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Editors

# People, Personal Data and the Built Environment

 Springer

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# Preface

This book has emerged from original contributions to the *People, Personal Data and the Built Environment* workshop held at the ACM Designing Interactive Systems conference 2017. In turn, this workshop built on a workshop series started at the Mixed Reality Lab Nottingham, investigating the same topic. While participation depended on the acceptance of submitted material, the workshops themselves were all designed to be highly interactive. Participants designed new adaptive environments around existing technologies typically found in the built environment that produce and consume personal data. Those new environments were framed by the context of a particular building type and set of personas. Along the development of the workshop series, we introduced privacy and legal constraints that emerged from the application of the EU General Data Protection Regulation for participants to respond to. Finally, participants were asked to develop utopian and dystopian design fictions. This material provided the context for a set of researchers and academics, across the workshop series, to discuss the wider implications of the use of personal data in the built environment<sup>1</sup> (Schnädelbach et al. 2019) and frame our thinking as editors of this book.

During the workshop series, a host of challenges emerged at the intersection of personal data and built spaces. Examples of these range from the apprehension towards personal data being used in co-habited spaces, via the relationship of consent to data processing, to entry conditions of buildings, and the different requirements that underpin in-the-moment interactivity versus long-term adaptations. These were discovered across a set of adaptive environment designs that combined existing building infrastructures with adaptive services, which brought together personal interaction with personalised tools, and that considered how to make adaptive buildings actively route people along its topologies.

Throughout the conduct of the workshop series and the development of the book, it became clear how much this area is still developing and how rapidly the ground is shifting. This book aims to make a contribution to this ongoing discourse.

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<sup>1</sup> Holger Schnädelbach, Nils Jäger, and Lachlan Urquhart. 2019. Adaptive Architecture and Personal Data. *ACM Trans. Comput.-Hum. Interact.* 26, 2, Article 12 (March 2019), 31 pages. DOI: <https://doi.org/10.1145/3301426>.

For this purpose, we draw on material submitted to the book project by workshop participants but also material invited from colleagues in our research network. As a result, the chapters in this book present a particular cut through the possible relationship of people, personal data and the built environment as seen at a specific point in time.

At this point, we would like to acknowledge the contribution made by all our workshop participants, whether they appear in this volume or not. Your input has shaped the discussion throughout the development of these ideas and has at least indirectly influenced the contributed chapters. We would also like to thank our workshop co-organisers of the entire series: Dr. Lachlan Urquhart, Lecturer in Technology Law, University of Edinburgh; Dr. Nicholas Dalton, Associate Professor, Northumbria University; Dr. Elizabeth Churchill, Director of User Experience, Google; Dr. Nils Jäger, Lecturer in Digital Architecture, University of Loughborough; and Sara Nabil, Ph.D. researcher, Newcastle University. Without your energy, expertise and commitment to the conduct of the workshop, this book would not have happened. Finally, we would like to acknowledge that this book project was part-funded through EPSRC grant EP/N005848/2 and the University of Nottingham through the Nottingham Research Fellowship ‘The Built Environment as the Interface to Personal Data’, and through the ‘Digital Living MDRT’ fund at Northumbria University.

Berlin, Germany  
Newcastle upon Tyne, UK  
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Holger Schnädelbach  
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