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Configuring User-Designer Relations

Interdisciplinary Perspectives

Springer

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Computer Supported Cooperative Work ISSN 1431-1496
ISBN: 978-1-84628-924-8 e-ISBN: 978-1-84628-925-5
DOI: 10.1007/978-1-84628-925-5

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Control Number: 2008936631

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Printed on acid-free paper

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Chapter 1

Introduction: Configuring User–Designer Relations: Interdisciplinary Perspectives

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1.1 Introduction

It is a commonplace but one that is probably worth repeating: user–designer relations are both multifaceted and also highly situated. In this book we want to examine some of the ways that the design of information and communications technology based systems (ICTs) can be conceptualised and what the attendant issues and rewards might be. We do not seek to set out a policy or advance a platform for the (re)configuration of user–designer relations, but to show how such relationships might be arranged and managed. In all cases the reader is invited to consider how a particular configuration of users and designers might be achieved, how it could apply to their own situation and how the practical exigencies of their own situation might impact on the production of particular configurations.

By focusing on the processes of negotiating and shaping the relations that connect use with design, we follow Suchman's call to

> replace the designer/user opposition – an opposition that closes off our possibilities for recognising the subtle and profound boundaries that actually do divide us – with a rich, densely structured landscape of identities and working relations ... (Suchman, 1994, p. 22).

In their effort to realise productively the transformative potential of new technologies in use, users and designers are inescapably thrown together – whether they actively seek collaboration or separations – neither can escape the influence of the other. The contributions to this book map out the multifaceted and situated nature of some important user–designer configurations, describing often difficult but effective (and also not so effective) ways of configuring them. They show, for example, how reconfiguring user–designer relations does not take place in isolation and provide

A. Voss et al. (eds.), *Configuring User-Designer Relations*,
DOI: 10.1007/978-1-84628-925-5_1, © Springer-Verlag London Limited 2009

some pointers to how we might begin to take the social, economic, cultural, material context into account. They illustrate and call for methods that might enable practitioners to justify the need for and hence find an organisational space for collaborative user–designer relations, itself often one of the more difficult challenges. We do not aim to produce an exhaustive typology or to specify some ideal–typical configuration; rather we want to look at the 'grammars' of user–designer relations within working divisions of labour. That is to say we want to consider how the terms are deployed in practice and in context and the impacts that these have on what is developed. Moreover, user–designer relations change or need to be reconfigured over time to fit different goals and evolving circumstances. We will start by looking at the concerns raised by the contributors to the present volume and then attempt to draw out some common themes which address the 'grammars' of user–designer relations.

1.2 The Chapters

In Chapter 2, Törpel, Voss, Hartswood, and Procter set out to provide the reader with an overview of participatory design (PD) practices and how the PD community has responded to new challenges. The PD community has been at the heart of debates about user–designer relations for more than 20 years. Törpel et al. trace the evolution of PD from its roots within the socio-technical systems school at London's Tavistock Institute, through its politicisation by the Scandinavian school of IT systems development and, finally, the varieties of PD that have subsequently emerged as it has been taken up and adapted by the mainstream of ICT systems development practice. Törpel et al.'s point, then, is that PD no longer stands for a unitary set of ideals but a rich, heterogeneous, and fluid constellation of practices, whose commitments to user–designer relations vary widely.

Chapter 3, by Voss, Procter, Slack, Hartswood, and Rouncefield, explores relationships in development and use with a focus on the role of ethnographic studies. The separation between design and use makes it difficult to design technologies that genuinely support work practices, not only because designers lack a thorough understanding of practice but also because practices evolve dynamically, in interaction with new technologies. Separated from use in time and space, design often fails to address changing opportunities and needs – often with substantial cost implications. Ethnography promises a route out of this conundrum. However, its potential is hard to realise. Voss et al. insightfully examine the difficulties that arise and seek to sketch out productive modes of engaging ethnography, concentrating on practical methods of doing ethnographically informed design. Their approach is symmetrical, that is, they strive to explicate design practices and practices of investigating use.

A brief historical review of changing systems design practices reveals how ICT system design, rooted in engineering rather than aesthetic design methods, struggled to move beyond a linear conception of its processes. Approaches based on iterative and evolutionary models – building repeated encounters between design and use into the process – have gained dominance today, especially in the 'agile' methods of extreme programming. But it remains to be seen whether such methods can facilitate new user–designer relations and socio-technical innovation processes. Moreover,

changing user–designer relations are not just a matter of changing the way we design. As research within the field of computer-supported cooperative work (CSCW) has shown, it is crucial that designers also change their conception of the use practices they are designing for. Ethnographic research in CSCW potently unveils the thoroughgoing sociality of work. Whether actively collaborating or engaged with others through peripheral awareness, whether constructively working together, or involved in conflict, work is a social process and technologies must fit into, and support, the sociality of work. Some basic principles for user–designer relations can be drawn from these considerations. They point towards using ethnography to inform design and PD processes. However, as Voss et al. point out, such attempts to bridge between design and use may not address the more fundamental problems that obstruct successful design and appropriation.

Building on their own comprehensive experience, the authors then appraise just how ethnography has been used to inform design; the challenges designers, users, and ethnographers face; and the strategies they have developed to fold knowledge of dynamically evolving work practices into design. They explore analytical motivations and the uneasy relationship between analysis of existing practices and the task of envisaging the future. A summary of particularly productive methods of, and orientations towards, conducting ethnographic studies then leads into a discussion of the potential to constructively transform user–designer relations by folding ethnographic sensitivities into iterative and participatory approaches to design.

One important move towards such a goal can be made through ethnographic studies of design work itself. Drawing on a number of studies, including the investigation undertaken by Martin, Mariani, and Rouncefield (Chapter 7), Voss et al. argue that ICT system design – like all forms of work – is deeply collaborative and social, distributed across time and space, involving both users and designers. This exploration leads into a conceptualisation of design as one approach amongst several that need to be practically aligned to enable innovation in use. It benefits from and depends on analytical (ethnographic) and practical–political engagement with users. Voss et al. conclude with an exploration of how such a move towards design as part of innovation in use constitutes a fundamental, yet doable and profitable reorientation and reappreciation of user–designer relations.

The chapter by Jenkings (Chapter 4) is the first of six empirically based chapters which present some of the diversity of approaches to user–designer relations within a range of very different contemporary ICT systems development projects. The question posed by Jenkings (and it is one which has been asked many times) is whether it is possible to practice user engagement meaningfully in the context of a large organisational project involving potentially thousands of users located at multiple work sites. His point is that most – if not all – PD techniques have been developed for application within small user communities and the mechanisms for user–designer interaction on which they typically rely do not scale well. Jenkings attempts to find solutions to this recurring problem in a project within a setting which, in terms of scale and complexity, is arguably the most challenging one could possibly wish for. The UK National Health Service (NHS) is the largest employer in Europe with multiple and overlapping organisational decision-making structures and has launched Connecting for Health (CfH), said to be the world's largest civil ICT project, with

the aim of providing the UK with a national electronic health record service. Jenkings' contribution is particularly timely as the NHS in England grapples with the problems of delivering the CfH project. The project has been under fire for many reasons, not least for its approach to (or lack of) user engagement. Martin, Mariani, and Rouncefield (Chapter 7) examine user–designer relations specifically in the context of the CfH project in their own chapter.

Jenkings concedes that the techniques of user–designer engagement that have become synonymous with PD cannot survive intact in an encounter with a user constituency of such scale and diversity. Jenkings describes the origins, development, and evaluation of a prototype tool, the 'Animator' intended to facilitate user–designer communication and, in particular, to help raise user awareness. While the tool itself was crafted to address the needs of a specific project, Jenkings suggests that we might look to technology-demonstrator tools more generally to facilitate user engagement on this scale. What Jenkings sets out to show is that it is possible to produce useful tools to facilitate engagement with large-scale and diverse user communities. Jenkings readily acknowledges that the 'proof' of this assertion rests, in part, on accepting more limited user-engagement goals for the approach that he describes. One lesson is clear from Jenkings's account and it is that this approach is not a short cut but must be underpinned by the very same kinds of painstaking user-engagement work which we have come to associate with PD 'in the small'.

In Chapter 5, Bonner examines the uses of PD tools and techniques by product designers developing interfaces for domestic appliances. His designers – charged with designing a new cooker – undertook four tasks: cooking a meal; considering how the technology being designed could support that activity; thinking about a week in the life of a cooker; and finally developing scenarios about potential users of the cooker.

Cooking a lunch is something that most of us will have done. Yet, when we attend to the seen but unnoticed aspects of how we go about doing this and the technologies that support our activities, it becomes interesting to consider just how design impacts on this mundane activity. Bonner shows how designers of domestic technologies employed Muller et al.'s CARD methodology to topicalise the activity of cooking a meal, and how, when looking at the process of cooking, the designers saw how their design of domestic technologies could afford that activity (Muller et al., 1995). Just how do we go about cooking lunch and how does technology afford or get in the way of this activity? The CARD methodology was sufficiently disjunctive from the normal activity to produce what we might call 'aids to imagination' vis-à-vis what it was to cook lunch.

One of the designers highlights an interesting issue regarding the 'ownership' of methods and their attendant findings – 'if all this goes well – it will be our idea – if it all goes wrong – it will be yours'. While this may well have been said jokingly, the issue of what the payoff of adopting of novel methods for reconfiguring user–designer relations might be is something to consider. We might also consider the role of the IT professional here as a methodological intermediary, providing new ways for persons to research user requirements, which can be taken up with little control yet potentially bearing the *imprimatur* of the IT professional. Further, the comment highlights the ways that such methodologies are (or become) embedded within or-

ganisational frameworks and can be used to obtain resources, make decisions about products, and so forth. Reconfiguring user–designer relations does not take place in isolation.

A second set of exercises was convened and led by designers with employees of the company not engaged in design. The designers set up a 'function filter' where cards were prioritised by frequency and importance of use within scenarios around using a microwave oven. Bonner points out the ways in which the designer-led exercises differed from those led by the IT professional – this might be glossed as a prioritisation of prototypes as a means of blocking off more innovative suggestions from users. The emerging prototype was both a means of solidifying the findings and a concrete embodiment of solutions to issues raised.

Bonner's chapter raises a number of foundational issues for reconfiguring user–designer relations – notably the importance of users of PD coming to trust the methods and what they elicit, and the organisational dimensions of design that is the need for a methodology to be recognised as acceptable and viable, and thereby to find an organisational space. The issue of ownership is also important – when the method becomes part of the organisation's repertoire of research tools, it is potentially subject to what, in another context, Knorr-Cetina (1981) has referred to as 'conversion–perversion'. To our minds, there is a need for all reconfigurations to bear a health warning – once enmeshed within organisational exigencies what a method is and what it becomes may be very different.

Picking up the challenge of achieving organisational acceptance, Hyysalo's chapter (Chapter 6) sets out a compelling rationale for the adoption of PD within the commercial sector. Many companies have employed the rhetoric of being 'customer driven', but, as Hyysalo demonstrates, this has often been merely a rhetorical device and attendant user involvement has been merely at a 'Guinea pig' level. Hyysalo notes that if we examine the 'long wave' (Freeman and Louçã, 2001) of innovation, we find that competitive advantage is not inevitably to be realised through being first to market or by being the cheapest: as artefacts and users move closer together (consider the rise of open source software as an example), it makes economic sense to involve users in innovation and development processes. This is not simply about creating niches for products but about achieving a tighter coupling between what users want and what manufacturers produce (and, in some cases, the blurring of the distinction between users and designers).

Hyysalo examines the biographies of two innovative products – a record system for diabetics and 'Wristcare', a physiological monitoring and alert system – and the configuration and reconfiguration of user–designer relations over time within each.

In the first case, patients with chronic diseases and health care professionals collaborated with designers to develop the product. While no formal 'methodology' was used, the sharing of experiences of managing illness informed the design of the system. Through this, the company developing the software found that their task was too difficult and re-focused their development efforts on a more generic patient–health care professional system for management of chronic illnesses, which was subsequently rolled out in 1998. The central issue within this collaboration is that users have knowledge and experience that would take developers considerable time and effort to acquire (if it is possible at all) – the 'learning curve' would have been

too steep for the system to be developed under a reasonable business logic. Users were a key resource in the development at the start, but, as Hyysalo points out, as the system became more widely used, the company distanced itself from users and took on less of their suggestions for features and amendments. This brings out an important issue – the management of user-led calls for change. When a product is in development or has been rolled out in a small number of settings, it is comparatively easy to change things – but when there are large numbers of users with potentially conflicting needs, there are problems. In short, it is easy to manage a core set (Collins, 1988) of users as opposed to a larger and potentially more diverse population. This does not mean, as some have suggested, that PD does not 'scale', but that the ways that it does so have to be managed. Pollock and Williams (Chapter 9) show, for example, that once a system becomes a package, some of the competitive gain from tailoring based on specific uses is attenuated and – at least from the company's perspective – user participation needs to be turned towards 'generification' to maintain its value.

In Hyysalo's second case study, the 'wristcare' product developed out of company experience in the health care sector and had been developed with a vision of what the product could do for seniors. User involvement impacted only marginally on development at the early stages since the vision had solidified what the product would look like and what it would do. As the device was rolled out it became apparent that users were unable to cope with its functionality and that a substantial number could work the basic system only with great difficulty, leading to a number of potentially costly false alarms. Issues with the system meant that there was a need to focus on how it was used in context, which led to some redesign and also to a reconfiguration of functionality so as to act as a monitor for seniors rather than being solely an alert system. As with the first system, the designers found that the number of variants became unsupportable and sought to add some of the functionality into later versions of the product. The aim was, as before, to produce a packaged solution capable of being sold internationally.

Both of Hyysalo's case studies illustrate the centrality and the changing nature of user involvement over time and the ways that it can add value to products. While users were involved in both cases, there was no formal method in use – users were involved as a part of the 'natural history' of the developments. It should also be noted that the companies involved moved away from engagement with users after a brief time and that this was in part driven by the need to produce a packaged solution. Returning to the comments made above on the rhetorics of collaboration, the case studies suggest that the relevance and sustainability of collaborative relations lessens once the need to commodify is felt.

Hyysalo concludes by making some proposals for the configuration of user–designer relations in product development. He suggests that informal collaboration and social learning (Williams et al., 2005) are important, and that the extent of user involvement be considered temporally since what informs development at one stage may prove to be problematic later. Finally, Hyysalo notes that as technologies become increasingly configurable, the appropriateness of particular layers of configuration and the opportunities for and benefits of involvement of a range of players should also be considered in more commodity-oriented phases.

Martin, Mariani, and Rouncefield (Chapter 7) consider the practical issues around stakeholder participation in the deployment of a hospital information system (HIS) incorporating an electronic health record (EHR) within a UK hospital trust: their ethnographic study investigates 'participation "in the wild"' and explicates the reasons for the particular configuration of user–designer relations. The development of integrated electronic medical records is the goal of a number of national health care providers, and stakeholder participation in design, development, and implementation is seen as important. As the authors note, their study was not simply another critical engagement with the development of EHRs but an exploration of the pragmatics of participation. A hospital is a diverse and complex organisation and to understand how EHR systems might fit in requires substantial effort. This diversity and complexity is mirrored in the pool of potential user-participants and their areas of expertise. It is not surprising that a significant number of users involved in projects are 'expert' or 'super' users with substantial domain knowledge. Of course, they are not the only users involved – others will be drawn from a variety of domains, but Martin et al. observe that the choice of participants is likely to be influenced by pragmatic and political considerations. There are many differences of perspective and opinion within such groups and also project stakeholders in addition to users of the system. Their participation has to be managed in and as a part of developing the system. Martin et al.'s findings help to explain why user participation in projects of this kind may fall somewhat short of expectations reflected in the PD literature.

The project involved the configuration of a commercial off-the-shelf (COTS) software package. Martin et al. report on the ways that the project is made manageable by division into phases (Button and Sharrock, 1996) and how, in turn, these phases then influence the character and emphasis of user engagement at any particular time. So, for example, during the tendering process, user engagement is limited to Trust board members and it is only during later phases, when potentially crucial choices have already been made that users 'at the sharp end' are given an opportunity to influence the way the project unfolds. The main focus of Martin et al.'s study, however, is the realities of achieving user engagement at the clinical-user level. Here, the authors observe a variety of problems, beginning with the difficulties of recruiting end-users with the requisite expertise to inform the configuration process and the subsequent impact this had on the goals of the configuration work. As the project unfolds, Martin et al. document how the seemingly endless contingencies faced by the project manager in the struggle to keep the project on schedule – ongoing negotiations about tasks and responsibilities, evolving requirements and changing priorities, inter- and intraorganisational tensions, etc. – shape what is practical in terms of user engagement.

To address some of the observed failings in user engagement in this and similar projects, Martin et al. argue that, while research should further develop methods to enhance understanding of users' practices and contexts and to facilitate user involvement throughout the design and implementation process, it should also consider how such methods can be made to work in commercial and organisational settings and real-world design projects. This is not just a matter of revealing the need for more resources and more time. Difficulties arise because user–designer relations can be stretched beyond constructive tension by the different perspectives, interests, and

pressures brought to development and deployment. Martin et al. highlight the need to shape user–designer relations in ways that are mindful of their larger contexts – including organisational demands and regulatory frameworks. In turn, user–designer collaborations can be powerful catalysts in making organisations aware of the fact that transforming the organisation is inseparable from realising innovative technical 'solutions'.

Büscher, Christensen, Hansen, Mogensen, and Shapiro (Chapter 8) take an interesting direction in redefining the boundaries between use and design by designing for assembly – supporting users in the assembly of a repertoire of technologies for a specific task – and by focusing design on producing what we might call work-affording artefacts. Their research, undertaken as part of the palpable computing initiative, indicates the need for designers to support people in making what systems or assemblies afford for their users perceivable or 'palpable'. The 'disappearing computer' is seen as eliding some of its affordances because it is embedded within objects, as opposed to being a discrete entity that can be noticed, explored, and combined with others. Put simply, what we cannot fully see we cannot fully appreciate, nor can we exploit to the full the affordances of such artefacts. To exploit the potentialities of technologies we must be able to engage with them. The disappearing computer is thus shorn of some of its affordances – the aim of palpable computing is to maintain the promise of computers embedded in artefacts, while enabling a focus on affordances. It is no use embedding computers in artefacts if these artefacts continue to get in the way by, for example, asking users about configuration options (Anderson et al., 2003). Part of the vision of palpable computing is to design artefacts that support various configurations without being overly intrusive as to the choices made – although it should be appreciated that this 'quiet optimisation' necessitates compromise.

The 'visibility arrangements' of such systems are central – the focus is not on design for an array of uses but on inspectable configurability for these uses. This suggests that designers no longer occupy an intermediating position but that the visibility arrangements of artefacts make an array of possibilities available to users – in short, users become situated designers, assemblers of arrays of work affording artefacts. In order to realise this vision, Büscher et al. propose a reconfiguration of PD, opening up longitudinal collaborations to encompass software architectures and involving software architects in the design process and making users familiar with some of the affordances of software architectures. Now, this does not mean that users have to become computer scientists, it does mean however that software architects – 'travelling architects' (Corry et al., 2006) – become involved in the design and development process and prototypes include some idea of software architectures that will afford the kinds of work envisaged. The long-term engagement proposed by the authors turns on a reflexive relationship between work practice and the development of technologies – ethnographic observation of work practice informs that technology development and artefacts are designed to better afford work practice. The kinds of 'assemblies' that users put together – in the case at hand, landscape architects using *inter alia* cameras, GPS, and maps – are central to this process: how to make things work together to enable people to do their work is, obviously, the motivation behind this technique. This does not mean designing one configuration or assembly, but

enabling a number of potential configurations to be made, something which requires a robust architecture.

We have already noted the importance of long-term engagements with users and work practice in interdisciplinary teams: the design technique proposed by Büscher et al. continues this and also suggests that 'futures laboratories' are useful in developing such systems. Futures laboratories are fora for emerging work practices and the development of technologies to support them – they enable the exploration of just what types of assemblies of artefacts might support emergent work. For example, emergency medical professionals may be able to save valuable time and make more effective treatment interventions by using video devices to feed back images of a patients' condition and to receive advice as to effective management. What kinds of technologies will support this and how far these are usable and dependable in practice is something that can be explored in futures laboratories. The kinds of long-term engagement afforded by participatory design and futures laboratories are central to the development of novel assemblies of the type discussed – Büscher et al. provide an excellent illustration of the ways that such developments can work in their chapter.

Pollock and Williams (Chapter 9) take a very different focus for their examination of user–designer relations. They observe that we commonly associate the issue of user engagement with the question of how a software package or ICT system can be made to work for a particular group of users within a specific setting. As ICT systems projects seldom involve building solutions from scratch, the study of user–designer relations has tended to focus on the processes by which commodified and generic packages are adapted to meet the needs of particular users (see, e.g. Chapter 7 by Martin et al.,). Pollock and Williams note how this overlooks the issue as to how generic software packages that are capable of bridging different organisational settings (albeit with varying degrees of ease) come to be generic in the first place. They use case studies in which they track the 'biographies' of two COTS software packages to explore the nature of the 'generification work' and how it leads to artefacts, which successfully embody those characteristics that are common across different organisational settings and yet are seemingly capable of being 'localised' for any particular one.

Based on their findings, Pollock and Williams argue that, far from exemplifying 'design from nowhere' (Suchman, 1994), the suppliers of generic packages practice their own strategies for achieving an adequate degree of engagement with users. A key question often raised in academic debates about user engagement is: how is it possible to satisfy the diverse needs of multiple users? Pollock and Williams show through their findings how package suppliers employ particular user-engagement strategies so as to be able to rein in demands to meet diverse and potentially conflicting requirements and so achieve what is, for them, a practical and appropriate balance between being seen to be responsive to their users while pursuing a generic solution. To put it simply, Pollock and Williams illustrate how software package suppliers employ a collective user-engagement strategy to discipline and shape user requirements, leading user community members to compromises rather than insisting that their individual needs be met. By pursuing engagement at the user community level, suppliers are able to manufacture a situation where users recognise that it is in their best interests to align their requirements, which – though they are less optimal –

have more chance of being implemented, rather than hold out for multiple, distinct solutions, which – though they better reflect individual requirements – are also in more danger of being ignored. At the same time, software suppliers are willing to give some clients preferential treatment, especially those who are perceived to be able to exercise leadership of their communities.

Pollock and Williams' final point is that large-scale software packages are not the monolithic artefacts they have sometimes been characterised as being, but an intricate and pragmatic balancing of the generic and the particular, such that distinctive organisations and standardised solutions are able to co-exist effectively.

1.3 The grammars of User–Designer Relations

The case studies in this volume elaborate a variety of 'grammars' of user–designer relations found in different organisational settings, each uniquely and individually rooted in their historical contexts, but continuously reformed and remade, both in the light of shifting circumstances, and, crucially, in peoples' (both users' and designers') attempts to comprehend and realise technology's transformative potential.

By 'grammars' of user–designer relations, we point to how the various working divisions of labour between users and designers actually play out in practice – the everyday shared understandings of with whom various responsibilities, expertise, and competencies reside, and how they might be properly discharged or applied. Understanding the logics underpinning grammars of user–designer relations is not simply an academic turn, but something that both users and designers undertake to do. We see through the case studies presented here how people variously judge what might be reasonably asked for, what they might expect to get and when, who has influence, who might be best approached with particular problems, what promises it is safe to make to whom, who might make good allies and who is in competition, who has need for information, and how best they might be approached, and so on (seen most strikingly in Voss et al.'s chapter). We see people not only exploring and orienting to local logics or grammars in this way, but also evaluating them (again, an undertaking not solely in the purview of academics); they make judgements about whether current modes of engagement are appropriate to shifting business models and objectives (e.g. Hyysalo, Pollock and Williams) or whether novel approaches are likely to survive and become part of the design team's repertoire (e.g. Bonner), as well as seeking to reshape them to meet new needs or respond to changing circumstances and aspirations (e.g. Büscher et al.).

All of the studies in this volume play an important role in adding to our understanding of a variety of user–designer relations in different contexts and settings – their affordances, problematics, and adaptation to shifting circumstances. This includes general lessons and recurring patterns that we might see played out across a number of contexts (which we attempt to draw out in the conclusions), exemplars of particular forms of practice that we can draw upon as resources and appropriate for own needs, as well as a host of consequential nuances that may or may not be of immediate relevance – but which can perhaps give us the sensitivity to anticipate the

implications of different configurations of user–designer relations in our own circumstances.

The aim of this book, then, is to deepen our understanding of user–designer relations so that we, as users, designers, or academics offering advice, can grapple with the problems user–designer relations pose with a sophistication born of an engagement with their workaday exigencies. It is in this spirit that we invite you to read on.

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Chapter 2

Participatory Design: Issues and Approaches in Dynamic Constellations of Use, Design, and Research

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2.1 Introduction

This chapter has two related aims: (1) to give an overview of the various approaches developed under the heading of participatory design (PD) and (2) to discuss their assumptions and commitments. Introducing the field of PD involves exploring its scope and definitions and delineating its internal structure. This will necessarily involve highlighting certain features at the expense of others, so we do not wish to claim that we are producing a definitive and comprehensive account. Rather, our aim is to delineate different key traditions and approaches in PD. The field of PD is diverse and it is therefore necessary to match its different approaches to the situation at hand, reflecting on who the relevant actors are, what their interests and commitments are, and how they relate to each other. This will then allow us to ask what concerns, assumptions, and commitments guided work in PD in terms of the questions asked about practice, design, and research, the direction the answers take as well as the concepts, methods, and literary genres used.

We will argue that it is of vital importance that this background is taken into consideration when doing PD and that a key ability of PD practitioners is to skilfully *match PD approaches* with their concepts, methods, and assumptions on the one hand and *the phenomena* encountered in the setting in which (re) design takes place on the other. We do not believe that there can be a comprehensive set of rules that allow decisions about an adequate match to be made in a schematic way, but that, instead, a process of reflection is required that takes into consideration the specific features of the design situation. Only by doing this, can one make an adequate choice of the approach to take in a particular PD intervention. Consequently, this chapter seeks to sensitise the reader to the fact that approaches in PD are diverse in terms of the questions they foreground, their approaches to answering them, as well as the concepts and methods used. The specific objectives and settings for PD are just as

A. Voss et al. (eds.), *Configuring User-Designer Relations*,
DOI: 10.1007/978-1-84628-925-5_2, © Springer-Verlag London Limited 2009