking about things as things, or objects or as things-in-relation (see next section) is not only something that emerges from your research but can also be a critical angle that your analysis can take. And so, you could look at your data through the analytical lens of materials (by looking at how materials surface and emerge through your data), as things-in-relations (see next section) or even as objects. Any of the theoretical possibilities introduced in Chapter 2 could also be repurposed as creative analytical routes to open up what insights your data can provide.

Box 8.2: Drawing and writing as techniques to centre things in your analysis

There are many different tools through which people conduct their analysis – computer-based software, highlighting, cutting and pasting. These usually involve some form of writing – whether this is writing key words or more extensive writing or may involve mapping or drawing (see Kara, 2015 and Leavy, 2015 for a fuller discussion of drawing an analysis). Drawing can be a way to engage with the materiality of objects as a form of analysis. In concentrating on the object's material dimensions as you are drawing, you may notice things you have not previously. Mapping can be a written as well as a sketching exercise and you may be mapping to make connections between key themes; in McLeod's (2014) research into the use of antidepressants, which drew upon Deleuze's theoretical concept of assemblage, she used the analytical technique of sketching assemblage maps to look at the interaction of and the co-participation of the elements she identified. Sketching these maps was a way for her to explore how these connections were generated and explored.

- Thinking about and attuning yourself to the materiality of things, as drawing is a way of seeing things (see Chapter 7).
- Reconnecting to the research contexts of data production.
- Showing the relationships between different things (whether this is the relations between things, or between your key themes and ideas, mapping can help you think through different kinds of connections and relationships).
- Tracing changes over time, whether this is a sequence of events, or several entwined transformations, narrative mapping is useful when doing narrative analysis to look at different kinds of change over time (including material changes as these intersect with other life changes).

Maps and drawings as part of the analysis can have multiple components: your words, participants' words, extracts from theories, authors that are helpful in interpreting, images of objects, drawings or maps of spaces.

Analysing things-in-relations: how do you categorise things?

A key part of the process of analysis is categorising your data; that is, thinking about meaningful ways to group ideas or themes emerging from your data. How you organise your data follows from the mode of analysis being undertaken; if you are taking a thematic analysis, you would think about how to organise your data in the themes you identify. How you categorise data also involves thinking about the boundaries that you are drawing; this includes deciding on the boundaries of meaningful units of analysis. This has been discussed throughout the book as being a theoretical question (whether you are working with things, or things-in-relation or assemblages for example), an empirical question (as this is how you draw the boundaries of your empirical research) as well as an analytical question. It is this latter aspect that I will focus upon here; as I suggested in the previous section , you can repurpose the theoretical units introduced in Chapter 2 as analytical strategies. When you are working through your data you might think about analysing your data, for example, as a set of objects in relation to each other, or as objects with biographies, or as assemblages. These can be both routes into the data, as well as emerging from it. Being open to different possibilities for units of analysis as they come out of your data is one way to yield unexpected insights. You are being open to what you might find, as well as to what things are, and to where the boundaries of things lie.

This is best illustrated through an example – DeSilvey's work (2006, 2007) with the residual material culture in an abandoned homestead in Montana in the USA explores the limitations of using existing forms of categorisation. Her analysis dovetails with the approach outlined in the previous section of working with things 'as they are' and highlights that if you are prepared to be open minded about what you have found and what your units of analysis are, then this can be revelatory. In the process of attempting to categorise and inventory the objects she found in the abandoned homestead, DeSilvey encountered many decaying and hybrid items, such as an old chocolate box with a few flowers and a lock of hair in it and a book that had been gnawed by mice. Encountering these ambiguous and hybrid things leads DeSilvey (2006) to think about what counts as a thing and how she classifies them. As she is working from the perspective of local history and heritage, where there is an emphasis upon preserving 'objects', the things she encounters – like a gnawed book – challenge what a discrete thing is. It raises where you draw the boundaries of what things are:

- Is it still just a book or is the mouse activity now an inextricable part of the book?
- Can you define a phase in this book's history when it was a discrete object – a book – before the mouse activity?
- Where do the boundaries of things fall in an ecological and temporal sense?
- How do you classify things that are ambiguous?

These questions are provocative ones about what things are and how they relate to other things and are all questions I have been provoked to think about by reading about the things DeSilvey encounters. While these objects are more evidently hybrids than you encounter in your research, they highlight that if you are open minded in what your data shows, then provocative and fascinating questions can be raised about things and their relations in your research. Data analysis is not necessary a phase of closing down what you have found but also of unpacking and opening up.

DeSilvey explores a number of different analytical frames for thinking about the things she encounters, including whether you can see them as an 'artefact' (made due to human manipulation of the material world) and an 'ecofact' (relic of other than human engagements with the environment (2006: 323). Seeing it just as an artefact would mean that the decay is an erasure of the meanings of the original; whereas she analyses it as both a book (artefact) *and* as a store of material for rats making a home. As these objects are materially ambiguous, they disrupt dominant ideas about what objects are considered suitable for a local history archive. Attempting to categorise them in terms of what they were used for failed to get to what is interesting about these particular objects (DeSilvey, 2007), as the collection appeared static and durable. This concern mirrors Back's calls for a live sociology where the challenge is not to render data into dead fossil facts (2012).

DeSilvey explored different ways of categorising things, where written documents were categorised by type or theme, but objects were categorised into boxes based upon where they were found (with one miscellaneous box). As the objects had been unused for so long, this approach sidestepped the limitation of categorising things according to original use (and thus prioritising a temporal phase of the object where it was a clearly defined 'object'). Instead of using pre-existing classification systems, she tried to pay heed to both where former inhabitants of the homestead put things, as well as the uncertain and 'seductive presence' of materials (2007: 885). Organising things through where they were found allowed her to build upon how people already grouped things; by having a separate inventory (which was systematic) she was able to keep the objects themselves in these seemingly random collections of what ended up in a cupboard. This allowed some insight into the histories of the house and everyday practices. This echoes the discussion in Chapter 5 of empirical research that draws on theories of assemblages to highlight the importance of looking at things in relationship to other things within particular spaces (Woodward and Greasley, 2015).

In thinking about how to retain the vitalities of both data and things, this involves exploring things as they are, as they were, and also as they can be. This may be speculative or imagined, or in some of DeSilvey's research she allows some of the decaying things to continue changing as this allows additional insights. Take the example of a grain binder (metal, designed to cut, gather and fasten sheaves of grain together), which started to accumulate with other old technologies next to the wooded area; as it has decayed, the trees have grown around it. Decaying things can have an unusual charge (2006: 330), as you are able to imagine in different ways when things are incomplete. Although it is clearly not possible in all projects to leave things to decay, allowing material transformation can be a method of analysis if objects are understood as processual and changing. In design-led disciplines, designers creating material change is a key method of enquiry; in the interdisciplinary project into denim I was involved in (Woodward, 2015), giving the denim from jeans that I had already interviewed participants about to a designer was a way to explore potential futures for the jeans.

Key questions and issues to consider when thinking about how you categorise include:

- How do you understand things/objects? How does the data you are faced with open up or suggest ways of thinking about things? Do you need to explore the implications of thinking about things in different ways?

- How does the way you have categorised fit with how people themselves categorise? Try to think about how things are often ambiguous and polysemous (Shanks and Hodder, 1995), as they mean different things to different people, and over the course of the object's life. Explore what things are in a material sense, temporal sense (different phases of its life) as well as in an ecological/relational sense (where you are thinking about what it is in relation to the environment and material surroundings).
- Think about exploring different forms of categorisation (such as through usage, meanings, historical contexts, in relationship to other objects they were found with) to see the different possibilities. Looking at things out of place can be provocative and produce insights (such as by placing unexpected objects together).
- Consider having a systematic written inventory alongside additional more creative forms of grouping things.

Attuning yourself to the material through data 'around' things: images and words

Images

There is a vast literature on image analysis (such as Rose, 2016) and the different approaches that can be taken; in this section I am not going to systematically review what all of these approaches offer to thinking about things. Instead, I want to highlight two types of photograph and the material interpretations they allow: documentary-style photos and photos that aestheticise objects. I have selected these as they highlight some of the different possibilities through which you can think about things through images. The ways in which you interpret objects through images depends upon the type of image as well as what you are trying to find out; documentary-style images are ones which may allow us to access material details of things, in terms of their design, size, colour, materials and other facets of their material appearance (as well as factors such as potential use). This type of analysis depends upon having images which centre objects and/or show the material details of all or an aspect of the objects. The archaeological approach to contemporary US houses (Arnold et al., 2012) uses photography to systematically document objects, including how many, and the spaces they were kept in. Images like these allow an understanding of objects, their appearance, as well as where they are placed in relationship to other objects. In DeSilvey's work on a disused cobbler's workshop (DeSilvey, 2013), the photos taken included documentary photography to capture the space and all of the types of objects in there as well as close-up details of objects and 'accidental collages and telling fragments' (2013: 648). The close-ups were intended to be both intimate as well as focusing upon fine-grain surface details. The images can be analysed to afford insight into a material practice, a particular object and how objects are found in relation to each other; in addition, the photographer takes a photo from a particular analytical angle which frames how the object is depicted as a 'telling' image. These approaches highlight the different analytical routes suggested earlier between documentation and revelation; they can be used together or as stand-alone methods for thinking about objects.

In his discussion of the aesthetics of materiality through the example of breaking up of ships, Crang (2010) explores a series of different types of images to think about them not just in terms of documentation of objects and materials but also as aesthetic objects. The images he discusses depict the process of breaking down of ships, which can reveal the materials and materiality of the ships. Crang (2010) suggests that analysing the different ways photographs are framed are not 'distortions' of what they really look like (which implies that you are looking for an accurate depiction as possible of an object) but instead give us glimpses of insight into different facets of the material. Examples of aesthetic registers for things include the picturesque, the sublime and the realist, which have a 'revelatory charge' (Crang, 2010: 1088). For example, he discusses some images which focus upon the beauty of the ship's carcass as a ruin; at first glance, the image looks like a painting of ships on the beaches in Bangladesh, but as the viewer realises it is a photograph, you come to feel the consequences of globalisation through the shock of it being a photograph. The aesthetic of it appearing like a painting engages audiences as well as makes them feel discomfort.

Words

In many of the material methods discussed in this book, you will be generating written data (such as interview transcripts, observation notes or pre-existing documentation such as probate inventories). You may well not have access to the objects themselves in the phase of analysis. There has been much made of the limitations of verbal methods to understand material culture which are often by definition non-verbalised material practices; however, I would like here to suggest that if you attune yourselves to things in written records then they can offer useful insights into the material world. I will look at both people's own written accounts of things as well as pre-existing written records to think about how you can use words to think about things. Layne's work (2000) on material culture, stillbirths and miscarriages is a useful route into thinking about how to analyse the words people use to talk about objects that matter. The research focuses specifically upon how material culture helps people to deal with the 'realness problem' of stillbirth and miscarriage. Layne explicitly engages with the challenge of doing a material culture analysis based upon the 'linguistic representation of the objects in a particular narrative genre' (2000: 324); namely that of online pregnancy loss support groups. The most in-depth accounts of material culture she finds are those which concern the loss of a baby in later pregnancy or after birth, not least as more items have been bought by this stage. Her analysis centres upon how the language used to describe objects is used to connect the objects to the babies, via the use of 'physical and evocative homologies' (2000: 324). There is an emphasis in people's descriptions of objects of smallness, softness or realness: items of clothing are commonly described in details of the 'tiny pink rosebuds'; or 'precious little summer things' (cited 2000: 329). The smallness and softness of the items evokes the smallness of the baby as language operates through homology; as the items are 'precious' so too is the baby that they come to stand for. The adjectives used are evocative of both the objects and babies as the absence of images of the items causes you to imagine things, people and relationships through language.

The use of pre-existing written records is particularly pertinent for disciplines such as history; Richardson (2015) addresses how historians analyse language to understand material culture through the examples of probate inventories, wills and literary sources. I will focus in particular upon the language in probate inventories here, as this was a method that was introduced in Chapter 5 to think about collections. Richardson explores how the language of probate inventories can help us to understand how distinctions were made between objects. These distinctions point towards the different valuations placed on possessions. Inventories of the belongings of people of higher status are easier to analyse, as there is more detailed language to allow insight into the **material qualities** of goods. For example, in an inventory from Warwick Castle in 1643, a quilt is described in terms of its material condition, the fabric as 'crimson china satin lynd with golde colord sarcenett…' [*sic*] (cited 2015: 47), as you are introduced to the material's provenance, details of its fabric colours, and also later embroidery patterns. The language of the inventories includes details not only of the objects but as they are grouped by rooms these can be made sense of in terms of the **material environments** that people worked and slept in. In the inventories for lower status houses, the objects are described in less detail, yet still the use of language to differentiate between objects can be telling. So, for example, there is still reference to the state (as old), or the type of material (coarse) or in one instance a box and bed are described as 'joined' – a way of making that meant things were more durable. There are still material details about specific items and when these are understood in relation to other objects the meanings of different objects can be understood.

In addition to reading the language for material traces, Richardson suggests that thinking about specific inventories in relationship to wider knowledge of the material culture of the period is useful, as well as quantitative data of the period to understand what types of objects were in probate inventories of the time. Taking the example of a 'great stone pot' (cited in Richardson, 2015: 48), 'great' could be read as large; however, when looking at other stone pots of the era, Richardson concludes that 'great' may have also meant distinguished, as it would have been the most striking object owned. Her analytical method here is that of 'reading between language and objects' (2015: 49). Probate inventories reflect the language an appraiser might use, whereas wills are closer to how people might use language themselves about their material environment as they represent an attempt by the person writing to get words as close as possible to reflect the will of the person making it and help to understand how people saw their own possessions as well as the people they were bequeathed to.

- Language provides material details of objects and environments.
- Situating these descriptions with other data forms can enhance your analysis as you learn more about the type of material culture people are talking about.
- Descriptive words both enhance these details as well as differentiate between things and people.
- Words are both descriptive and evocative.
- Words used about things show you how people imagine with things (such as imagining children that didn't survive), as well as allow you to imagine these things and relationships.

Communicating research: writing

In this second half of the chapter, I will shift towards thinking about how you disseminate the findings of your research. This phase is often thought about as the phase ‘after’ you do your data analysis; although writing, drawing and doing exhibitions can come at different stages within the research process – as ways to generate more data, or even as a form of analysis (see Box 8.2). While there has been a more recent shift towards considerations of alternative forms of the presentation of research findings (some of which are to be discussed later), academic writing (in the conventional form of a journal article, book chapter of research monograph) is the main form through which academics are expected to disseminate their findings and analysis. There are broader discussions over access and the limitations of these conventions but writing about research using material methods poses particular challenges that I would like to discuss here. As has already been discussed throughout the book, the relationships people have to things are often not verbalised, which can pose a challenge to both methods that are based upon eliciting verbal accounts, as well as word-based forms of dissemination. This section will explore what challenges conventional academic writing poses for writing about material culture research, as well as being creative with writing styles and expanding the possibilities of how you can write the material.

One of the theoretical ideas that runs throughout this book is that things and materials are vibrant (Bennet, 2009) and, as our material and social relations are co-constituted, things are an intrinsic part of the vitalities of everyday life. And so, how you write about things needs to capture, convey and evoke these vitalities. In part, this is a question of thinking about words you use to describe things and material practices, as well as reconnecting the words people say back to the live contexts and relationships they emerge from (Back, 2012). Rather than just bemoan the inadequacies of words in understanding people’s relationships to things, I want to encourage you to think instead about their possibilities. As Richardson (1997) notes, writing the story of a life is both *less than* and *more than* that life, as through writing a story in connection to other stories and literatures, that life is connected and extended to others. So, too, writing about material culture may not get to some facets of the materiality (that visual or tactile media may allow) but it may also allow insights into facets of the material that are not present through a display of objects. Words can allow you to imagine objects, to experience things you have not experienced and to empathise.

Being able to do this involves being reflexive about how you write. Much is made of reflexivity at the stages of data generation but much less so in terms of reflecting upon how writing is done. As such, Richardson (1997) suggests that academics fall back on metaphors they do not even think about or are aware of (such as the metaphors of building theory, having shaky foundations and so on). These are often based upon discipline-specific conventions and terminologies (Shanks and Hodder, 1995) and established forms of rhetoric (Clifford and Marcus, 1986). Academic journal articles are discipline-specific literary forms, and you need to be aware of what these conventions are, and what other alternatives are possible.

Thinking specifically about writing up material culture research, you need to think about how you can use language to make present the vital material relations that emerge through empirical research. Writing is a method of enquiry for you and also for those reading. It is an ‘exercise in taking our readers to where we have been and to experience what we have heard and seen’ (Back, 2014: 65). Recording devices (video or audio) are not enough to capture the vitality of things and re-engaging with the data through writing can be an imaginative and evocative act. Writing goes through multiple editing stages, which allow you to think through your writing, but also be critical about the possibilities you have for expanding your understanding of the material. Being reflexive about writing involves acknowledging the materiality of words, as they have vitalities of their own (Motamedi Fraser, 2012). If you understand and acknowledge that words have their own properties and intensities with physical, affective and emotional dimensions (2012: 97–8) and resonances, then they do not just represent what you want. Writing involves exploring the possibilities of words, of thinking, imagining and revisiting research contexts through writing. If standard academic writing fails to get to the complexities of the material relationships that you are exploring in research, then you need to experiment with different forms of writing. Alternative forms of writing are not inherently better but may be more suited in particular research instances and widen out the possibilities of what you can say about your research.

Different forms of academic writing

There are multiple different forms of academic writing. Van Maanen (2011) characterises key ways in which ethnographic accounts are written: realist (very detailed and an absence of the ethnographer in it), confessional (centres the ethnographer) and impressionist styles. The impressionist style is exemplified by Geertz's influential thick description (1973), which emphasises writing that is simultaneously detailed, imaginative and evocative as a way to get readers to connect with an experience. Geertz's discussion of 'thick description' has been lasting in terms of the power of language to conjure up places and activities (Geertz, 1973). Far from being an attempt to just interpret what you have seen, even in being detailed and selective about what you write about and how, Geertz understands writing to be an interpretation, but also imaginative and evocative of people, places and things. Writing is also a continuation of the process of analysis; writing descriptions is an attempt to think about and show what things mean. As you describe, you are at the same time analysing and theorising. This process of description clearly lends itself to ethnographic research, but also matters where you do have transcripts of what people say as this not only helps to interpret, understand what was happening as well as bring it to life, but also helps to understand more the material contexts and relationships within (or about) which things are said.

This has particular resonances in relationship to material culture where people may find speaking about objects challenging if they have a limited vocabulary for talking about materiality (such as not knowing technical terms or even language to talk about materials) or that they simply cannot put mundane material relationships into words. As a consequence, you may need to write about these material relationships yourselves, and this involves paying heed to material details, but, as Geertz suggests, doing so in ways that are imaginative, to evoke the vitalities of things. This approach is evident in DeSilvey's (2006) descriptions of the things she found in an abandoned homestead in her research; for example, as 'Nests of bald baby mice writhed in bushel baskets. Technicolor moulds consumed magazines and documents. Repulsive odours escaped from the broken lids of ancient preserve jars' (2006: 319). The language vividly describes what is found in ways that excite our imagination and repulse our senses, as well as using language that gives agency to the material agents as, for example, moulds 'consume'.

Evocative writing is one that attends to the capacities of things and involves tuning into these capacities and trying to create language that allows your readers to also 'tune in' and imagine the material. Given the ways in which it is possible to imagine things through words, then the use of the techniques of literary fiction are ones that may lend themselves to writing about things. These accounts draw from the ways in which the writing techniques of fiction have the power to engage audiences and to make people, events and things vibrant. They can be understood as creative non-fiction (Leavy, 2015) when they are based upon research data but are written using the tools of literary fiction. The techniques of literary fiction are those which often clearly evoke the material, sensual and atmospheric in attempts to draw the readers in and could thus be useful for thinking about writing material culture research. Miller's book (2009) on the role of objects in a series of houses on a street in London could be read as one such book. Each chapter is what Miller terms a portrait of a person on the street; the portraits are attempts by Miller to describe the person, possessions of a house and the relationships between them. The writing draws upon ethnographic research and findings but is evocative, descriptive and interpretive. It also falls at the boundaries between academic and popular writing as it is not laden with references or theory but instead is an interpretation of people and things, written in an accessible way.

What to do with participants' words

Writing involves both constructing your own words, as well as drawing upon the words of your participants. Back (2012) has noted that there is a tendency to place large quotes from participants within academic articles as if these speak for themselves. There are not enough attempts to describe the people who say these words, the contexts they say them in as well as the things they may say them about. The task of writing is to bring people, things and their material relationships to life and this includes thinking about how you use people's own words. Possibilities of what to do with quotes include:

- quoting verbatim from a transcript;
- using additional descriptions;
- contextualisation around the quote;
- crafting the transcript into alternative forms.

The academic convention is to place quotes verbatim in prose from transcribed documents of interviews, around which the academic performs their analysis. While this is a convention, there is nothing 'natural' about people's words being in prose format. I would like to focus here upon the 4th of these bullet points: crafting transcripts into alternative forms. One possibility is to turn transcripts from interviews into narratives – a strategy Rhodes (2000) has called 'ghostwriting' as a way to make explicit the role of the researcher in crafting a narrative. It allowed him to use the participants' words, as well as additional contextual information, but as the narrative is more evidently 'crafted' than a direct quotation appears to be, it makes evident the role of the writer in constructing the narrative and interpretations.

Several academics have experimented with putting people's words into a more poetic format. For example, Richardson (1997) has reshaped participants' words as poetry; through re-reading and thinking about them she sees different sides and meanings to them. Richardson suggests that the poetic form is closer to how people talk, as we speak in incomplete sentences, pause and give emphasis. As Leavy notes, in poems words are 'surrounded by space and weighted by silence' (Leavy, 2015: 77), which allows for silences to matter as well as placing emphasis on particular words. Kara (2015) notes that putting words into poems highlights rhetorical devices people use in speech such as repetition, or word emphases. In addition, poetic writing has a different effect on the reader. Helen Owton (2013) used narrative poetry (as well as artwork and academic prose) in her research on sport and asthma as a means to highlight the sensory and embodied aspects of her research.

There are many different ways of constructing the poems. Kara discusses the use of 'I-poems' (2015: 117), where words, phrases and quotes connected to 'I' are extracted and put in a new document in the same order and become the basis of an 'I-poem' (see Edwards and Weller, 2012). Lapum et al. (2012) took keywords, phrases and ideas to form free verse poems, which were refined through discussion of the research team. The potentials of this approach for material culture research is evidenced in DeSilvey's work on the residual material culture of an abandoned Montana homestead, which has already been discussed in this chapter. She cites an example of an over-stuffed bushel basket she found in the homestead which, when emptied, included scraps of printed matter and the spines of mice who has once lived there having nibbled on the various texts left in the basket. DeSilvey picked out the shards of texts that were left and drafted a poem from the fragments, which due to the mice's participation in shredding the papers she sees as co-authored by the mice – an extract of which is included below (2006: 333):

cardboard box

on the wall

behind a picture

parts will

have a numerous

synchronic

handiwork

that of

invention in

minimum delight

DeSilvey was working with the materials left, which are also words that speak of the material, and the peculiar assemblages left behind in the homestead. It is fragmentary and yet the words, how they are placed together, start to convey something of the assemblages that she is researching and writing about.

Using images

While writing offers many possibilities, other means of dissemination, including the use of images and developing exhibitions, have offered additional routes into exploring material relationships. Photographs have been incorporated into conventional academic formats (such as journal articles) as well as stand-alone photo-essays. In Daniels' book (2010) on the Japanese home, she adopts a number of different strategies for the organisation of photographs in relation to text. It includes both images throughout the book as well as separate photo-spreads within the book on particular themes. The book includes photographs taken by the researcher, by a photographer as well as participants' own photographs. If you are thinking about using photographs in written work, consideration needs to be given to:

The types of image used

Think about what you are trying to do with the photograph; for example, the images may be part of how you are developing an argument, or you may be drawing on photography to provoke people to think or see differently. In Daniels' 2010 book on the Japanese home, the highly visual book seeks to challenge the glossy coffee-table books about the ideal Japanese home, which is always minimalist, to show it as a complex, messy, social and material world in which people live. Images may be useful if you are trying to get people to see things that cannot be articulated through words. Metelerkamp's photo-essay (2013) of institutional spaces aims to look at the ordinary everyday spaces and materials of institutions. Photos are able to articulate things that cannot be verbalized and that what is most ordinary to participants (such as an atrium or lecture theatre) can be revealing when photographed.

The relationship between different images

Often more than one image is used together; this is particularly the case with photo-essays. Consideration needs to be given to how images are organised. One strategy is to organise images thematically; Metelerkamp's photo-essay organised the photos under themes (such as zones of collection or transactional spaces), which has a brief introduction before a series of photos within this theme placed together. DeSilvey's photo-essay (2013) on a disused cobbler's workshop in Cornwall organises the photos thematically in terms of the *stages* of the research and photographer's involvement. These chronological stages explore how the relationship to objects shifts through being photographed. So, for example, returning to the site after the initial act of photographing DeSilvey notes that original space and objects had less power now they have been photographed, connecting to Benjamin's notion that once something is represented it changes our perception of the original. The power of the image to evoke objects somehow diminishes the capacities of the actual place and things to affect us; these images prompt a connection between viewer and photo but also between the viewer and the object it is photographing. Organising the photographs in this thematic sequence allows a reflection upon the relationships between photography and the things they photograph, as this is dynamic and shifts.

One way of ordering themes can be to create a narrative. In Hamilakis and Ifantidis' (2013) photo-essay on the Acropolis, the reader/viewer is led on a tour of the Acropolis, with the first photo and accompanying text starting with the upwards ascent. The text includes multiple suggestions and questions and so rather than prescribing or shutting down meanings the text serves to provoke the reader/viewer to think about the images or places and objects on the route around the Acropolis.

The relationship images have with written text

Text accompanying an image may be just a caption, although Daniels (2010) has a list of image details at the back of the book and the images are without in-text captions, to avoid the captions under photographs fixing the meanings. The text may be explanatory or contextual. In Back's work on tattoos (2012), he includes a series of portraits of people, with both images of their tattoos on the body as well as written descriptions of the people, incorporating their words. The portrait is, therefore, constituted of both the words and images, which are descriptive and allow insight into both the 'verbal and non-verbal modalities' (2012: 93) of love expressed by tattoos.

Videos

The production of films is a medium which allows exploration of things in motion, or material practices, as well as to engage audiences in multi-sensory ways, such as Marks' (2000, cited in Pink, 2009) film which attempts to draw audiences into a place through corporeal, affective and intellectual registers. Through inter-sensory connections, you are not just seeing, but also imagine smelling and touching. Video material may be produced to supplement written or visual work, or as a stand-alone output. Video stills in a sequence have been used in written work to illustrate a series of material practices. For example, Dant's work on car repairs (2009) presents video stills with quotes from participants and descriptions of context are used to illustrate sensual knowledges, and gesture (how people use tools in relationship to the car and their own bodies).

The use of video as a stand-alone output is one that can allow:

- a depiction of particular material practices;
- multi-sensorial connections;
- you to connect in objects in unexpected ways through adopting film techniques of editing or changing the focus of the camera.

Hockey, Robinson, Dilley and Sherlock's research into shoes (as part of the If the Shoe Fits project – which focuses upon the material culture of shoes, identity and life transitions) developed a stand-alone documentary, which details the case studies of two of their participants' shoe collections and practices. In addition, the project created a video of people walking (Sherlock, 2012) which is filmed at ground level, cutting off at the ankle, just showing a mass of shoes walking past. It is shot from two angles: feet walking past the camera and feet walking away from the camera. The video offers a different perspective on shoes as they are centred; the usually taken for granted becomes the focal point.

Creative editing and filming can allow videos to provoke you to think differently about things, rather than just document them. This usually involves the participation of film-makers; one example is *Afterlife* , a film in collaboration between a director (Walmsley), the Manchester Museum and Sue Ryder Charity shop (Walmsley, 2018). By placing contemporary objects next to antiquities (from the Egyptology collection) to explore lost or found objects, the film disrupts the viewers' expectations. Seeing things moving in and out of context makes you think about objects, contexts and meanings differently. The sound on the film includes fragments of readings from the Ancient Egyptian Book of the Dead, which have faint accounts of memories cut into them. The film does not document but provokes and opens up new ways of thinking about objects you own and museum objects.

Alternative modes of presentation

The centrality of objects and materials in exhibitions means that they lend themselves to disseminating material culture research. There has been a broader shift towards engaging with alternative forms of dissemination, such as exhibitions within disciplines not conventionally associated with museums or exhibitions (such as sociology). Rather than just being a site to disseminate findings, Puwar and Sharma (2012) suggest that curating is a way of asking research questions in different creative fields, and is usually part of an interdisciplinary, collaborative engagement. For research that is not into material culture (nor based upon material methods), putting on an exhibition is a way of critical enquiry that engages with the materiality of research. So, for example, Lapum et al. (2012) in their collaborative research into narratives of open-heart surgery developed an installation. It is not a project that centred materials or materiality, but in putting together an installation materiality becomes a medium to think through how to provoke audiences to situate themselves in the position of an open-heart surgery patient. It is an example then of a material method. The exhibition was ordered as a spiral that audiences walk through, taking you through each phase of the surgery and recovery. The materials and how they are positioned and juxtaposed was seen as a way to disrupt ways of thinking and to capture dimensions of experience that are hard to articulate. Attention was paid to how poems, which had been developed from interview transcripts, were displayed: lighting matched the intensity of the words, particular textiles were used (both cool and clinical as well as warm and organic) and colours (which in one instance peek through a seam as a sign of life returning after the operation).

In the shoe project already discussed, an interim and final exhibition were developed. One was a research-in-progress exhibition (intended for academics) and another an exhibition at the Northampton shoe gallery, which also was a visiting exhibition in the Winter Gardens in Sheffield. The former exhibition included the films already discussed of shoes walking being played in loops at the entrance to the exhibition, with pairs of trainers being hung by their laces on the ceiling girders as well as text and images throughout the exhibition. This interim exhibition here was intended to both provoke audiences as well as to develop ideas.

One of the challenges of exhibitions and material culture research is to allow the objects to be vitalised by their contexts, other objects and interaction with audiences. The conventional exhibition of objects in glass cases turns things into aesthetic objects. Daniels (2014) has engaged explicitly with attempts to address these challenges; based upon her ethnographic work on Japanese homes, Daniels developed an exhibition at the Geffrye museum in 2011, 'At home in Japan – beyond the minimal house'. The exhibition was both the culmination of her ethnographic work, and collaboration with a photographer, as well as being the basis for ongoing research into exhibitions and ethnographic research (Daniels, 2019). The exhibition juxtaposed the ahistorical myth of the Japanese house, characterised by minimalism, with the complexities of everyday Japanese homes. The exhibition recreates a standard Japanese apartment where the spaces and rooms are filled with everyday objects (400 in total) with related sounds playing and a commentary produced by Japanese inhabitants as well as Daniels herself.

The selection of ordinary objects served to challenge the emphasis upon iconic objects that museums often prioritise and to open up possibilities for interactivity. People could put on slippers, look in closets and drawers, lie down on the futon or pick up any items they wanted. Photos were a key aspect of the exhibition with image text wallpapers covering at least one wall in each room. Some life-size photos were used to cover walls, and in one instance to give the appearance of looking out into a garden. This allowed the more complete experience of being in an apartment. The exhibition was an immersive environment, drawing on domestic objects, photos, written text and sounds with the emphasis not just upon transmitting knowledge but also centring experience by engaging the senses. Daniels sees it as an 'experiment in living ethnography' (Daniels, 2014) to try and communicate performative bodily knowledge of things, in particular spaces as experienced during fieldwork.

Conclusion

Both analysis and dissemination are phases that involve thinking about how you can attune yourself to the material as well as convey what is interesting about the material world in your research. This involves being attentive to the materiality of different data forms (photos, transcripts, audio-recordings) as well as to the ways in which different media such as exhibitions, images and writing can allow you to expose and explore materials, things and their relations. The need to be attentive and attuned to the material is something that I have discussed throughout the book and is particularly marked in the phase of analysis. Listening, reading, looking and touching different forms of data calls on us to be attentive to how different data forms can provoke you to think and also can evoke people, places and things. Being attentive here means you are thinking about how different material forms (whether this is forms of data) have particular capacities to effect.

Engaging with how your data not only affects you but also how it can affect others (audiences and readers) is part of the process of how you think about your strategies of dissemination. The need to keep data ‘vital’, by connecting it to the vitalities of the contexts and people it emerged from, is a key issue for how you analyse data in a way that pays heed to the vitalities of things. This is as true for the practice of analysis as it is for dissemination; different forms of writing and using images and videos or object-based exhibitions are all possibilities to explore. In Chapter 2 , I introduced the ways in which things can be understood to have effects – whether you think about this in terms of materiality or in terms of vital materials. How things have effects is not just a question for how you understand your empirical area, but also a question for thinking about the materiality of methods, as they have the capacity to provoke participants to respond. So, too, things may provoke you as a researcher to think differently about your research field and about the things themselves as the feelings that objects may elicit are surprising and unexpected. It is these material effects in their multiple forms – to give you pause to think, to question or to allow you to reminisce – that is central to how material methods can be developed and used, as well as how you analyse and disseminate data. Things are vital and the same should be true for the data you generate and the texts, webpages or exhibitions that ensue from your research.

Bibliography

Adams, C. and Thompson, T. (2011) ‘Interviewing objects: including educational technologies as qualitative research participants’, International Journal of Qualitative Studies in Education, 24 (6): 733–50.

Akama, Y. and Pink, S. (2014) ‘Design + Ethnography + Futures: Disrupting’, Participatory Design Conference, Windhoek, Namibia, October 2014.

Akama, Y., Stuedahl, D. and van Zyl, I. (2015) ‘Design disruptions in contested, contingent and contradictory future-making’, Interaction Design and Architecture(s) Journal – IxD&A, 26: 132–48.

Alison, P. (ed.) (1999) The Archaeology of Household Activities. London: Routledge.

Allen, L. and Hamby, L. (2011) ‘Pathways to knowledge: research, agency and power relations in the context of collaborations between museums and source communities’, in S. Byrne, A. Clarke, R. Harrison and R. Torrence (eds) (2011) Unpacking the Collection Networks of Material and Social Agency in the Museum. London: Springer. pp. 202–29.

Appadurai, A. (1986) ‘Introduction: commodities and the politics of value’, in A. Appadurai (ed.) The Social Life of Things: Commodities in Social Perspective. Cambridge: Cambridge University Press. pp. 3–63.

Arnold, J., Graesch, A., Ragazzini, E. and Ochs, E. (2012) Life at Home in the Twenty-First Century. Los Angeles: Cotsen Institute of

Archaeology Press.

Atkinson, P., Coffey, A., Delamont, S., Lofland, J. and Lofland, L. (eds) (2001) Handbook of Ethnography. London: Sage.

Back, L. (2007) The Art of Listening. Oxford: Berg.

Back, L. (2012) 'Live sociology: social research and its futures', in L. Back and N. Puwar (eds) Live Methods. Oxford: Blackwell. pp. 18–39.

Back, L. (2014) 'Writing as a movement of imagination, reading as companionship in thought', in C. Smart, J. Hockey and A. James (eds) The Craft of Knowledge: Experiences of Living with Data. Basingstoke: Palgrave Macmillan. pp.56–76.

Back, L. and Puwar, N. (eds) (2012) Live Methods. Oxford: Blackwell.

Baiocchi, G., Graizbord, D. and Rodríguez-Muñiz, M. (2013) 'Actor-Network Theory and the ethnographic imagination: an exercise in translation', Qualitative Sociology, 36: 323–41.

Banks, M. (2001) Visual Methods in Social Research. London: Sage.

Barad, K. (2003) 'Posthumanist performativity: toward an understanding of how matter comes to matter', Signs: Journal of Women in Culture and Society, 28 (3): 801–31.

Barad, K. (2007) Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham, NC: Duke University Press.

Barthes, R. (1972) Mythologies. New York: Hill and Wang.

Bartmanski, D and Woodward, I. (2015). Vinyl: The Analogue Record in the Digital Age. London: Bloomsbury.

Baudrillard, J. (1988) Selected Writings/Jean Baudrillard. Stanford, CA: Stanford University Press.

Beer, D. (2010) Mobile music, coded objects and everyday spaces, Mobilities, 5 (4): 469–84.

Beisel, U. and Schneider, T. (2012) Provincialising waste: the transformation of Ambulance Car 7/83–2 to Tro-Tro Dr. Jesus. Environment and Planning D: Society and Space, 30 (4): 639–54.

Bell, S. (2013) Objects, Memory and Narrative Presentation. Goldsmiths, University of London, 4 July 2013. Available on the NCRM website: http://eprints.ncrm.ac.uk/3176/1/NOVELLA_Objects_Memory_and_Narrative_to_post_2013_with_notes_added.pdf

Bell, M. and Bell, S. (2012) What to do with all this 'stuff': memory, family and material objects in storytelling, Self and Society, 8 (2): 63–84.

Bennet, J. (2009) Vibrant Matter: a Political Ecology of Things. Durham, NC: Duke University Press.

Bhattacharya, K. (2009) 'Othering research, researching the other: de/colonizing approaches to qualitative inquiry', in J.C. Smart (ed.) Higher Education: Handbook of Theory and Research, vol. 24. Dordrecht: Springer. pp. –

Bloch, M. (1995) 'Questions not to ask of Malagasy carvings', in I. Hodder, A. Alexandri, V. Buchli, J. Carman, J. Last, J. Lucas and M.

Shanks (eds) Interpreting Archaeology: Finding Meaning in the Past London: Routledge. pp. 212–15.

Boehner, K., Vertesi, J., Sengers, P. and Dourish P. (2007) 'How HCI interprets the probes', Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. CHI' 07.

Bourdieu, P. (1970) 'The Berber house or the world reversed', Social Science Information, 9 (2): 151–70.

Boyer, K. and Spinney, J. (2016) 'Motherhood, mobility and materiality: material entanglements, journey-making and the process of "becoming mother"', Environment and Planning D: Society and Space, 34 (6): 1113–31.

Braithwaite, N. (2017) 'Sensing creativity: the role of materials in shoe design', The Senses and Society, 12 (1): 90–4.

Buchli, V. (1995) 'Interpreting material culture: the trouble with text', in I. Hodder, A. Alexandri, V. Buchli, J. Carman, J. Last, J. Lucas and M. Shanks (eds) Interpreting Archaeology: Finding Meaning in the Past. London: Routledge. pp. 181–93.

Buchli, V. (ed.) (2002) The Material Culture Reader. Oxford: Berg.

Byrne, S., Clarke, A., Harrison, R. and Torrence, R. (eds) (2011) Unpacking the Collection Networks of Material and Social Agency in the Museum. London: Springer.

Causey, A. (2017) Drawn to See: Drawing as an Ethnographic Method. Toronto: University of Toronto Press.

Chilton, G. and Scotti, V. (2014) ‘Snipping, gluing, writing: the properties of collage as an arts-based research practice in art therapy’, Art Therapy, 31 (4): 163–71.

Clifford, J. and Marcus, G. (1986) Writing Culture: the Poetics and Politics of Ethnography. Berkeley, CA: University of California Press.

Cook, I. (2006) ‘Geographies of food: following’, Progress in Human Geography, 30 (5): 655–66.

Cook, I. et al. (2004) ‘Follow the thing: papaya’, Antipode, 36(4): 642–64.

Copertino, D. (2014) ‘The tools of the trade: the materiality of architecture in the patrimonialization of “Arab houses” in Damascus’, Journal of Material Culture, 19 (3): 327–51.

Crabtree, A., Hemmings, T., Rodden, K., Cheverst, K., Clarke, G., Dewsbury, J. Hughes and Roucefield, M. (2003) ‘Designing with care: adapting cultural probes to inform design in sensitive settings’, in S. Viller and P. Wyeth (eds) Proceedings of 2003 Australasian Computer Human Interaction Conference – OzCHI, Brisbane: Ergonomics Society of Australia. pp. 4–13.

Crang, M. (2010) ‘The death of great ships: photography, politics, and waste in the global imaginary’, Environment and Planning A: Economy and Space, 42 (5): 1084–102.

Crang, M., Hughes, A., Gregson, N., Norris, L. and Ahamed, F. (2013) ‘Rethinking governance and value in commodity chains through global recycling networks’, Transactions of the Institute of British Geographers, 38 (1): 12–24.

Daniels, I. (2010) The Japanese House: Material Culture in the Modern Home. Oxford: Berg.

Daniels, I. (2014) 'Museum experiments in living ethnography: "At Home in Japan" in London?', Bulletin of the National Museum of Ethnology, 38 (4): 513–31.

Daniels, I. (2019) What are Exhibitions for? – An Anthropological Approach. London: Bloomsbury.

Dant, T. (2009) 'The work of repair: gesture, emotion and sensual knowledge', Sociological Research Online, 15 (3): 7.

Dawdy, S.L. (2013) 'Archaeology of modern American death: grave goods and blithe mementoes', in P. Graves Brown, R. Harrison and A. Piccini (eds) Oxford Handbook of the Archaeology of the Contemporary World. Oxford: Oxford University Press. pp. 451–65.

Delamont, S. (2007) 'Ethnography and participant observation', in C. Seale, G. Gobo, J. Gubrium and D. Silverman (eds) Qualitative Research Practice. London: Sage. pp. 205–17.

DeLanda, M. (2016) Assemblage Theory. Edinburgh: Edinburgh University Press.

De Leon, J.P. and Cohen, J.H. (2005) 'Object and walking probes in ethnographic interviewing', Field Methods, 17 (2): 200–4.

Deleuze, F. and Guattari, F. (2004) A Thousand Plateaus: Capitalism and Schizophrenia. London: Continuum.

DeSilvey, C. (2006) 'Observed decay: telling stories with mutable things', Journal of Material Culture, 11 (3): 318–38.

DeSilvey, C. (2007) ‘Salvage memory: constellating material histories on a hardscrabble homestead’, Cultural Geographies, 14 (3): 401–24.

DeSilvey, C. (2013) ‘On salvage photography’, in P. Graves Brown, R. Harrison and A. Piccini (eds) Oxford Handbook of the Archaeology of the Contemporary World. Oxford: Oxford University Press. pp. 642–53.

Dodge, M. and Kitchin, R. (2009) ‘Software, objects, and home space’, Environment and Planning A: Economy and Space, 41 (6): 1344–65.

Drazin, A. and Kuchler, S. (eds) (2015) The Social Life of Materials. London: Bloomsbury.

du Gay, P., Hall, S., Janes, L., Madsen, A., Mackay, H. and Negus, K. (eds) (1997) Doing Cultural Studies: the Story of the Sony Walkman. London: Sage.

Edensor, T. (2011) ‘Entangled agencies, material networks and repair in a building assemblage: the mutable stone of St Ann’s Church, Manchester’, Transactions of the Institute of British Geographers, 36 (2): 238–52.

Edwards, R. and Weller, S. (2012) ‘Shifting analytic ontology: using I-poems in qualitative longitudinal research’, Qualitative Research, 12 (2): 202–17.

Evans, D. (2014) Food Waste: Home Consumption, Material Culture and Everyday Life. London: Bloomsbury.

Evans, D. (2018) ‘Rethinking material cultures of sustainability: commodity consumption, cultural biographies and following the thing', Transactions of the Institute of British Geographers, 43 (1): 110–21. https://doi.org/10.1111/tran.12206

Everett, M. and Barrett, M. (2012) '"Guided tour": a method for deepening the relational quality in narrative research', Qualitative Research Journal, 12 (1): 32–46.

Fine, G. and Deegan, J. (1996) 'Three principles of Serendip: insight, chance, and discovery in qualitative research', International Journal of Qualitative Studies in Education, 9 (4), 434–47.

Finley, S. (2002) 'Women myths: teacher self-images and socialization to feminine stereotypes', in C. Bagley and M. Cancienne (eds) Dancing the Data. New York: Peter Lang. pp. 162–76.

Fowler, C. and Harris, O.J. (2015) 'Enduring relations: exploring a paradox of new materialism', Journal of Material Culture, 20 (2): 127–48.

Fox, N. and Alldred, P. (2015) 'New materialist social inquiry: designs, methods and the research-assemblage', International Journal of Social Research Methodology, 18 (4): 399–414.

Fullagar, S. (2017) 'Post-qualitative inquiry and the new materialist turn: implications for sport, health and physical culture research', Qualitative Research in Sport, Exercise and Health, 9 (2): 247–57.

Garner, A. (2004) 'Living history: trees and metaphors of identity in an English forest', Journal of Material Culture, 9 (1): 87–100.

Gauntlett, D. and Holzwarth, P. (2006) 'Creative and visual methods for exploring identities', Visual Studies, 21 (1): 82–91.

Gaver, B., Dunne, T. and Pacenti, E. (1999) 'Cultural probes', Interactions, 6 (1): 21–9.

Gaver, B., Boucher, A., Pennington, S. and Walker, B. (2004) 'Cultural probes and the value of uncertainty', Interactions, September–October 2004: 53–6.

Geertz, C. (1973) The Interpretation of Cultures. New York: Basic Books.

Geismar, H. and Horst, H.A. (2004) 'Materializing ethnography', Journal of Material Culture, 9 (1): 5–10.

Gell, A. (1998) Art and Agency. Oxford: Clarendon.

Gibson, C., Head, L., Gill, N. and Waitt, G. (2011) 'Climate change and household dynamics: beyond consumption, unbounding sustainability', Transactions of the Institute of British Geographers, 36 (1): 3–8.

Gibson, J.J. (1979) The Ecological Approach to Visual Perception. Boston, MA: Houghton Mifflin.

Gondwe, M. and Longnecker, N. (2015) 'Objects as stimuli for exploring young people's views about cultural and scientific knowledge', Science, Technology and Human Values, 40 (5): 766–92.

Gosden, C. and Marshall, Y. (1999) 'The cultural biography of objects', World Archaeology, 31 (2): 169–78.

Graham, S. and Thrift, N. (2007) 'Out of order: understanding repair and maintenance', Theory, Culture & Society, 24 (3): 1–25.

Graizbord, D., Rodríguez-Muñiz, M. and Baiocchi, G. (2017) 'Expert for a day: theory and the tailored craft of ethnography', Ethnography, 18 (3), 322–44.

Greasley, A.E. (2008) 'Engagement with music in everyday life: an in-depth study of adults' musical preferences and listening behaviours'. PhD thesis, University of Keele, Department of Psychology.

Gregson, N. (2007) Living with Things: Ridding, Accommodation, Dwelling. Wantage: Sean Kingston Publishing.

Gregson, N., Crang, M., Ahamed, F., Akhtar, N. and Ferdous, R. (2010) 'Following things of rubbish value: end-of-life ships, "chock-chocky" furniture and the Bangladeshi middle class consumer', Geoforum, 41: 846–54.

Guy, A., Green, E. and Banim, M. (eds) (2001) Through the Wardrobe: Women's Relationship to their Clothes. Oxford: Berg.

Halawa, M. and Olcon-Kubicka, M. (2018) (online first) 'Digital householding: calculating and moralising domestic life through homemade spread-sheets', Journal of Cultural Economy, 11 (6): 514–34.

Hamilakis, Y. and Ifantidis, F. (2013) 'The Other Acropolises: multi-temporality and the persistence of the past', in P. Graves Brown, R. Harrison and A. Piccini (eds) Oxford Handbook of the Archaeology of the Contemporary World. Oxford: Oxford University Press. pp. 758–81.

Handley, S. (2016) Sleep in Early Modern England. New Haven, CT: Yale University Press.

Harman, G. (2009) Prince of Networks: Bruno Latour and Metaphysics. Melbourne: re.press.

Harper, D. (2002) ‘Talking about pictures: a case for photo elicitation’, Visual Studies, 17 (1).

Harrison, R. and Schofield, J. (2010) After Modernity: Archaeological Approaches to the Contemporary Past. Oxford: Oxford University Press.

Harrison, R. (2011a) ‘Surface assemblages: towards an archaeology *in* and *of* the present’, Archaeological Dialogues, 18 (2): 141–61.

Harrison, R. (2011b) ‘Consuming colonialism: curio dealers’ catalogues, souvenir objects and indigenous agency in Oceania’, in S. Byrne, A. Clarke, R. Harrison and R. Torrence (eds) (2011) Unpacking the Collection Networks of Material and Social Agency in the Museum. London: Springer. pp. 55–82.

Harvey, P and Knox, H. (2014). ‘Objects and materials: an introduction’ in Harvey, P., Casella, E., Evans, G., Knox, H., Mclean, C., Silva, E., Thoburn, N. and Woodward, K. (eds) (2014) Objects and Materials: A Routledge Companion. London: Routledge. pp 1-18.

Harvey, P., E. Casella, G. Evans, H. Knox, C. Mclean, E. Silva, N. Thoburn and K. Woodward (eds) (2014) Objects and Materials: A Routledge Companion. London: Routledge

Hays-Gilpin, K. (2011) ‘Crafting Hopi identities at the Museum of Northern Arizona’, in S. Byrne, A. Clarke, R. Harrison and R. Torrence (eds) (2011) Unpacking the Collection Networks of Material and Social Agency in the Museum. London: Springer. pp. 185–208.

Heath, S. and Balmer, A. 2018. ‘Seeing through the lines: some lessons in observational drawing’, July 11th, 2018 at the Morgan Centre conference Everyday Creativity, University of Manchester.

Heath, S., Chapman, L. and The Morgan Centre sketchers (2018) ‘Observational sketching as method’, International Journal of Social Research Methodology.

Hein, J., Evans, J. and Jones, P. (2008) ‘Mobile methodologies: theory, technology and practice’ Geography Compass, 2 (5): 1266–85.

Hemmings, T., Clarke, K., Rouncefield, M., Crabtree, A. and Rodden, T. (2002) Proceedings from Participatory Design Conference: Probing the probes. Malmo, Sweden.

Henare, A., Holbraad, M. and Wastell, S. (eds) (2007) Thinking Through Things: Theorising Artefacts Ethnographically. London: Routledge.

Hicks, D. (2010) ‘The material-cultural turn: event and effect’, in D. Hicks and M. Beaudry, M. (eds) The Oxford Handbook of Material Culture Studies. Oxford: Oxford University Press. pp. 25–98.

Hicks, D. and Beaudry, M. (eds) (2010) The Oxford Handbook of Material Culture Studies. Oxford: Oxford University Press.

Hinthorpe, L. and Schneider, K. (2012) ‘Playing with purpose: using serious play to enhance participatory development communication in research’, International Journal of Communication, 6: 2801–24.

Hockey, J. (2014) ‘The social life of interview material’, in C. Smart, J. Hockey and A. James (eds) The Craft of Knowledge: Experiences of Living with Data. Basingstoke: Palgrave Macmillan. pp. 93–111.

Hodgetts, D., Radley, A., Chamberlain, K. and Hodgetts, A. (2007) 'Health inequalities and homelessness: considering material, spatial and relational dimensions', Journal of Health Psychology, 12: 709–25.

Hodson, E.A. (2017) 'Prisms of the abstract: material relations in Icelandic art', Journal of Material Culture, 22 (1): 72–92.

Holbraad, M. (2014) 'How things can unsettle', in P. Harvey, E. Casella, G. Evans, H. Knox, C. Mclean, E. Silva, N. Thoburn and K. Woodward (eds) Objects and Materials: A Routledge Companion. London: Routledge. pp. 228–37.

Holmes, H. (2019) 'Material affinities: "Doing" family through the practices of passing on', Sociology, 53 (1): 174–91.

Horst, H. (2004). 'A pilgrimage home: tombs, burial and belonging in Jamaica', Journal of Material Culture, 9 (1), 11–26.

Hoskins, J. (1998) Biographical Objects: How Things Tell Stories of People's Lives. London, New York: Routledge.

Hulme, A. (2015) On the Commodity Trail: the Journey of a Bargain Store Product from East to West. London: Bloomsbury.

Hunt, N. (2005) 'Bicycles, birth certificates and clysters: colonial objects as reproductive debris in Mobutu's Zaire', in W. van Binsbergen and P. Geschiere (eds) Commodification: Things, Agency and Identities. Munster: Lit Verlag. pp. 123–41.

Hurdley, R. (2006) 'Dismantling mantelpieces: narrating identities and materializing culture in the home', Sociology, 40: 717–33.

Hurdley, R. (2007) 'Focal points: framing material culture and visual data', Qualitative Research, 7(3): 355–74.

Hurdley, R. (2010) 'The power of corridors: connecting doors, mobilising materials, plotting openness', The Sociological Review, 58 (1): 45–64.

Hurdley, R. and Dicks, B. (2011) 'In-between practice: working in the "thirdspace" of sensory and multimodal methodology', Qualitative Research, 11 (3): 277–92.

Hutchinson, H., Mackay, W., Westerlund, B., Bederson, B., Druin, A., Plaisant, C., Beaudouin-Lafon, M., Conversy, S., Evans, H., Hansen, H., Roussel, N. and Eiderback, B. (2003) 'Technology probes: inspiring design for and with families', Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 5–10 April 2003, Fort Lauderdale.

Iltanen, S. and Topo, P. (2015) 'Object elicitation in interviews about clothing design, ageing and dementia', J. Design Research, 13 (2): 167–84.

Ingold, T. (2000) The Perception of the Environment. London: Routledge.

Ingold, T. (2007) 'Materials against materiality', Archaeological Dialogues, 14 (1): 1–16. doi:1017/S1380203807002127

Ingold, T. (2010) Bringing Things Back to Life: Creative Entanglements in a World of Materials. NCRM Working Paper. Realities/Morgan Centre, University of Manchester.

Ingold, T. (2012) 'Toward an ecology of materials', Annual Review of Anthropology, 41: 427–42.

James, A. (2014) ‘Jigsaws with missing pieces: research imagination(s) and children’s lives’, in C. Smart, J. Hockey and A. James (eds) The Craft of Knowledge: Experiences of Living with Data. Basingstoke: Palgrave Macmillan. pp. 77–92.

Jönsson, L., Tau, U. and Lenskjold, T. (2015) ‘Stakes At the Edge Of Participation: Where Words and Things are the Entirely Serious Title of a Problem’, Nordes 2015: Design Ecologies Conference, no 6.

Joy, J. (2009) ‘Reinvigorating object biography: reproducing the drama of object lives’, World Archaeology, 41 (4): 540–56.

Joyce, R. (2015) ‘Things in motion: itineraries of Ulua marble vases’, in R. Joyce and S. Gillespie (eds) Things in Motion: Object Itineraries in Anthropological Practice. Santa Fe: School for Advanced Research Press. pp. 21–38.

Joyce, R. and Gillespie, S. (2015) ‘Making things out of objects that move’, in R. Joyce and S. Gillespie (eds) Things in Motion: Object Itineraries in Anthropological Practice. Santa Fe: School for Advanced Research Press. pp. 1–20.

Joyce, R. and Pollard, J. (2010) ‘Archaeological assemblages and practices of deposition’, in D. Hicks and M. Beaudry (eds) Oxford Handbook of Material Culture Studies. Oxford: Oxford University Press. pp. –

Kara, H. (2015) Creative Methods in the Social Sciences: A Practical Guide. Bristol: Policy Press.

Keane, W. (2003) ‘Semiotics and the social analysis of material things’, Language and Communication, 23 (3–4): 409–25.

Keane, W. (2005) 'Signs are not the garb of meaning: on the social analysis of material things', in D. Miller (ed.) Materiality. Durham, NC: Duke University Press. pp. 182–205.

Kent, S. (1999) 'The archaeological visibility of storage: delineating storage from trash areas', American Antiquity, 64: (1): 79–94.

Kjeldskov, J., Gibbs, M., Veter, F., Howard, S., Pedel, S., Mecoles, K. and Bunyan, M. (2004) 'Using cultural probes to explore mediated intimacy', Australasian Journal of Information Systems, 11 (2).

Klepp, I. and Bjerk, M. (2014) 'A methodological approach to the materiality of clothing: wardrobe studies', International Journal of Social Research Methodology, 17 (4): 373–86.

Knowles, C. (2015) 'The flip-flop trail and fragile globalization', Theory, Culture & Society, 32 (7–8): 231–44.

Kopytoff, I. (1986) 'The cultural biography of things: commodification as process', in A. Appadurai (ed.) The Social Life of Things: Commodities in Cultural Perspective. Cambridge: Cambridge University Press. pp. 64–91.

Kunimoto, N. (2004) 'Intimate archives: Japanese-Canadian family photography, 1939–1949', Art History, 27: 129–55.

Kvale, S. (1996) InterViews: An Introduction to Qualitative Research Interviewing. Thousand Oaks, CA: Sage.

Lamotta, V.M. and Schiffer, M.B. (1999) 'Formation processes of house floor assemblages', in P. Alison (ed.) The Archaeology of Household Activities. London: Routledge. pp. 19–29.

Lapum, J., Ruttonsha, P., Church, K., Yau, T. and David, A. (2012) ‘Employing the arts in research as an analytical tool and dissemination method: interpreting experience through the aesthetic’, Qualitative Inquiry, 18 (1): 100–15.

Latour, B. (1993) We Have Never Been Modern. Cambridge, MA: Harvard University Press.

Latour, B. (2005) Reassembling the Social: An introduction to Actor-Network-Theory. Oxford: Oxford University Press.

Laurier, E. (1998) ‘Replication and restoration: ways of making maritime heritage’, Journal of Material Culture, 3 (1): 21–50.

Law, J. (2003) ‘Making a mess with method’. Lancaster: Centre for Science Studies, Lancaster University. Available at: www.comp.lancs.ac.uk/sociology/papers/Law-Making-a-Mess-with-Method.pdf

Law, J. (2004) After Method. London: Routledge.

Law, J. (2007) ‘Actor Network Theory and Material Semiotics’, available at: www.heterogeneities.net/publications/Law2007ANTandMaterialSemiotics.pdf (accessed 14 January 2019).

Law, J. (2010) ‘The materials of STS’, in D. Hicks and M. Beaudry (eds) The Oxford Handbook of Material Culture Studies. Oxford: Oxford University Press. pp. 173–90.

Law, J. and Urry, J. (2004) ‘Enacting the social’, Economy and Society, 33 (3) 390–410.

Lawler, S. (2002) ‘Narrative in social research’, in T. May (ed.) Qualitative Research in Action. London: Sage. pp. 242–58.

Layne, L.L. (2000) ‘“He was a real baby with baby things”: a material culture analysis of personhood, parenthood and pregnancy loss’, Journal of Material Culture, 5 (3): 321–45.

Leavy, P. (2015) Method Meets Art: Art-Based Research Practice. Guildford: Guildford Press.

Lewis, C., May, V., Hicks, S., Costa Santos, S. and Bertolino, N. (2018) ‘Researching the home using architectural and social science methods’, Methodological Innovations. https://doi.org/10.1177/2059799118796006

Licoppe, C., Diminescu, D., Smoreda, Z. and Ziemlicki, C. (2008) ‘Using mobile phone geolocalisation for “socio-geographical” analysis of co-ordination, urban mobilities, and social integration patterns’, Journal of Economic and Social Geography, 99 (5): 584–601.

Lorimer, H. (2005) ‘Cultural geography: the busyness of being “more-than-representational”’, Progress in Human Geography, 29 (1): 83–94.

Lövgren, K. (2015) ‘Squirrels and nostalgia: about wardrobe collections of older women’, in L. Karlsson, M. Liliequist, A. Lundgren, K. Lövgren and A. Sjöstedt (eds) Ageing, Culture and Identity. Umeå: Umeå University. pp. 95–120.

Lyon, D. (2016) ‘Doing audio-visual montage to explore time and space: the everyday rhythms of Billingsgate fish market’, Sociological Research Online, 21 (3): 1–12.

Lyon, D. and Carabelli, G. (2016) ‘Researching young people’s orientations to the future: the methodological challenges of using arts practice’, Qualitative Research, 16 (4): 430–45.

Magaudda, P. (2011). ‘When materiality “bites back”: Digital music consumption practices in the age of dematerialization’, Journal of Consumer Culture, 11 (1), 15–36.

Malan, A. (1990) ‘The archaeology of probate inventories’, Social Dynamics, 16 (1): 1–10.

Mannay, D. (2010) ‘Making the familiar strange: can visual research methods render the familiar setting more perceptible?’, Qualitative Research, 10 (1): 91–111.

Mannay, D. (2016) Visual, Narrative and Creative Research Methods. London: Routledge.

Mannay, D. and Edwards, V. (2013) ‘It’s written in the sand: employing sandboxing to explore the experiences of non-traditional, mature students in higher education’. Presented at Society for Research into Higher Education (SRHE) Annual Research Conference 2013, Celtic Manor, Newport, Wales, UK, 11–13 December 2013.

Mannay, D. and Edwards, V. (2014) ‘Coffee, milk and a sprinkling of sand: an initiative to assist non-traditional, mature students form supportive networks in higher education’. Presented at 2014 FACE Annual Conference, Salford University, Salford, UK, 2–4 July 2014.

Marchand, T. (2009) The Masons of Djenne. Bloomington, IN: Indiana University Press.

Marcus, G.E. (1995) 'Ethnography in/of the world system: the emergence of multi-sited ethnnography', Annual Review of Anthropology, 24 (1995): 95–117. https://doi.org/10.1177/1463499605059232

Mason, J. (2011) 'Facet methodology: the case for an inventive research orientation', Methodological Innovations Online, 6 (3): 75–92.

Mason, J. (2018) Qualitative Researching (3rd edn). London: Sage.

Massey, D. (2005) For Space. London: Sage.

Mattelmäki, T. (2005) 'Applying probes – from inspirational notes to collaborative insights', CoDesign, 1 (2): 83–102.

McLeod, K. (2014) 'Orientating to assembling: qualitative inquiry for more-than-human worlds', International Journal of Qualitative Methods, 13 (1): 377–94.

Merleau-Ponty ([1945] 1962), Phenomenology of Perception, London: Routledge.

Metcalfe, A., Riley, M., Barr, S., Tudor, T., Robinson, G. and Guilbert, S. (2012) 'Food waste bins: bridging infrastructures and practices', The Sociological Review, 60 (2): 135–55.

Metelerkamp, P. (2013) 'Institutional spaces', in P. Graves Brown, R. Harrison and A. Piccini (eds) Oxford Handbook of the Archaeology of the Contemporary World. Oxford: Oxford University Press. pp. 522–46.

Michael, M. (2004) 'On making data social: heterogeneity in sociological practice', Qualitative Research, 4 (1): 5–23.

Michael, M. (2012) 'De-signing the object of sociology: toward an "idiotic" methodology', in L. Back and N. Puwar (eds), Live Methods. Oxford: Blackwell. pp. 166–84.

Michael, M. (2016) 'Notes toward a speculative methodology of everyday life', Qualitative Research, 16 (6): 646–60.

Miller, D. (1987) Material Culture and Mass Consumption. Oxford and Cambridge, MA: Basil Blackwell.

Miller, D. (1998) A Theory of Shopping. Cambridge: Polity Press.

Miller, D. (ed.) (2005) Materiality. Durham, NC: Duke University Press.

Miller, D. (2009) The Comfort of Things. Cambridge: Polity Press.

Miller, D. (2010) Stuff. Cambridge: Polity Press.

Miller, D. and Woodward, S. (2012) Blue Jeans: the Art of the Ordinary. Berkeley, CA: University of California Press.

Mintz, S. (1986) Sweetness and Power. London: Penguin.

Mohr, S. (2016) 'Containing sperm – managing legitimacy: lust, disgust, and hybridity at Danish sperm banks', Journal of Contemporary Ethnography, 45 (3): 319–42.

Mol, A. (2002) The Body Multiple: Ontology in Medical Practice. Durham, NC: Duke University Press.

Motamedi Fraser, M. (2012) 'Once upon a problem', in L. Back and N. Puwar (eds), Live Methods. Oxford: Blackwell. pp. 84–107.

Müller, M. (2015) 'Assemblages and actor-networks: rethinking socio-material power, politics and space', Geography Compass, 9 (1): 27–41.

Nimmo, R. (2011) 'Actor-network theory and methodology: social research in a more-than-human world', Methodological Innovations Online, 6 (3): 108–19.

Nordstrom, S. (2013) 'Object-interviews: folding, unfolding, and refolding perceptions of objects', International Journal of Qualitative Methods, 12 (1): 237–57.

Norris, L. (2008) 'Recycling and reincarnation: the journeys of Indian saris', Mobilities, 3 (3): 415–36.

Norris, L. (2012) 'Economies of moral fibre? Recycling charity clothing into emergency aid blankets', Journal of Material Culture, 17 (4): 389–404.

Olesen, B. (2012) 'How blue jeans went green: the materiality of an American icon', in D. Miller and S. Woodward (eds), Global Denim. Oxford: Berg. pp. 69–86.

Olsen, B. (2010) In Defense of Things: Archaeology and the Ontology of Objects. Plymouth: Altamira Press.

O'Neill, M. (2008) 'Transnational refugees: the transformative role of art?', Forum: Qualitative Social Research, 9 (2), Art. 59.

Owton, H. (2013) ‘Integrating multiple representations: fighting asthma’, Qualitative Inquiry, 19 (8): 600–3.

Pearce, S. (1995) On Collecting: an Investigation into Collecting in the European Tradition. London: Routledge.

Percival, J. (2002) ‘Domestic spaces: uses and meanings in the daily lives of older people’, Ageing and Society, 22: 729–49.

Pickering, A. (2010) ‘Material culture and the dance of agency’, in D. Hicks and M. Beaudry (eds), The Oxford Handbook of Material Culture Studies. Oxford: Oxford University Press. pp. 191–208.

Pink, S. (2004) ‘Performance, self-representation and narrative: interviewing with video’, Seeing is Believing? Approaches to Visual Research Studies in Qualitative Methodology, 7: 61–77.

Pink, S. (2007) ‘Sensing Cittàslow: slow living and the constitution of the sensory city’, The Senses and Society, 2 (1): 59–77.

Pink, S. (2009) Doing Sensory Ethnography. London: Sage.

Pink, S., Sumartojo, S., Lupton, D. and Heyes LaBond, C. (2017) ‘Empathetic technologies: digital materiality and video ethnography’, Visual Studies, 32 (4): 371–81.

Pinney, C. (1997) Camera Indica: the Social Life of Indian Photographs. London: Reaktion Books.

Pollard, J. (2008) ‘Deposition and material agency in the Early Neolithic of southern Britain’, in Barbara J. Mills and William H. Walker (eds), Memory Work: Archaeologies of Material Practices. School for Advanced Research. pp. 41–59.

Puwar, N. and Sharma, S. (2012) ‘Curating sociology’, in L. Back and N. Puwar (eds), Live Methods. Oxford: Blackwell. pp. 40–63.

Rathje, W. (2011) ‘Archaeological intervention in the past, present and future tense’, Archaeological Dialogues, 18 (2): 141–61.

Rathje, W. and Murphey, C. (2001) Rubbish! The Archaeology of Garbage. Tuscon, AZ: University of Arizona Press.

Reed, A. (2007) ‘“Smuk is king”: the action of cigarettes in a Papua New Guinea prison’, in A. Henare, M. Holbraad and S. Wastell (eds), Thinking Through Things: Theorising Artefacts Ethnographically. London: Routledge. pp. 32–46.

Reno, J. (2013) ‘Waste’, in P. Graves Brown, R. Harrison and A. Piccini (eds) Oxford Handbook of the Archaeology of the Contemporary World. Oxford: Oxford University Press. pp. 261–272.

Rhodes, C. (2000) ‘Ghostwriting research: positioning the researcher in the interview text’, Qualitative Inquiry, 6 (4): 511–25.

Richardson, C. (2015) ‘Written texts and the performance of materiality’, in A. Gerritsen and G. Riello (eds), Writing Material Culture History. London: Bloomsbury. pp. 43–58.

Richardson, L. (1997) Fields of Play: Constructing an Academic Life. New Brunswick, NJ: Rutgers University Press.

Riggins, S.H. (1994) ‘Fieldwork in the living room: an auto ethnographic essay’ in Riggins (ed.) The Socialness of Things. Berlin: Mouton de Gruyter. pp. 101–47.

Rivoal, I. and Salazar, N.B. (2013) ‘Contemporary ethnographic practice and the value of serendipity’, Social Anthropology, 21: 178–85.

Robertson, S. (2008) ‘Cultural probes in transmigrant research: a case study’, Interactions: UCLA Journal of Education and Information Studies, 4 (2).

Robinson, G., Riley, M., Metcalfe, A., Barr, S. and Tudor, T. (2015) ‘Exploring pro-environmental actions through discarded materials in the home’, in Unmaking Waste 2015 Conference Proceedings. University of Adelaide, pp. 533–41.

Rose, G. (2016) Visual Methodologies (4th edn). London: Sage.

Rowsell, J. (2011) ‘Carrying my family with me: artefacts as emic perspectives’, Qualitative Research, 11 (3): 331–46.

Sayer, D. (2015) ‘The chance meeting of an umbrella and a sewing machine on a statistical table – some thoughts on surrealism and sociology’, Goldsmiths Annual Methods Lab lecture, 6 March 2015.

Sayes, E. (2014) ‘Actor–Network Theory and methodology: just what does it mean to say that nonhumans have agency?’, Social Studies of Science, 44 (1): 134–49.

Sayre, S. (1999) ‘Using introspective self@narrative to analyze consumption: experiencing plastic surgery’, Consumption Markets and Culture, 3 (2): 99–127.

Schadler, C. (2017) ‘Enactments of a new materialist ethnography: methodological framework and research processes’, Qualitative Research 19 (2), 215–30.

Shankar, S. (2006) 'Metaconsumptive practices and the circulation of objectifications', Journal of Material Culture, 11 (3): 293–317.

Shankland, D. (ed.) (2012) Archaeology and Anthropology. London: Bloomsbury.

Shanks, M. and Hodder, I. (1995) 'Processual, postprocessual and interpretive archaeologies', in I. Hodder, A. Alexandri, V. Buchli, J. Carman, J. Last, J. Lucas and M. Shanks (eds), Interpreting Archaeology: Finding Meaning in the Past. London: Routledge. pp. 3–29.

Sheridan, J., Chamberlain, K. and Dupuis, A. (2011) 'Timelining: visualising experience', Qualitative Research, 11 (5): 552–69.

Sherlock, A. (2012) 'If the Shoe Fits'. Available at: www.youtube.com/watch?v=xJBnx2F09sY&context=C37a52eeADOEgsToPDskL-JRfNJvWEvy830oA9p3qj

Shoval, N., Kwan, M.-P., Reinau, K. and Harder, H. (2014) 'The shoemaker's son always goes barefoot: implementations of GPS and other tracking technologies for geographic research', Geoforum, 51: 1–5.

Simmel, G. ([1907] 1957) 'Fashion', American Journal of Sociology, 62: 541–58.

Skjold, E. (2014) 'The Daily Selection'. PhD Thesis, Design School Kolding and Doctoral School of Organisation and Management Studies at Copenhagen Business School.

Spriggs, H. (2016) '"Uurga shig" – What is it like to be a lasso? Drawing figure–ground reversals between art and anthropology', Journal of Material Culture, 21 (4): 405–28.

St. Pierre, E.A. (2011) ‘Post qualitative research: the critique and the coming after’, in N.K. Denzin and Y.S. Lincoln (eds), Sage Handbook of Qualitative Inquiry (4th edn). Los Angeles, CA: Sage. pp. 611–35.

Stahl, A. (2010) ‘Material histories’, in D. Hicks and M. Beaudry (eds), Oxford Handbook of Material Culture Studies. Oxford: Oxford University Press. pp. 150–72.

Stephens, N. and Lewis, J. (2017) ‘Doing laboratory ethnography: reflections on method in scientific workplaces’, Qualitative Research, 17 (2): 202–16.

Sumartojo, S. and Graves, M. (2018) ‘Rust and dust: materiality and the feel of memory at Camp des Milles’, Journal of Material Culture, 23 (3): 328–43.

Sutton, B. (2011) ‘Playful cards, serious talk: a qualitative research technique to elicit women’s embodied experiences’, Qualitative Research, 11 (2): 177–96.

Thomas, J. (1995) ‘Reconciling symbolic significance with being-in-the-world’, in I. Hodder, A. Alexandri, V. Buchli, J. Carman, J. Last, J. Lucas and M. Shanks (eds), Interpreting Archaeology: Finding Meaning in the Past London: Routledge. pp. 210–12.

Thomas, J. (2012) ‘Archaeology, anthropology and material things’, in D. Shankland (ed.), Archaeology and Anthropology. London, Bloomsbury. pp. 219–32.

Tilley, C. (1999) Metaphor and Material Culture. Oxford: Blackwell Publishers.

Tilley, C. (2001) 'Ethnography and material culture', in P. Atkinson, A. Coffey, S. Delamont, J. Lofland and L. Lofland (eds), Handbook of Ethnography. London: Sage. pp. 258–72.

Tilley, C., Keane, W., Kuchler, S., Rowlands, M. and Spyer, P. (eds) (2013) Handbook of Material Culture. London: Sage.

Torrence, R. and Clarke, A. (2011) '"Suitable for decoration of halls and billiard rooms": finding indigenous agency in historic auction and sale catalogues', in S. Byrne, A. Clarke, R. Harrison and R. Torrence (eds), Unpacking the Collection Networks of Material and Social Agency in the Museum. London: Springer. pp. 29–53.

Van Binsbergen, W. and Geschiere, P. (eds) (2005) Commodification: Things, Agency and Identities. Munster: Lit Verlag.

Van Maanen, J. (2011) Tales of the Field: On Writing Ethnography. Chicago, IL: University of Chicago Press.

Vannini, P. (ed.) (2015) Non-Representational Methodologies: Re-Envisioning Research. London: Routledge.

Walker, W. and Lucero, L. (2000) 'The depositional history of ritual and power', in M. Dobres and J. Robb (eds), Agency in Archaeology. London: Routledge. pp. 130–47.

Walmsley, H. (2018) Afterlife, a film produced by Giulia Mattei in collaboration with the Egyptology Department at The Manchester Museum and the Sue Ryder Charity Shop. Available at: https://youtu.be/6RRDuiXk-BI

Warde, A. (2005) 'Consumption and theories of practice', Journal of Consumer Culture, 5 (2): 131–53.

Weismantel, M. and Meskell, L. (2014) ‘Substances: “Following the material” through two prehistoric cases’, Journal of Material Culture, 19 (3): 233–51.

Willig, C. (2015) ‘“My bus is here”: a phenomenological exploration of “living-with-dying”’, Health Psychology, 34 (4): 417–25.

Wills, W., Dickinson, A., Meah, A. and Short, F. (2016) ‘Reflections on the use of visual methods in a qualitative study of domestic kitchen practices’, Sociology, 50 (3): 470–85.

Wingfield, C. (2011) ‘Donors, loaners, dealers and swappers: the relationship behind the English Collections at the Pitt Rivers Museum’, in S. Byrne, A. Clarke, R. Harrison and R. Torrence (eds), Unpacking the Collection Networks of Material and Social Agency in the Museum. London: Springer. pp. 119–40.

Woodward, I. (2001) ‘Domestic objects and the taste epiphany: a resource for consumption methodology’, Journal of Material Culture, 6 (2): 115–36.

Woodward, S. (2003) ‘Looking good, feeling right: aesthetics of the self’, in S. Kuchler and D. Miller (eds) Clothing as Material Culture. Oxford: Berg. pp. 21–40.

Woodward, S. (2007) Why Women Wear What They Wear. Oxford: Berg.

Woodward, S. (2015a) ‘Object interviews, material imaginings and “unsettling” methods: interdisciplinary approaches to understanding materials and material culture’, Qualitative Research, 16 (4): 359–74.

Woodward, S. (2015b) ‘The hidden lives of domestic things: accumulations in cupboards, lofts and shelves’, in E. Casey and Y. Taylor (eds), Intimacies: Critical Consumption and Diverse Economies. Palgrave Macmillan. pp. 216–31.

Woodward, S. (2018) ‘Dormant things’. University of Manchester. Available at: https://sites.manchester.ac.uk/dormant-things/ (home page) (accessed 19 December 2018).

Woodward, S. and Greasley, A. (2015) ‘Personal collections as material assemblages: a comparison of wardrobes and music collections’, Journal of Consumer Culture, 17 (3): 659–76.

Wright, C. (2004) ‘Material and memory: photography in the Western Solomon Islands’, Journal of Material Culture, 9 (1): 73–85.

Yaneva, A. (2013) ‘Actor-Network-Theory approaches to the archaeology of contemporary architecture’, in P. Graves Brown, R. Harrison and A. Piccini (eds), Oxford Handbook of the Archaeology of the Contemporary World. Oxford: Oxford University Press. pp. 121–34.

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