Chapter 1
Introduction

Abstract The arguments made in this book were first articulated in sketch form in a conference paper in 2009 called *Ethnography Considered Harmful*. The paper tackled contemporary propositions that there was a need for 'new' approaches to ethnography to contend with a changing and broadening milieu for design, and presented a number of reasons for handling such calls with care. We explain here how that paper was received and the range of misunderstandings it gave rise to. We also outline how we were effectively left with the sensation of a job only half-done and how this current volume sets out to properly articulate for systems design what it might be engaging with really when it turns to ethnography for an understanding of the social. As a frame for this latter point we go on to present in outline the concern this volume has with the relationship social science in general and ethnomethodology in particular have with members' methods for the accomplishment of orderly action and interaction in the world. We do this in order to begin to elaborate *a systematic method* for building the social into systems design, and give some initial indications as to how design might choose to engage with such a method. We explain how, in order to accomplish this, it will be necessary to closely inspect and deconstruct how ethnography has evolved in social science and what this might amount to in systems design. We outline how the various chapters of this book contribute to this job of deconstruction: how they take the reader, step-by-step, to an understanding of what kinds of choices confront systems design when it seeks to engage with the social, and what kinds of consequences may ride upon the choices it makes.

1.1 Ethnography Considered Harmful

In 2009 the authors of this book presented a research paper called *Ethnography Considered Harmful* (Crabtree et al. 2009) at the annual ACM CHI conference on Human Factors in Computing Systems, the premier conference in the field of Human Computer Interaction (HCI). The paper was co-authored by Button, Crabtree and Tolmie, all experienced 'ethnographers', and computer scientist Tom Rodden, who has pioneered ethnographic studies in systems design. The paper reflected on

new approaches to ethnography in systems design that were being proposed by a number of different people. The presentation was done as a special panel session open to the conference at large and was followed by responses from four panellists, including the fourth author of this book Mark Rouncefield.[1] This book has its origins in *Ethnography Considered Harmful* and the subsequent misunderstandings and misinterpretations given of it by three panellists and other parties to the event. It is not our intention in writing this book to take the panellists and other researchers to task, however, but rather to open up for broader and more detailed consideration than was possible in a CHI paper, even one given a longer presentation time than normal, why it is that we think ethnography *could* be harmful to systems design.

We appreciate that this is a serious claim to make. It is not one we make or take lightly. The central issue we want to address is how building the social into systems design can be made a *methodical* matter rather than a piecemeal or pliable activity. Simply put, we want to address the core question, what could be a social methodology for systems design? To date the standard way in which systems design engages with the social is through 'ethnography'. However, in the development of 'new' approaches to ethnography we are concerned that design could, unwittingly, buy into what can be shown to be problematic ways in which the social sciences at large go about the business of investigating the social. This could in turn anchor design in the disciplinary worlds of social science rather than the natural attitude of the everyday, commonly understood world into which systems are placed and must operate.

We are all sociologists working in the particular field of ethnomethodology.[2] Our work for the most part has not been conducted within the institutional and organisational structures of sociology, but within computer science departments at the universities of Lancaster and Nottingham or the research arm of a company famous for inventing many of the components of modern computing – the Xerox Corporation. In this respect we have conducted a broad range of empirical studies that address actual social situations and the locally ordered character of human action and interaction for the purposes of supporting system design, both in terms of developing general sensitivities to the social and shaping particular design endeavours around it. We have been content, for the sake of convenience, to call these studies and to have them called *ethnographies* insofar as they make use of materials gathered through fieldwork.

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[1] The other panellists included Bill Gaver (Goldsmith College London), Tracey Lovejoy (Microsoft Redmond), and Wendy Kellogg (IBM Yorktown Heights). William Newman (University College London) chaired the session.

[2] Ethnomethodology was developed by Harold Garfinkel, and his book *Studies in Ethnomethodology* (Garfinkel 1967) outlines many of ethnomethodology's basic issues. Very simply, Garfinkel eschewed the traditional social science preoccupation with generating theoretical accounts of society and the social character of action and interaction in favour of *studies* of action and interaction located within actual social situations. This current book is not an introduction to ethnomethodology, though we do elaborate Garfinkel's rejection of traditional social science, including 'new' developments in social science which have, ironically, in part been developed through misunderstandings of his work. Although not itself an introduction to ethnomethodology Mike Lynch's *Art and Artifact in Laboratory Science* (Lynch 1985) expands upon many ethnomethodological themes in an erudite and accessible way.

However, in doing this, our studies have come to be parcelled up with other sorts of social studies that are also called ethnography, which we entertain disciplinary misgivings about. In writing *Ethnography Considered Harmful* we were attempting to address three key misgivings. First, we were attempting to address calls that were being made for 'new' approaches to ethnography to be developed to address the challenges of ubiquitous computing. Second, and related to this, we were attempting to address misunderstandings about ethnomethodologically-informed ethnographies, which have it that they are all about work and the workplace and that new approaches are therefore required to support the diversification of computing in everyday life. Third, we were attempting to show that the 'new' approaches on offer were not new at all, but well-established in mainstream social science and that they traded on problematic understandings of the social that are pervasive in the social sciences, as ethnomethodology has attempted to make visible.

Our paper upset people from a number of different groups. First, some of the designers and computer scientists with whom we have worked over the years could not understand why we appeared to be so confrontational. Second, though rather less surprisingly, were those whose work we were either criticising or distancing ourselves from. Third, were members of the panel itself. Despite the fact that two of us had worked as senior researchers in industry for a combined total of 25 years, working very closely with the business groups of our company, we, as a collection of authors, were chided by the panellist from Microsoft for not understanding how products are produced and placed. The panellist from IBM played music to us, seeming to suggest that we suspend our intellectual concerns in order to be happy and get on well with other people, and the panellist from academia spoke in defence of those we had criticised, and attempted to show how our criticisms were based upon ill-informed, partial and distorted readings of their work. A fourth group was made up by a number of people in the audience whose questions seemed to be aimed more at us than they were at the arguments we were making.

With the exception of those whose work we criticised, we were puzzled by the paper's reception. Critique is not new for CHI. Lucy Suchman's critique of cognitive approaches to systems design (Suchman 1987) is now a seminal text in HCI, for example. Within our home discipline of sociology critique is the norm, for there is much dispute about how the study of the social is possible and how it can be conducted, and disputes are often worked through in terms of criticism of one another's work. Critique figures as an important tool in systems design and sociology then. In critiquing 'new' approaches to ethnography in systems design, we were addressing other bodies of *sociological* work. Sociological in the sense that even if they were not done by sociologists they were nevertheless examinations of *social life* done for professional purposes. We were trying to make visible what we considered to be their shortcomings and the consequences this could have for systems design if designers were to try and build systems on their basis.

In this latter respect, we were not just engaged in sociological argument for its own sake. Rather, we were concerned that the problems of sociological description, which have plagued sociology and other social science disciplines such as anthropology, were now being played out in and for systems design. We wanted to

make sure that designers did *not* view all ethnographies as apiece, but had the resources to differentiate between different kinds of ethnography. That there are ethnographies such as our own, which are concerned with the methodical ways in which people assemble and order their situated actions and interactions; ethnographies that provide interpretations of and commentaries on society and culture through a theoretical apparatus; and ethnographies that describe what anyone can see but no more than that and thus leave the socially organised nature of action and interaction untouched (empirically or theoretically). Irrespective of their differences, these studies were and still are lumped together under the term 'ethnography' in HCI and we argued that if they were not disentangled then confusions over how to build the social into design could proliferate to the detriment of design. In making these distinctions we wanted to underscore the fact that there are crucial differences in how the social can be approached that are masked by the blanket term 'ethnography', and that these differences might lead design to construe the social in demonstrably problematic ways as it attempts to build social matters into its considerations.

The social now occupies a significant place in systems design thinking, just as 'the user' once did. Understandings of the user were underpinned by consensus as to how the user was to be addressed – cognitively – and cognitive theory thus became the vehicle through which the user was delivered into design. With respect to the social, however, there is as yet *no* consensus as to how it is to be driven into design. On the face of it ethnography would seem to be that vehicle. However, on the arguments we presented in *Ethnography Considered Harmful*, the term 'ethnography' is turned and used in different ways by different social science perspectives or viewpoints on the social, which do not agree as to how it is to be addressed. Design is not so much rubbing up against different types of ethnography then, which it might be invited to view as fit for different design purposes, as *different understandings* of the social and how it can be addressed. We wanted to make this clear in order to show that if it were thought that ethnography per se could be a vehicle for driving the social into systems design then that might well be a mistake.

Building the social into the design mix is a non-trivial matter, and perhaps the CHI conference was not the best place to 'out' our worries and concerns. Our arguments are rooted in old arguments and confusions in social science, and the word limit on CHI submissions only allowed us to gesture at these. Furthermore, many involved in systems design have only a utilitarian interest in ethnography, in the material insights it can deliver for design, and these interests are strongly represented at CHI. Our arguments were and are more principled than utilitarian in nature: we were not offering studies of the social, but querying the very grounds upon which design can effectively understand the social. We have thus produced this volume in order to try to do justice to our arguments and to elaborate what is a complex and far from trivial matter for systems design: *how to methodically build the social into systems design practice*.

Our premise is that the design of interactive systems, applications and services in any context, be it in support of workplace activities, domestic activities, leisure activities, whatever, requires a systematic understanding of the social. If the reader

does not share this premise, then this book should not be read as an attempt to convince them otherwise. Rather, it is directed at those in the systems design community who are already convinced that designing computer systems to support or automate human action and interaction requires some understanding of how action and interaction is done and organised by those who do it. On the basis of that premise our major argument is that the social is currently understood in systems design in a piecemeal fashion, and requires next-step attempts to build it into the design of systems. What is needed is the development of a systematic method for building the social into design practice. Ethnography is *not* that method because it is not, in itself, a method at all. It is rather a gloss on a host of competing perspectives on the social that conceal conflicting understandings as to how the social can be apprehended and tracked into systems design. This may be a surprise to those in systems design who turn to ethnography as a solution. However, a key thrust of this volume is to make the divisions visible and to reflect on what this can mean for systems design. Doing so requires that we highlight important arguments and differences in the social sciences, and show how these are being played out in and for systems design.

We are aware that some within systems design might argue that they do not need to know about, and are not interested in, the twists and turns of social science thinking. We accept that this may well be true for many designers. Design is a very broad church. Only some of its members have an interest in the social and of these many might consider that they only need to have light traction on it. Some designers might simply be interested in a particular cultural matter, or some interactional issue, or some aspect of the professions that touch upon the social. For them, society, how people do the things they do, how they act and interact, the particular undertakings involved, etc., may be little more than a resource for stimulating their design interest. From our point of view we note, as the field of Computer Supported Cooperative Work (CSCW) compellingly illustrated when it emerged out of HCI, that the lack of serious and sustained attention to the *organisation* of human activity *in* action and interaction undermined the effectiveness of computing technologies for the social settings that introduced them and the people who had to use them. Seriously addressing the interactionally organised character of human activity provided not only a resource but also a *focus* for rethinking how to approach the design of collaborative systems. From our experiences in CSCW it seems to us that the social should be far more than just a resource for stimulating the imagination of designers, it should be a resource in the actual design of systems. However, we do not want to legislate as to what designers' interests should be and we appreciate that many designers may believe they only require a light touch on social matters and that they may, consequently, find this volume only of passing interest.

For those in the design community who are interested in drawing the social into the design mix in a *systematic* manner, we would maintain that calls for 'new' approaches to ethnography covertly draw them into the murky waters of social science thinking. These new approaches inevitably implicate the design community in the twists and turns of social science theory and method, though this may not be a particularly visible feature of such calls. It is ironic too that these calls badge

themselves as 'new' ways of approaching the social. They might be new in HCI but they drive systems design towards traditional ways of understanding the social in the social sciences, which produce abstract and general descriptions that *hover above* social life as it is ordinarily encountered by the very people engaged in society's day-to-day business. Calls for new approaches to ethnography as a means of apprehending the social introduce systems design to old confusions in the social sciences, which provide little traction on social reality as this is understood as an everyday matter. In arguing against these calls we are obliged to lay out the grounds we have for rejecting foundational ways of describing the social in the social sciences. In challenging the 'new' it is necessary to open up old problems involved in describing the social for systems design, for without some appreciation of these issues design may well wander up the same blind alley that the social sciences in general have ended up in. Does design, as it grapples with building social matters into the mix, want to be saddled with the theoretical, methodological and philosophical confusions that beset the social sciences? Probably not, but in the short term it may have to as it gets to grips with the problems of sociological description. In writing this book it is our hope that it will go some way towards helping those designers who have a foundational interest in the social make their way through the social science maze.

1.2   Deconstructing Ethnography

In the spirit of hope this volume sets out to deconstruct ethnography for the systems design community in an attempt to elaborate a systematic method for building the social into systems design. The term 'method' in the social sciences usually implicates a body of practices built up within a discipline through which it addresses and develops knowledge of its subject matter. The social sciences have developed, and otherwise borrowed from other disciplines, a range of methodological practices through which they purportedly generate knowledge about social matters. By and large these practices are aimed at answering the foundational question posed by Thomas Hobbes (1651), "how is social order possible?" The social sciences have set about attempting to answer this question by constructing a diverse methodological apparatus, for example: systematic observation, experiments, statistical analyses, typologies and taxonomies, ideal types and a broad range of theoretical frameworks. Thus methods in the social sciences are disciplinary 'things', artefacts of the disciplines making up and articulating the social sciences as sciences.

The ethnomethodological tradition in which we work respecifies the ways in which social science works (see Garfinkel 1991). This respecification has various dimensions to it that we will elaborate in due course, suffice to say here that they underpin ethnomethodology's break with traditional sociology, anthropology, and other social science disciplines. One aspect of this break is a fundamental respecification of methods. As we will expand upon later, ethnomethodology recognises that people already have knowledge about how the social world works, which

they use in methodical ways to bring off their actions and interactions as orderly endeavours, and actually make the social world work. This knowledge is displayed in knowing how to do, see and describe social activity, and is held in common by the members of society. To take a very simple example, just reflect on all the things we display we know in 'going to the pictures'. Setting aside how we get there, once there we display our knowledge of how to queue *in* actually queuing, of how to take turns at talk *in* asking for a ticket for a particular show, of economic institutions and transactions *in* offering our credit card, of interpersonal relationships *in* offering to buy the drinks and popcorn, of appropriate ways of being hygienic *in* using the urinals, and so on and so forth. The simple point to appreciate is that our actions are possessed of and display methodically ordered knowledge, and if that is in doubt just try to go to the head of the queue, walk in without paying, or use the corridor as a urinal and the full force of the everyday knowledge of how to do these things will be brought to bear on you by the other people around you.

This knowledge of how to do and recognise social action is also relied upon and used, in unacknowledged ways, across the social sciences. Thus, and for example, an explanation of the exploitative power of marketing that accounts for us purchasing a cinema ticket takes for granted and relies upon common-sense knowledge of how to purchase a ticket, relies upon what it is that we actually *do*, on what constitutes the act of purchasing. We will elaborate upon this argument subsequently, but note here that the upshot of this argument is that any and all scientific disciplines engaged in the study of the social tacitly rely upon common-sense knowledge, common-sense understandings and common-sense reasoning, which is drawn upon to *re-describe* what anyone knows about society and the ordering or organisation of social life. A social scientist might describe the actions of a software engineer working for a global corporation as contributing to world hegemony, for example. This description not only re-describes the ordinary work of software engineering, it relies on recognising that there are persons in the world engaged in software engineering in the first place. Just what the work of software engineering consists of as an orderly enterprise is, however, left untouched by sociological re-descriptions of the common-sense world.[3]

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[3] One of the authors of this book was involved in a series of studies with the sociologist Wes Sharrock of software and hardware engineers involved in a number of projects to do with photocopiers, printers and multi-functional devices. At the time of the studies we were intrigued by the way in which social science colleagues, mainly in the area of Science and Technology Studies (STS), construed of scientists and technologists almost as though they were 'the enemy', involved in the technocratic subjugation of the world (see, for example, Law 1991). Whereas we were confronted with ordinary people not so much involved in working out the best mechanism of subjugation but in figuring out mundane practical solutions to technical issues and, more taxing for them, organising the running of the projects they were involved in within various and often conflicting constraints mainly to do with time and budget. Although we never included the hegemony example in the papers we published, it figured in our notes and helped us work our way through a number of issues. It will be used on various occasions in the present volume to illustrate particular analytic points. As on so many other occasions we thank Wes Sharrock for sharing his thoughts and contributions in this regard.

The methods of the social sciences are, then, at one and the same time ensnared by, and in competition with, methods of common-sense reasoning (Pollner 1987). They seek to replace common-sense knowledge of society with what they consider to be more rigorous, more objective, more systematic knowledge of the social world. Yet the descriptions they provide are *rooted* in the common-sense perspective. This produces an ironic situation in which social science descriptions treat the ordered properties of the common-sense world as *resources* for scientific elaboration, rather than as *topics* for investigation in their own right, and in doing so recast common-sense knowledge and understandings of the social. This results in descriptions of social life that are *at odds* with the very world they claim to be describing, and render a familiar world strange. Harvey Sacks, who developed what Harold Garfinkel described as the jewel in the crown of ethnomethodology, Conversation Analysis, describes the typical way in which social science proceeds:

> A curious fact becomes apparent if you look at … revolutionary scientific treatises back to the pre-Socratics and extending up to at least Freud. You find that they all begin by saying something like this, "About the thing I'm going to talk about, people think they know, but they don't." (Hill and Crittenden 1968)

From a social science stance it is an appalling thing to argue that, contrary to their insistence, the social sciences actually build-in common-sense knowledge of the social world; that their methods of accounting for the things they address are based upon common-sense methods; and that this results in descriptions that are parasitic upon what 'anyone' knows about society. What is appalling about this situation for the social scientist is the *reliance* of social science *on* common-sense, which inevitably throws the foundations of social science into disarray. The conflation of topic and resource and the inseparable entwining of social science description with common-sense knowledge, common-sense understanding and common-sense reasoning drives ethnomethodology's respecification of method (Zimmerman and Pollner 1970). Thus, rather than see and treat methods as disciplinarily owned things, ethnomethodology orients us to methods as common-sense things ordinarily used by society's members in their everyday lives, be they engaged in work or leisure or play, etc., to order their endeavours. Methods, for ethnomethodology, belong *to the members of society* and the activities they engage in. This may be a surprise to system designers. However, if design wants to move beyond a piecemeal engagement with the social and develop a methical engagement with it, and we understand that this is a big *if*, then this argument takes on an importance for design. Design can pick up on methods as disciplinarily owned things, pick up on the methods of the social sciences, *or* it can turn to the methods ordinarily used by society's members to bring about the ordered courses of action and interaction in which systems will actually be embedded.

Ethnomethodology's respecification of method is, we think, key to the attempt to systematically build the social into systems design. On this view, human activities are seen to be possessed of their own methods – *members' methods* – for assembling and ordering the distinctive courses of action and interaction that make up the recognisable features of society. The methical ordering of social life – the real world, real time social organisation of human action – is an investigable matter and the

sustained *topic* of ethnomethodological inquiry. *Studying* members' methodologies is what the term 'ethnomethodology' refers to: the study of folk knowledge and its procedural use in ordering the familiar scenes of everyday life. It means that when we point to a methodology for engaging with the social world we are not describing some disciplinarily owned apparatus and arguing that systems design pick it up. Rather we are arguing, or making the argument again to be more precise, that in attempting to build the social into the design mix in systematic ways designers should turn to members' methods as a means of getting a fix on the social. Such an argument may seem strange to systems designers. It may be of some small comfort to hear that it is perhaps even harder for those in the social sciences to grasp. For it is being argued that we turn away from established social science methodologies, turn away from disciplinarily generated knowledge of the social, and turn instead to methods whose existence is tacitly traded on but not acknowledged by the social sciences: methods that ordinary people use to do the ordinary things they do; methods that reflect an order of knowledge the social sciences are in direct competition with and seek to systematically replace.

We note here then, and address in detail later in this volume, two issues with respect to this concern with members' methods. The first is that the term does not refer to some armoury of *instructions* for the doing of human action that human beings possess and which they come by either innately or through socialisation. Computer science is familiar with the idea that sets of instructions are integral to the organisation of human action. The idea of a *plan* in Artificial Intelligence, for example, seeks to provide for action in terms of sequences of instructions for doing things. This cognitive conception of the methodical character of action was disputed by Suchman (1987), whose studies showed that such plans are always accountable *in action* to the situated, occasioned and contingent circumstances of realising them. Although not overtly marked in her book, Suchman's arguments resonate with Garfinkel's examination of 'instructed action', at least with respect to the way in which plans and instructions are organised in practice (Garfinkel 2002), and Wittgenstein's philosophical reflections on rule-following. Wittgenstein (1958) has described how rules do not determine their own application, that there are situated judgements involved in the use of a rule that are not themselves covered by the rule (Baker and Hacker 2009). Do you follow the signpost in the direction of its pointed end or its blunt end, for instance? Garfinkel describes how people do instructed action, such as following a set of instructions for reaching a destination: "Take the first left past the third set of traffic lights." Does that include the lights at this pedestrian crossing, or does it just refer to the lights governing road intersections, and does that alley count or should I turn at the first road? Much has been written in the social sciences relating to normative action and the idea that it is rule-governed. We do not intend to launch ourselves into this body of work, but simply point out here that members' methods cannot be reduced to this kind of account.

What members' methods refer to is simply that there is a methodical character to social undertakings, not that there are a bunch of rules for doing them. Take, for example, the very simple act of answering a phone. There are a number of methodical matters involved here. (1) Simply picking up the phone is to acknowledge the

action of being 'summoned'. (2) The answerer, in immediately speaking rather than just holding the phone, recognises that the summons is providing for them to do a next action. (3) That next action usually consists of doing a greeting and in using a greeting term such as "hi" the answerer is displaying that not anything can be an appropriate next action but that some particular action, a greeting, is an appropriate response to the summons. (4) In using a greeting term the answerer is providing for another appropriate next action to be done, a reciprocal greeting by the caller. Now of course it is possible to try and codify these things into a set of rules for answering phone calls. But in so doing little is gained because it is not the case that people are following them to do the things they account for. Rather in noticing these features of phone call openings we are describing the sort of thing that everyone knows about them, and knows by being competent members of a culture brought up and schooled in society's ways (Sacks 1984). These 'ways' constitute the methods through which we accomplish the doing of social action and they are broadly recognisable, seen, known and understood by other members who share the same forms of social life.

This takes us onto the second concern we have with members' methods: that they provide for common-sense knowledge of society. Common-sense knowledge does not refer to people's opinions or beliefs about social life. Rather it refers to the knowledge society's members possess and display when, for example, they pick up the phone when it rings, rather than being puzzled as to what to do about it. Ethnomethodology recognises that common-sense knowledge, common-sense understandings and common-sense reasoning is wrapped up in the methods that people use to order social activities. It is these common-sense methods – *ethno methods* – that we refer to when we speak about building the social into systems design in a systematic and methodical way. We are arguing, then, that insofar as systems design is concerned to draw the social into the design mix it should orient itself to members' methods, and undertake empirical analyses that make these methods visible and available to design practice. Thus a social method for design is not a method of *our* construction. It is rather to provide design with access to members' methods for doing and organising human activities and social life, and for design to thereby be instructed in social matters *by those involved in their doing*, rather than through the disciplinary methods of social science. Ethnomethodology is all about making members' methods inspectable, and making visible the consequences of this inspection for studies of the social world. It is our objective that the first of these issues is made to matter for design. To do so we are obliged to forage into aspects of the second.

1.3   Volume Structure and Content

In Chap. 2, *Building the Social into Systems Design,* we lay down the contours of our argument and the intellectual territory we are working across throughout this book. We take up the central claim that ethnography is not all of apiece, examining

its contested character in the social sciences. We review the origins of and motivations for ethnography in systems design, addressing the uptake and use of a marginal social science approach at Xerox PARC in the 1970s and its subsequent development in the 1980s in CSCW amongst broader efforts to develop workplace systems. We argue that over the course of its adoption in systems design ethnography has come to stand as a proxy for the social, which legitimates a diversity of perspectives and glosses over its origins in a design context in ethnomethodological studies. Calls for 'new' approaches to ethnography reflect mainstream social science concerns with the problem of social order, substituting ethnomethodological concerns with situated action and the local production of order with top-down theoretical views that emphasise the formative role of social and cultural structures on the orderliness of situated action and interaction. We argue that 'new' approaches to ethnography trade on mistaken assumptions about the ethnomethodological approach and mask the very insights into the social that have been of value to design to date. In elaborating these issues, we are not arguing whose version of ethnography is more appropriate to systems design. We are arguing that *ethnography is not the issue*. Understanding the social and building it into design is what matters. The rest is a divergence.

In Chap. 3, *Ethnography as Cultural Theory,* we begin our deconstruction of ethnography, examining how 'new' approaches trade on and in old assumptions about how the social should be described. We turn to the origins of ethnography in anthropology, elaborating Bronislaw Malinowski's immersive approach to the study of culture and society and how it becomes problematic (Malinowski 1922). Of particular issue is the grounding of observations of what people do in social or cultural theories to explain observed events. This substitutes descriptions of *how* action is done for competing accounts of *why* it is done, and what its doing *means*. It results in the production of interpretations of and commentaries on action and its organisation, which foreground the cultural meanings of action and its perceived structural character. Situated action therefore becomes a site to witness generic social and cultural institutions at work, rather than something to be understood in its own terms. The substitution produces descriptions or accounts of social order that stand at odds with common-sense understandings. The incarnate orderliness of action as known, seen and recognised by society's members is left untouched and is never unpacked. Thus the naturally occurring orderliness of action is *surplus* to the analytic requirements of ethnography. How society's members organise action *in action* remains to be described.

In Chap. 4, '*New' Ethnography and Ubiquitous Computing,* we address so-called 'new' approaches to ethnography, which track the old problems of sociological description elaborated in Chap. 3 into systems design. We explore the notion of 'messiness' and 'infrastructure' in ubiquitous computing and 'multi-site ethnography' as an analytic lens on society and culture (Dourish and Bell 2011). We attempt to show that there is nothing new in these arguments; that they simply represent a call to build the traditional role and apparatus of ethnography in anthropology into systems design. We critically examine the occasioned use of everyday concepts as a means of rendering general sociological descriptions. We argue that this central

analytic practice trades on common-sense methods of interpretation, which reify generalised sociological accounts and make abstract theoretical concepts real-worldly. The result is that the descriptions generated through the analytic apparatus of contemporary ethnography provide generalised accounts of social life that are of an order, despite the disciplinary rhetoric, that anyone can provide: the man in the street, the tourist, the journalist, *anyone whomsoever*. This begs the question as to why systems design has need of ethnography at all?

In Chap. 5, *Interpretation, Reflexivity and Objectivity,* we examine contemporary anthropological concerns with the relationship between the observational act, which is at the heart of ethnography, and that which is observed, along with the impact of participation as an observer. These concerns have developed in part as a reaction to problems with the more traditional understanding of ethnography in anthropology that we have previously examined, and are being introduced as matters that design should attend to. Thus we address the assertion that all observation is theory-laden and inherently interpretive, showing that this argument again trades on and abuses ordinary language concepts that are used in unproblematic ways in the everyday world. The alleged necessity of theory to observation is supplanted by the 'praxio-logical' character of perception, i.e., the ordinary ability of society's members to see and recognise action. It is not an intellectual ability rooted in 'reflexive' practices of academic theorising, which focus on the ethnographer's observational and literary practices, but one rooted in the practical organisation of action and the reflexivity of members' descriptive practices, which enable them to account for the world around them. We consider the rebuttal to this, which is that we are advocating an outmoded 'realist' agenda, which we counter through an examination of the problem of objectivity in social science research. In tackling the issues of reflexivity and objectivity we attempt to relocate them in members' methods and *restore them to the everyday world* from which social science has appropriated them, thereby confusing itself with respect to its remit.

In Chap. 6, *The Missing What of Ethnographic Studies,* we focus upon the use of ethnography in sociology. We examine Anslem Strauss's call for studies of the work that people actually do, in contrast to studies of the imputed structural conditions under which work is assumed to be done. This involves us in examining old and new misunderstandings of what the notion of 'work' means in ethnographic studies and systems design. We also look at the studies of interaction that came out of the Chicago School of Sociology, which represent a serious and sustained attempt to get to grips with how the social world is organised within the things that people actually do. Despite their claims, however, we argue that these interactionist studies never-theless miss the interactional work involved in the doing of human activity. In its place are put 'scenic' descriptions: descriptions of social features of action that frame the interactional work involved in doing it; descriptions of the interactions that surround work; descriptions that again return us to what anyone can see but this time in terms of mere observations rather than general theoretical interpretations. We say 'mere observations' because these descriptions lack analytic focus and coherence. They replace theoretical descriptions with empirical ones for sure, but fail to get to grips with *the interactional 'what' of human action* and the orderly

ways in which social phenomena are thereby brought about and pulled off in the course of their very doing. We then turn to some of the 'new' ethnographies offered to design and argue that they similarly embody scenic descriptions and let the interactional what of members' actions slip by in favour of heuristic devices that settle by fiat what is going on in social settings and what is relevant about it to systems design.

In Chap. 7, *Ethnography, Ethnomethodology and Design,* we explicitly turn to the ethnomethodological respecification of the study of social order as a locally produced interactionally achievement. We draw an explicit contrast between ethnographic studies and ethnomethodological studies that make use of ethnographically-gathered materials. In doing so we elaborate how the social sciences come to routinely and systematically ignore the interactional order in treating the orderliness of action as a taken for granted resource for investigating social life, rather than as a foundational problem for sociological investigation. The distinction highlights key differences in the descriptive practices of ethnography and ethnomethodology. The difference contrasts the abstract descriptive practices of mainstream social science with concrete descriptions of "work's things" (Garfinkel 1986), which relocate what anyone knows about the orderliness of everyday life in the methodical undertakings that recognisably constitute particular social endeavours. Ethnomethodological studies replace the artful, political, intriguing, and sometimes exotic descriptions of social life produced by mainstream social science with descriptions of mundane order. This is not to advocate that common-sense be accorded some special status and privilege; we are not trying to rival science with what anyone knows about society. Rather, we are saying that relocating what anyone knows in members' methods for mundanely producing the social order roots design in the lived work of interaction and that this, in turn, provides *a systematic means of anchoring systems design in the social world*.

Having built an understanding of ethnomethodology we turn in Chap. 8, *Members' Not Ethnographers' Methods,* to demonstrate that the study of members' methods can provide a resource for building the social into design. We do this by examining particular studies that have been previously undertaken. We make visible how they are descriptions of members' methods and how these methods have been built into design. The studies we treat range across ethnomethodology's historical engagement with design, and across work and leisure settings. In the course of doing this we disabuse design of the idea that ethnomethodological studies of work are only applicable for studying jobs, occupations or workplaces. We also draw together the considerations of the previous chapters by summarising what can be learnt through the deconstruction of the term 'ethnography' for undertaking empirical studies of human action and interaction, and lay out how this provides a method for design to build-in the social. We emphasise that we are not attempting to be prescriptive: design can look to whatever quarters it cares for inspiration, for context, for legitimisation, for whatever. We are, however, providing for those designers who want as a methodical matter, as opposed to a piecemeal matter, or an occasional matter, to build the social into design practice, just such an analytic method, and the grounds for proposing this method, as opposed to an interpretive or a scenic ethnography.

The need to write this book is immensely frustrating for us. Garfinkel's *Studies in Ethnomethodology* created a fork in the road for social science. Social science has largely ignored ethnomethodology's arguments and continued on in the same direction, ending up in the blind alley which the academic concern with reflexivity so aptly demonstrates. It could take a new direction, studying the methods through which society's members achieve, display and make use of the social order in their mundane actions and interactions. Although ethnomethodology in part exists in a dialogue with social science, in which the exhibits of its studies are used to sign-post the fork in the road, it also exists in making those exhibits visible in their own right as the direction of travel. It is in this latter direction that we have worked within systems design, undertaking studies of members' methods and making the exhibits of our studies tell for design purposes. The frustration then resides in having to back track to the fork and emphasise it less systems design should wander up the same blind alley and lose sight of the *incarnate orderliness* of everyday life that systems must gear into if they are to live and thrive in practice.

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