Shared Encounters

Computer Supported Cooperative Work

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Foreword

Paul Dourish

In the early 1990s, Mark Weiser published his landmark paper on ubiquitous computing. Partly a manifesto and partly a progress report, it anticipated a world in which increasing miniaturization of computational devices and the pervasive availability of wireless networking would allow for a radical reconfiguration of the relationship between people and computation. Freed from the confines of conventional devices, computation could move beyond the PC and "off the desktop." However, if computing is moving off the desktop, where is it going? One of the challenges of the reconfiguration that Weiser anticipated is to understand something of the spaces into which computation is moving. The contributions in this volume reflect just this sensitivity.

Arguably, the fundamental character of ubiquitous computing research is not technological, but spatial. Certainly, ubiquitous computing poses significant technological challenges, but in many ways these are simply the extrapolation and intensification of trends that predated the arrival of ubiquitous computing as a topic. Power management, decentralized software architectures, multiagent systems, interlayer processing, sensor fusion are all active areas of research, but they reflect concerns that manifest themselves too in others areas of computer science and engineering research. On the other hand, the spatial character of ubiquitous computing systems is one of their intrinsic properties and a crucial area for analysis and design. By "spatial" here, I do not mean merely geometric. Instead, I am focused on the fact that they inhabit the same space as we do, and that they structure it and organize it in much the same way as our own activities and movements do. Here, the concerns of computer science and technological design intersect with those of cultural geography and urban studies to produce an immensely generative new research area.

The city, and the urban experience, has long been a site of social inquiry, in the writings of cultural critics such as Walter Benjamin and sociologists such as Georg Simmel. At this point, though, in the early twenty-first century, we are rapidly

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approaching the point at which more than 50% of the world's population are urban dwellers for the first time in our history. It is a particularly apposite moment, then, to examine the relationship between technology and urban experience.

It is not that the urban experience is becoming a technological one, because cities depend critically upon technologies for their very existence. The city is a product of infrastructure of many sorts – transportation, communication, sanitation, power, and more (including, of course, the information infrastructures of urban management and regulation). The technologies associated with mobile and ubiquitous computing, then, are being deployed in environments already heavily technological. However, some significant new issues arise around the personal – and interpersonal – aspects of these technologies.

Some of the most interesting questions arise around topics of ownership, management, stewardship, and control over technology and information. If the mobile phone is a critical tool of urban infrastructure in contemporary cities, then it differs from those other pieces of urban infrastructure in that it is individually owned, operated, and to an extent, controlled. Ubiquitous and mobile computing forges systems out of ad hoc coalitions of devices and services, but, critically, it does so across administrative boundaries. When urban dwellers use public transport to get around, they do so entirely as "users" of a system over which they have little control and no direct ownership. On the other hand, when mobile phone owners use location-based services to locate each other and exchange information, the "system" that they employ is one that depends on public and private infrastructures, technologies that they own, and technologies that they encounter. Mobile technologies connect people to each other in ways that both depend upon, and transcend, public or commercial infrastructures, offering services that are "personal" in ways that public infrastructures never can. In doing so, they create new forms of technologically mediated social relations, not only among people, but between people, corporations, and states.

That said, it is important not to be blinded by the rhetoric of revolution that so often attends discussion of new technologies, the sense that new technologies and new technological practices have radically destabilized the old order, and that everything is up for grabs. It is all too easy to allow our fascination for genuine innovation and novelty to blind us to the ways in which new technologies are firmly enmeshed in preexisting contexts. Doreen Massey uses the term "power geometries" to draw attention to the ways in which encounters with urban space are structured by complex power dynamics and that questions of accessibility, mobility, representation, and regulation are means by which power is exercised and power relations maintained. So, alongside the "flaneur" – the urban wanderer, for whom the city becomes a sensory feast and a place of pleasure, whose discretionary time, money, and mobility are these days supplemented by any number of location-aware devices and services – we must also consider those for whom mobility is not a choice but a necessary mode of living, or those for whom it is not available at all, or those excluded from participation due to the barriers of all sorts – technological, economic, linguistic, physical, and more. The urban experience is heterogeneous, not simply in the sense that cities vary from one to another, but also in the sense

that there are many simultaneous experiences of any given urban space. There are those who move through it and those who are imprisoned by it, those who consume it and those charged with its upkeep, those for whom it is a site of freedom and those for whom it is a site of regulation, and more. While Michel de Certeau has written of the ways in which urban residents can take possession of the city, producing their experience of it through their own tactical appropriations, they do so only within limits and bounds.

In the image of the informated urban resident, we have the fusion of technology and urbanism, two major components of the image of modernity. It is exactly this opportunity to examine the cultural imaginary of modernism and its contemporary manifestations that makes the topics explored in this volume so generative. The "encounters" that animate are at once personal and cultural, physical and conceptual – and of ever-increasing relevance to our daily lives.

The contributions to this volume reflect the diversity of work in this research area. They are drawn from disparate disciplines, including computer science, cultural studies, anthropology, sociology, urban design, and architecture; they span the globe, including studies in Europe, Asia, Australia, and the United States); and they reflect a wide range of concerns, including those in working, domestic, professional, and entertainment settings. What ties them together, though, is the common concern with encounters both with and through information technology as a site for the production of social and cultural life. Mobile blogging, urban games, and academic conferences, among others, provide sites for examining the lived phenomena of shared encounters.

Above all, the theme that pulls these contributions together is an understanding of the mutuality of technological opportunity and social practice. The significance of emerging mobile technologies, such as those explored here, cannot be understood purely in their own terms. Rather, they must be understood in the context of social practices that render them meaningful in particular settings. The material and fabric of every space have always constrained and enabled social relations and reflected historical circumstances and the interests of those who have shaped it, responding to human needs but also opening up a space of possibilities. When mobile technologies are considered in this light, our focus moves to the encounters that arise and the forms of collective practice that make up the social glue, in the words of the final section here, by which people are connected. Understanding the social organization of spatial settings, the appropriation afforded by forms of playful interaction, and the complexities of sharing – the topics, in turn, of the other sections of this collection – is critically important in pushing the research agenda forward.

As location-enabled services are increasingly deployed on mobile devices, the topics explored here will become even more important, and the blend of social, technological, theoretical, and design elements that this volume encompasses will become even more necessary. The contributions collected here not only provide evidence of the richness of this domain, but also point toward its future directions.

Preface

This book is intended to offer insights and knowledge on the topic of shared encounters. It is introduced by Paul Dourish, a highly respected thinker in this area, who offers his distinctive viewpoint on the topic. The main section of the book opens with a chapter, contributed by the book editors, in which the different themes and methodologies of shared encounters are discussed in detail.

The book is then divided into four sections; each section presenting a different facet of the topic of shared encounters. Each section is introduced by a text from a key author in the field and presents an overview on the sub-topic in order to offer the reader a way into each collection of chapters; Barry Brown discusses shared experience, George Roussos outlines playful encounters, Malcolm McCullough introduces the section spatial settings and Elisabeth Churchill provides an introduction of the topic of social glue. The individual chapters that follow offer a particular perspective on the main topic and also provide insights from the author's own research background. The contributions are interdisciplinary in nature and the authors have a range of research backgrounds; among them computer scientists, architects, sociologists and artists.

Overall, the intention of the book is to introduce the range of empirical and theoretical approaches in the study of shared encounters and to highlight the multifaceted nature of shared experience in our everyday experience of space. It is by no means exhaustive, but we hope that it opens up new ways of thinking about the subject and stimulates a wider understanding of the value of shared encounters in our everyday lives.

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