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CyberParks – The Interface Between People, Places and Technology

New Approaches and Perspectives

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Preface

This book presents different challenges related to public open spaces and people, the relationships between them and possible roles of digital technology in this relationship. It is a book about a phenomenon that is increasingly being in the centre of sciences and strategies – the penetration of digital technologies in the urban space and related different approaches, methods, empirical studies, open questions and concerns. It brings together research work results, ideas, discussions and experiences of different participants of the Project CyberParks, fostering knowledge about the relationship between information and communication technologies and public spaces supported by strategies to improve their use and attractiveness (www.cyberparks-project.eu), that was founded by the H2020 European Programme Cooperation in Science and Technology (COST) in the period of April 2014 to April 2018 (https://www.cost.eu/actions/TU1306).

As a network, CyberParks opened opportunities for participants with different professional experiences and backgrounds, coming from 31 different countries to gather and explore, from different perspectives, the emerging challenge that digital technology advancements and their increasing pervasiveness pose to the production and use of public open spaces. Such endeavour called for interdisciplinary research, in order to advance fundamental understanding on issues that go beyond the scope of a single field of research practice.

As the main outcome of the CyberParks Project, this book aims at fostering the understanding about the current and future interactions of the nexus people, public spaces and technology. It addresses a wide range of challenges and multidisciplinary perspectives on emerging phenomena related to the penetration of technology in people's lifestyles – affecting therefore the whole of society and, with this, the production and use of public open spaces. CyberParks coined the term "cyberpark" to describe the mediated public open space, that emerging type of urban space where nature and cybertechnologies blend together to generate hybrid experiences and enhance quality of life. The latter issue – enhancing quality of life – has been a crucial aspect in the project, as the lure of technology should not be in place towards creating high-tech places but rather places that are inclusive and responsive. In a cyberpark, ICT and their devices are a driving force, media and tool, which act as a mediator between users and the virtual and real worlds. And that in turn could fuel a greater attachment of people to places. As a new space typology and/or as a new layer, a cyberpark has the potential to attract people to spend more time outdoors, to challenge new ways of outdoor activities and as interfaces to support new ways of co-creation. A cyberpark calls to generate innovative solutions, and thus encourage also new investment, and spur economic growth. These should be reasons enough to create more mediated public open spaces – an assumption that was widely reflected in the Project and is now widely addressed in the chapters of this book.

The concept of cyberpark, a complex system at the crossroads of different disciplines, is approached from different aspects and points of view – all aiming at developing a systematic understanding of how people use media, senseable and locative technologies in their appropriation of places, and at making sense out of a place's new intangible properties.

This book represents our own experiences of this journey, in a given timeframe and financial support for networking. Given the high interdisciplinarity of the CyberParks issues, it called for the need of a structured dialogue and a common understanding between the disciplines. From the perspective of cyberparks, technology can be used to "engage" users as co-creators of the production and management of public spaces. However, it is relevant to state that the technology penetration alone will not raise an active contribution for increasing the quality, inclusiveness and responsiveness of public spaces – as the digital/virtual world is not a substitute of the physical place. Technology must be coupled with "human" knowledge, towards preserving and increasing the different benefits, functions and "interpretations" of a public space, and towards avoiding the sameness, and bland and uninteresting places. In this process, technology in a constant development assumes an important role in shaping the future. Hence, the digital technologies and tools must be better understood and shaped in order to be properly used in transforming public spaces into more inclusive and responsive places. This leads us to the next question of whether augmented reality and senseable places will bring more people outdoors, increase the use of public places and connect people with nature. In short, does technology provide meaningful structures for sustained actions towards increasing quality of urban life?

COST Action CyberParks: A Think Tank

The CyberParks Project has focused its attention on information and communications technology (ICTs) as an active interface between the production of knowledge about the use of urban public space (research purposes) and guidance for interventions (policies and design practices). The penetration of technology in people's life and the use of the city is transforming our physical living space into a meditated and hybrid place. The digital development poses a societal challenge with reflections on social practices and on planning and design approaches to public spaces. This, in turn, might also challenge the future development of ICTs and their devices. Four years ago we embarked on an expedition marked by the rapid transformation of the urban landscape, growing of pervasive and ubiquitous computing, improved data interpretation technologies and a corresponding explosion of data, etc. The CyberParks initial idea grew to 88 researchers from 31 countries (as of April 2018). CyberParks understands itself as a research platform on the relationship between ICT and the production of public open spaces, and the relevance of both to sustainable urban development. As a COST Action, CyberParks had limited researching and working activities but they were also flexible enough to face the challenges and to provide the financial means to the ideas that arose and discuss them – and financing is a crucial issue in research that takes up challenges and innovation in urban development and is not a target of creating new markets. Five working groups were tasked with dealing with relevant issues (digital

methods, urban ethnography, conceptual reflection, designing a cyberpark and dissemination activities) aiming at providing insights and enhancing the conceptualisation of the mediated space and of the social practices under the influence of technology.

The COST framework financed the costs for the setting up of meetings and conferences, the organisation of scientific exchanges of short duration, training schools, and publications and dissemination activities. The flexible structure and the simple implementation and management initiatives enabled CyberParks to organise ten working groups meetings in different European cities, send 28 researchers for short scientific missions, and organise two conferences, a midterm in Malta in April 2016 and the Final Conference in Berlin in 2018. CyberParks was fortunate to count on the commitment of the participants, who in every single initiative demonstrated great motivation, dedication and vigour. The great commitment has also been a challenge for the management, as not all participants could always be invited. The COST enabled CyberParks to also organise capacity-building initiatives besides the aforementioned short missions, four different training schools tackling different issues and in different cities (Thessaloniki, Amsterdam, Lisbon and Nicosia) could be organised, in these training schools 77 young professionals widely discussed the issues with invited tutors. These training schools, linking up high-quality scientific networks across Europe, thus paid particular attention to young researchers in offering a discussion forum and networking opportunities tailored to their requests.

CyberParks, grasping the idea of the mediated and hybrid place, investigated the shape and scope of ICT impacts and the opportunities digital technology and mobile devices created to improve the legibility and liveability of public spaces, as well as new forms of integrating people's needs into urban design processes – on these issues participation in several international conferences and publications could be organised. All these publications are open source and available on the Project's website as part of the concept of sharing knowledge. Sharing knowledge is a step towards CyberParks leading issues: to use ICT to transform our cities into more human environment, rather than just more high-tech and to understand that "smartness" should be people friendly and a democratic process. Place-making, co-creation and inclusiveness to be helped through the advances in technology are seen as an opportunity to bring people together to engage with the production of public spaces and to create and support opportunities and capacities for people to transact with others for a common good.

Book Structure

The chapters of this book originate from different writing teams, organised across the five CyberParks' working groups. A call for chapters was launched by an Editorial Board organised to coordinate the production of this book. The Editorial Board members were also responsible for the peer review process, and this ensured double reviews per chapter. The two reviewers were selected according to the chapter topics. In a final process the chapters were again reviewed by the Editors-in-Chief, who with the Editorial Board members structured the chapters into the four parts. Each part was coordinated by two editors who guided the development of the chapters, and now present and discuss them in the introduction of each part. This editorial approach (peer

review process, international and interdisciplinary writing teams) reflects the accentuated internationality and multidisciplinarity of the CyberParks Project. Although this book is not the place to discuss the influence of new technologies on a general basis, it does, however, focus on the ability of digital technology to enhance communication and interaction with (potential) users, as a way to transform the production and uses of public spaces into an interactive process, enabling creative community participation and empowerment.

By casting light on this emerging urban phenomenon – the mediated public space – this book presents as pioneer case the relationship of people and technology with places. It illuminates paradigm shifts, introduces new concepts, visions and future trends, addresses challenges, new approaches, innovative tools and adaptive research methodologies, and it provides arguments for policy design and challenges practices for future planning of public open spaces. The spirit of internationality and in particular of transdisciplinarity is the common thread in this book. It is a witness of an intensified co-operation among the partners and the critical discussions to facilitate the advancement of knowledge.

Altogether 24 chapters, prepared by international writing teams, are arranged under the four broad themes:

- Part I explores the concept of CyberParks, its theoretical background and how the notion of the mediated place evolved.
- Part II centres its focus on socio-spatial practices towards increasing the knowledge of people and their relations with the space, since it is people who bring life to public spaces.
- Part III focuses on programming and activating cyberparks, on what has to be done to turn mediated spaces into places for learning, gaming and to make use of the potential of public spaces to increase the resilience of cities.
- Part IV dealing with technological challenges and research methodologies addresses the potential of technologies to increase the understanding of the relationship between people and places.

The issues addressed are preliminary in nature and are intended to provide starting arguments for further investigation in this field, in particular because of the accelerating development of technology and constant changes in opportunities for the adoption of devices and technology-based new products and services. The constant and accelerated development creates a challenging environment to study the social, cultural, political and urban impacts of digital technology advancements. The overarching intention behind introducing concepts, perspectives and methods is not to generate a comprehensive inventory on the interaction of technology into the urban space but above all to initiate a debate carefully considering crucial factors such as people, methods and methodologies in the production of public spaces. The quest remains in how to translate the technical development into more liveable and people-friendly environments.

Outlook and Acknowledgements

We wish to thank the chapter editors for their engagement with the CyberParks Project and with this book, the authors for their contributions, both together ensure that this book increases the understanding of the manifold relationships between public spaces and new technologies, their role in shaping public behaviour and sense of the common along with insights to enhance and take forward some key conceptual theoretical and methodological debates in the urban development and beyond. We hope that CyberParks, its findings condensed in this book, and the issues it explores can push forward the discussion around delivering safe, inviting and inspiring public spaces for all. We hope that the discussion started within the Project will last and will be transformed into action, empowering people with the knowledge and tools to support the social and physical changes needed to transform the urban environment into a more liveable and responsible space. We must be ready to nurture the innovation that the future holds – the future of the urban environment depends very much on actions taken today.

Finally, we want to thank the COST Programme for the trust placed in the CyberParks network.

October 2018

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