Suse Miessner

Urban Alphabets
A Smartphone Application to Change Public Space for the User
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A Smartphone Application to Change Public Space for the User
The whole work in digital form is accessible at:
www.ualphabets.com/thesis
or using the attached USB drive.

Additional information about the Urban Alphabets project is available at:
www.ualphabets.com
Master’s thesis
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at
Media Lab Helsinki
School of Art, Design and Architecture
Aalto University

author
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## List of abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCN</td>
<td>Connecting Cities Network</td>
</tr>
<tr>
<td>cf.</td>
<td>compare; Latin: confer</td>
</tr>
<tr>
<td>e.g.</td>
<td>for example; Latin: exempli gratia</td>
</tr>
<tr>
<td>et.al.</td>
<td>and others; Latin: et alii</td>
</tr>
<tr>
<td>FIESP</td>
<td>Federation of Industries Sao Paulo; Portuguese: Federação das Indústrias do Estado de São Paulo</td>
</tr>
<tr>
<td>no</td>
<td>number</td>
</tr>
<tr>
<td>UA</td>
<td>Urban Alphabets</td>
</tr>
<tr>
<td>URL</td>
<td>Uniform Resource Locator; the Internet address</td>
</tr>
<tr>
<td>v1</td>
<td>version 1 of iOS application (December 2012 - September 2013)</td>
</tr>
<tr>
<td>v2</td>
<td>version 2 of the smartphone applications (iOS, Android; in development since October 2014)</td>
</tr>
<tr>
<td>v3</td>
<td>version 3 of the smartphone applications (to be developed)</td>
</tr>
</tbody>
</table>
Summary

This thesis employs a practice-based research approach in order to determine the influence of digital mobile media on public space. To investigate this influence, the thesis has developed a smartphone application, Urban Alphabets, which enables users to create their own alphabet. Urban Alphabets (currently for iOS and Android platforms) encourages users to re-experience their surroundings by enabling them to upload photographs of individual, cropped letters, which can then be used to write short messages, called Urban Postcards. While the Urban Alphabets project also uses the uploaded letters for display on large-scale urban screens as well as exhibition in galleries, the Urban Alphabets smartphone application forms the basis for this thesis’ contribution to research in the spatiality of public spaces influenced by digital mobile media.

The work draws its theoretical framework from the fields of sociology, urban and cultural studies, as well as geography. It employs Lefebvre’s aspects of spatiality, perceived and conceived space, and additionally utilizes the concept of acted space, which emphasizes that users actively create spaces by means of their bodies.

Between May 2013 and November 2014, seventeen workshops were conducted in eight countries. Employing participant observation and group interviews, the thesis shows that Urban Alphabets increases users’ attention to details in their environment that usually remain unnoticed. The application encourages users to actively change their behavior in public, particularly when in small groups. For example, the participants make special efforts to capture the best possible photos. The use of two surveys and the group interviews enables the thesis to explore future development opportunities, such as the educational use of the project.

The results of this practice-based research show that mobile applications hold the potential to influence public space positively: Urban Alphabets causes users to re-explore public space through mobile media. Thus, it can be understood as one strategy to help users to step outside their usual perceptions of their everyday surroundings.

The work concludes by offering recommendations for designers of smartphone applications to re-connect users with their physical environments. However, this thesis should be understood as only a first step in a series of case studies to investigate the field of spatiality in public spaces influenced by the use of digital mobile media. In order to generalize the results of this thesis, it is recommended that further studies be carried out in this field.
First and foremost, I thank the Urban Alphabets workshop participants who have given their time and ideas, thereby contributing the material analyzed in this work. I am also thankful to everyone who has downloaded the app, and expressed interest in the project during presentations, conferences, screenings, or in any other way. A special thanks goes to the workshop translators in St. Petersburg, Helsinki and Sao Paulo, who have made the communication with participants much easier and allowed for deeper insights.

Secondly, I am thankful to Saurabh Pokhrel, who developed the Android version of Urban Alphabets and was very patient and dedicated when fixing technical bugs related to the variety of Android devices.

Thirdly, I am grateful to the Connecting Cities Network, all its curators, partners, event organizers, promoters, volunteers and fellow artists without which the scope of this work would have been much more limited. I am especially thankful for the support of Minna Tarkka, who has not only helped to find my way through the CCN “labyrinth” but has, together with Kaisa Kukkonen, also essentially contributed to the Avek funding application.

The Urban Alphabets project received funding from Avek/DigiDemo, Finnish Ministry of Education and Culture and an Aalto ARTS scholarship, which I appreciate greatly. Especially DigiDemo enabled me to concentrate onto the Urban Alphabets project and the accompanying research fully during 2014.

I am deeply thankful to Medialab Helsinki and everyone associated with it. When I came here in 2010 I was an architecture student thinking broader than many of my fellow students but still fixed on architecture and urban design. Today, almost 5 years later, I do not define myself in a single category any longer: I am an artist, designer, programmer, researcher, and an urban life enthusiast. Here I have understood that switching between roles does not undermine professionalism. I especially thank Nuno Correia, my thesis supervisor, teacher and friend, in whose course the first prototype of Urban Alphabets was developed, who encouraged me to pursue my path, and who helped me to stay on track in the phase of writing, especially concerning the methodology part.

I am furthermore thankful to all my friends and family members, who often unknowingly contributed thoughts and points of discussion relevant for my research work, who helped me with design or by proofreading this work, who encouraged me to follow my instincts and who provided a save place to return to during the times full of travels in 2014. Instead of many I want to mention two: Leyla Nasib has given feedback on design and usability of the app, promoted the project herself, proofread the last chapter of this work and calmed me down in times of worries about the growing scope of the project. Barbara Rebolledo has given important feedback on the visualizations and, together with Hanna Rantala, been a source of motivation to continue in different phases of this project and the final writing.

Lastly but most wholeheartedly, I am grateful to my grandmother Thea Richter, who would be proud to hold the printed version of this thesis in her hands, though she would not understand a single sentence.
Chapter I: Introduction

This thesis combines two areas of research as well as everyday life experiences whose interconnection has rarely been addressed in an adequate manner: On the one hand, new mobile technologies enable us to be constantly connected. On the other hand, public space as a phenomenon is an important basis of all Western societies. Thus, this thesis wants to determine how digital mobile media influence people’s behaviour in and perception of public spaces. Though digital mobile media are older than we commonly think, the existing research in this field largely employs a theoretical approach with little practical relevance for the designers. Attempts to re-connect users of mobile applications with the public spaces they inhabit in everyday life are practically missing. These spatial impacts of smartphone applications are the main area of interest in this work.

Several authors have argued that physical space loses its importance as everyday interactions are increasingly transferred to the digital sphere (e.g., Luscombe 2010; Batty quoted in Graham 1998). Personally, I fundamentally oppose this point of view: Space as a phenomenon cannot lose its importance to humankind as our bodies occupy space; essentially humans are space. Turning further to this work’s emphasis on public spaces I want to argue that the phenomenon should be a more important area of research interest: Public space is the place where society constitutes itself (Arendt 2002, 68) and where we are, as in Richard Sennett’s famous city definition, likely to meet strangers (1986, 264). Public space is where urbanity unfolds (Klamt 2007, 79, 83) and where we are confronted with the diversity of city life (Häussermann quoted in Lehtovuori 2005, 15). In other words, public space is the common basis of all Western societies.

This leads to one of the underlying assumptions of this work. I believe in what Martijn de Waal has called the “republican city ideal”: City dwellers are free to choose from a variety of lifestyles but they “share responsibility for the city as a whole.” (2014, 10) Thus, urban inhabitants
are most importantly citizens who have to engage with urban society to a certain extent. This foundation highlights public space as one of the most crucial places where urban society constitutes and city dwellers relate to each other. Thus, encouraging people to spend time in public spaces is a crucial part of this ideology. Hence, this thesis aims to enhance the understanding of the influences of mobile digital media onto public space. To fulfill this goal the work employs a practice-based research approach, utilizing a case study to answer the main research question. The smartphone application Urban Alphabets was developed as part of this research in order to examine the influences one particular case has onto people's spatial experiences. Urban Alphabets is a freely available smartphone application (iOS and Android) enabling users to design their own alphabets. By photographing and cropping individual letters users capture their own Urban Alphabet, which they can re-use to write short messages, called Urban Postcards. To evaluate how this application alters users' perception of and behaviour in public spaces 17 workshops have been conducted. These workshops employed participant observation in the field, as well as interviews and surveys.

The main findings of the case study show that Urban Alphabets changes public space for the user in many aspects. These characteristics include their perception of, actions in and representation of space. Furthermore the app alienated the users from the boredom of everyday life. They re-experienced familiar public spaces in an uncommon way. These differences remained even when the participants did not use the Urban Alphabets apps any more. This thesis contributes recommendations to provide guidance for other designers on the aspects to consider when starting the design process of a smartphone app aiming to re-connect users with the physical spaces they inhabit.

This introduction chapter presents my personal background and motivation to work in the field between urban studies and media design research. It then introduces the research questions of this work, which are divided into two main areas: While the first area is concerned with smartphone applications' relation to public space in general, the second area of interest is in the future artistic and commercial development of the case study object. The second chapter describes the methodology employed in this work. To approach the research questions in this practice-based research the

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1 While the term alienation frequently has a negative connotation, I use it in this work to describe a positive situation: When a user is alienated from the everyday she can realize its beauty.
smartphone application Urban Alphabets has been developed. Workshops are utilized as a frame to accommodate three research methods: The study employs participant observation in public spaces, group interviews and two surveys in order to systematically collect material for qualitative as well as quantitative research interests. The third chapter presents related research as well as artistic reference projects. The analysis of the related literature shows the lack of practically oriented research on the interconnection of public space and digital mobile media. The artistic and design projects presented are of inspirational nature for the case study. The fourth chapter establishes a theoretical understanding of the main concepts of this work: The definition of public space includes physical as well as socially produced aspects. The chapter also relates the importance of spatial experiences to the human body and introduces a definition of everyday life as simultaneously boring and stimulating. It follows that the development of tools to alienate city dwellers from the everyday is fruitful. Lastly the chapter introduces terms of behavioural science, such as involvement shield, and proper and improper behaviour, which are used during the discussion in chapter six. The fifth chapter consists of a documentation of the case study, Urban Alphabets. It presents the interfaces functionalities, means of presentation, and artistic ideas behind the project. The sixth chapter answers the research questions in regards to the case study: It discusses the changes taking place in public space from the users' perspective, the user types and interests and introduces two additional issues the public presentation of Urban Alphabets has raised. The final, seventh chapter summarizes the process and learning outcomes of the project and generalizes the results of the case study for the entire research field. The section presents recommendations for the development of smartphone apps aiming to re-connect users and the physical public spaces they inhabit, one of the practical contributions of this work. It also looks at the future development opportunities for Urban Alphabets and lastly recommends a number of topics for further research.

I.1 Note to the reader

This work includes references to several websites and digital appendices, which are essential to understand the thesis and access all its material. Consequently following the digital mobile media content of the work, the links are not presented in a human-readable form but as QR codes. Using a mobile device with a video camera and Internet access the reader can easily open the given URLs. To scan the QR-codes please use a common QR reader, e.g., scan.me 1. In order to guarantee one common design principle throughout this
work and to make it easier for the (human) reader, the links mentioned in this work link to a webpage made especially for this work. From this website all the thesis content can be accessed. Its common link is:

www.ualphabets.com/thesis 1

The digital appendices indicated throughout this thesis can also be accessed at:


The links referred to in this work can also be accessed at:

www.ualphabets.com/thesis/link[NUMBER].html

The original link sources are also stated in the references of this written thesis 2.

I.2 Personal background and motivation

While studying architecture at Bauhaus-Universität Weimar in Germany I personally discovered that architecture studies commonly focus on the physical aspect of our built surroundings. By contrast, to me it was important that architecture does not only concentrate on the physical but that architects actually think about the use of their plans, be it building or urban designs. Space, for me, is much more than merely corporeal. It can feel completely different depending on many aspects such as time of the day or of the year, user groups, its history, its future, to mention just a few. This and my interest in social relations were the reasons that during my Master studies in Weimar I focused on public space.

Over time I increasingly realized the negative connotation with which the use of new technologies in public spaces is often discussed (e.g., Luscombe 2010). But especially after I came to Medialab as an exchange student in 2010/11, I personally understood that there is more potential that has not been realized. By choice realized here refers to two meanings: On the one hand people do not realize in the sense of missing imagination, and on the other hand the potential has not been realized meaning that the field has not been explored satisfactory detail. In contrast to some other authors who argue that New Media decrease areas of social contact (e.g., Kraut et al. 1998; Luscombe 2010), I believe that New Media can influence public space in a positive way: With the help of New Media city dwellers can reclaim public space for public life.

This position brought me to focus on the topic of New Media’s influence

2 When I use the first person-account in this work it is to show my own contribution, hypothesis or opinion. In this sense it is not a manifestation of un-scientificity but on the contrary it expresses a transparent and reflected scientific description of these peculiarities.
Chapter I: Introduction

on public space for my Master’s thesis at Bauhaus-Universität Weimar. In the work “Interacting in Public Space – How New Media influence our behaviour in Public Space” (Miessner 2012) I established a theoretical framework of interconnections between media, technology, society and space ‣3, arguing that changes in one domain are always reflected in all other domains as well.

In the second part of the work, I chose three forms of New Media ‣3 and tried to analyze the influence they could have on the user’s behaviour in public spaces. However, as space is subjectively experienced ‣4 it appeared hardly possible to reach any definite results from the analysis of video documentations of different artworks. Thus, the main conclusion of the thesis was the suggestion to conduct a series of case studies in order to investigate the field more closely. Several case studies could enable to generalize the results.

This current thesis can therefore be understood as the first of a series of case studies, where I will investigate different forms of New Media (e.g., installations, urban screens ‣4, mobile media). This work focuses on mobile media, a topic I became increasingly interested in since 2011. This is certainly influenced by the rapidly increasing use of smartphones in the recent years, a trend some authors already call a historic moment (e.g., Jurgenson 2012). Secondly, the focus on mobile media is related to another personal experience: When I started to use Foursquare, I often wondered what people defined as places in the digital sphere. Foursquare (now: Swarm) is a mobile application allowing users to check in to a place and earn badges, for example based on how many of the same types of places the user has already visited before. Sharing

3 New Media can be understood as media whose production is enabled through new technologies (see Manovitch 2001 for a more detailed definition).

4 When I use the term urban screens in this work I refer to all fixed screens in public spaces. Thus, the term includes media facades, classical urban screens as well as projections in public spaces.
these check ins with ones network enables to coordinate meeting with friends in real-time. In her paper “Location, location, location: Collecting space and place in mobile media” Alison Gazzard points out that the definition of place in this application becomes interesting: The user’s are left to define a place - a place is identified by the users recognition as meaningful enough to check in (Gazzard 2011, 408). As Foursquare only stresses places, not the routes between them, Gazzard argues that such applications “distort our experiences of the spaces around us as checking in takes precedence over movement.” (2011, 416) Gazzard’s article has brought up similar questions to my own: How do users define place in the Foursquare application? This further raised my interest in the field. As we will see in Chapter III there is little other research discussing mobile media’s influences on definition of or behaviour in public spaces.

1.3 Research questions

This thesis aims to find answers in two main areas. The first is concerned with digital mobile media’s relation to public space. The second area dealt with in this thesis focuses on the artistic and commercial future development of the Urban Alphabets project, the tool developed to answer the main research question.

The first main area of research questions examines the relationship of digital mobile media and public space: Whereas my previous Master’s thesis dealt simultaneously with different forms of New Media (e.g., urban screens, mobile media, installations), this work narrows this topic down to focus on digital mobile media in order to answer the research question: How do digital mobile media, particularly smartphone applications, affect public space for the user? In particular, I am interested in the users’ perception of space, behaviour in space and user’s picture of that certain space (representation of space). Here, the work refers to Henri Lefebvre’s three aspects of space, which he outlined in his influential book “The production of space” (2011 [1974]). These features are perceived space (spatial practices), conceived space (representations of space), and lived space (spaces of representation) (Lefebvre 2011). I will later argue that Lefebvre’s space concept mainly focuses on the passive perception of space. Thus, the approach lacks the emphasis on active space making. In order to answer this main research question, the mobile application Urban Alphabets has been developed. Urban Alphabets is a multiplatform project aiming to raise awareness for our everyday physical surroundings. The main part of the project is a smartphone application allowing users to capture their own alphabet. The individually photographed and cropped letters can be used to write short messages, called Urban Postcards.

1 See chapter IV.1.2
This thesis can be considered practice-based research, which aims “to gain new knowledge by means of practice and the outcomes of that practice” (Candy 2006, 3). Tightly connected to the space definition the thesis attempts to determine whether users realize that they spend more attention to their physical surroundings while they use the applications. A third question is to ascertain the length of this effect.

Since the Urban Alphabets project is continuous, the use scenarios for the application have not been determined exhaustively from the beginning. Thus, this work also aims to find answers to two secondary research questions:

Firstly, the thesis intends to document use scenarios, which evolved during the project’s development phase. Urban Alphabets must be understood as a tool, which can be used to different ends. As the designer, I had a main use case in mind when designing the application: The idea was to re-connect users to their physical surroundings using their smartphones. However, users have a different approach and thus they could contribute other ideas how they could personally use Urban Alphabets. Secondly, this work explores which user types enjoy using the applications most. It hypothesizes there could be a correlation with the user’s interest in the topics of graphic design/fonts, writing systems, shopping, cities, modes of transportation, advertising and smartphone applications. The goal is to examine which interests, if any, correlate strongest with the user’s reported future use expectancy of the Urban Alphabets application.

The research questions clearly show my personal, positive approach to New Media in general and digital mobile media in particular. The uniting hypothesis is that smartphone applications potentially have the ability to re-connect users with their physical surroundings, if we, as designers, think about it from an early stage onwards. Thus, the work aims to propose recommendations, which can be used for developing smartphone applications with the users’ physical surroundings in mind.
Chapter II: Methodology

This work’s methodology was developed on the basis of the research questions. This chapter explains the framing as practice-based research, the role of the developed design artefact as well as the methods and their usage within the research.

II.1 Practice-based research

This writing is framed as practice-based research: in order to examine digital mobile media’s influences on public space and reveal spatial patterns in the usage of mobile applications caused by their design, I developed a case study object, called Urban Alphabets. The writing takes a “creative artefact [as] the basis of the contribution to knowledge”\(^5\) and aims to increase “knowledge by means of practice and the outcomes of that practice” (Candy 2006, 3).

The agenda for this thesis strongly involves the users of digital mobile media, and their subjective understandings and approaches. Thus the work employs mostly qualitative research methods, such as participant observation and interviews. However, the second area of research questions hypothesizes that a correlation of certain user interests and their interest in the case study object exists. To justify this assumption the work applies one quantitative research method, the survey \(\bullet 1\).

This thesis utilizes an iterative approach: Some of the methods used are of iterative nature \(\bullet 2\), a characteristic aspect of practice-based research (Rolling 2010, 110). Rolling suggests that arts-based research can establish validity through the “similarity of variations on a concept over time.” (2010, 110) In this study, I varied the focus in the workshops and interviews rather than the artwork itself, in which only small usability

\(5\) In the whole work, accentuations used within quotes correspond to the accentuations in the quoted sources.
adjustments have been made. Additionally, the chosen methods for this work partly influence each other: Participant observation sensitized me for the interest areas to be discussed in the group interviews. An analysis and revision of the working hypothesis after each workshop enabled to refine the conduct of the next workshop. Reviewing the outcomes of each workshop has also facilitated the process of improving the smartphone apps for the following workshop, which relates to the iterative nature of the research process mentioned above.

II.2 Urban Alphabets as a research tool

Urban Alphabets is a multiplatform project aiming to raise awareness for our everyday physical surroundings, which was developed as an artefact to investigate the research interest of this work. The main part of the project is a freely available smartphone application (iOS and Android) allowing users to capture their own alphabet. The individually photographed and cropped letters can be used to write short messages, called Urban Postcards. These Urban Postcards as well as the alphabets themselves can be sent via social networks or email or be saved as images on the smartphone.
Chapter II: Methodology

When I created the first prototype (v1) of Urban Alphabets in December 2012 it was not with the intention to use it for research purposes. Instead, it was a coursework for the Multitouch Interaction course based on a nearly forgotten hobby I had developed during my first year in Finland: Capturing Helsinki’s visual identity during city walks using letters as identification cues.

However, when I captured the first few Urban Alphabets using the prototype, I realized that this changes my own perception of the city enormously. It was not any more only during the dedicated walks that I searched for interesting letters, but I started to pay attention to letters

Figure 3: Interplay of employed methods
also in everyday life situations. Thus, I realized a great potential for my existing interests described in the introduction. Urban Alphabets from now on was developed as a research tool, to explore the influences digital mobile media have on public spaces. This investigation was to be lead by the users’ perspective, since my main interest is in the users’ subjectively experienced shifts.

Thus, the second version (v2) of the Urban Alphabets application has been developed with specific research objectives in mind: Its main purpose is to re-connect users with their physical surroundings. Hence, the time spend actively in the application was to be diminished compared to “traditional” smartphone apps, so that the user has the possibility to take a look at her surroundings. Intuitive interfaces were one way to increase the ease of use of the application, potentially allowing users to focus on their surroundings and quickly extend their Urban Alphabet whenever they find an interesting letter to capture.

Urban Alphabets serves as a tool to conduct the practice-based research in this work. Thus this thesis can also be considered a case study.

II.3 Workshops as a research setup

As a research setup this work employs workshops, designed as relatively short, single sessions with the aim to introduce the participants to the Urban Alphabets project. The participants played an active role in shaping the workshops. These characteristics are the key features that characterize workshops as a research method (cf. Community Tool Box 2015). The targets, length and sizes of the workshops were very different and depended on different factors ranging from the availability of target groups and kind of workshop organizer to my own suggestions. For an overview of the different workshops see Figure 4.

The workshops were split into three parts: introduction, walk and discussion.

The first part of the workshop was a very short introduction, in which I mainly introduced myself, explained the basics about the Urban Alphabets project and demonstrated the usage of the smartphone applications. In the second part, which varied in length, the participants walked in the city and captured their own Urban Alphabet, either in groups or individually. During this time I typically followed one group of 2-4 people to conduct participant observation. The workshop in Madrid was a special case because the Android app was still in development and

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6 When I use female phrases within this work I include all genders. These are only preferred over other phrases for purposes of readability.
**Figure 4: Overview of Workshops**

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Participants' Role in the City</th>
<th>Language(s)</th>
<th>No of Workshops</th>
<th>Target Group(s)</th>
<th>Discussion Transcribed</th>
<th>Length (Discussion)</th>
<th>Length (Walking)</th>
<th>Organizer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Petersburg, Russia</td>
<td>May 2013</td>
<td>Mostly design students, librarians, tourists</td>
<td>English, Russian</td>
<td>1</td>
<td>Urban Design Students, Graphics Design Students</td>
<td>No</td>
<td>1,5h</td>
<td>30min</td>
<td>MakeIt-Center (Education)</td>
</tr>
<tr>
<td>Munich, Germany</td>
<td>Sept 2013</td>
<td>Conference participants</td>
<td>English</td>
<td>2</td>
<td>General Public, Primary School</td>
<td>Yes</td>
<td>2h</td>
<td>2h</td>
<td>Walk21 (Conference)</td>
</tr>
<tr>
<td>Madrid, Spain</td>
<td>Feb 2014</td>
<td>Research students</td>
<td>English</td>
<td>23</td>
<td>General Public, Art Students</td>
<td>Yes</td>
<td>2h</td>
<td>2h</td>
<td>Medialab Prado (Education, Research)</td>
</tr>
<tr>
<td>Riga, Latvia</td>
<td>Jun 2014</td>
<td>Participants</td>
<td>English, Latvian</td>
<td>1</td>
<td>General Public, Children (1st-6th grade)</td>
<td>Yes</td>
<td>30min</td>
<td>20-30min</td>
<td>Riga 2014 (Culture)</td>
</tr>
<tr>
<td>Helsinki, Finland</td>
<td>Aug 2014</td>
<td>Students</td>
<td>English, Finnish</td>
<td>4</td>
<td>General Public, Art Students</td>
<td>No</td>
<td>1-1,5h</td>
<td>30min</td>
<td>m-cult Helsinki (Art, Culture)</td>
</tr>
<tr>
<td>Berlin, Germany</td>
<td>Sept 2014</td>
<td>Conference participants</td>
<td>German</td>
<td>4</td>
<td>General Public</td>
<td>No</td>
<td>1h</td>
<td>1h</td>
<td>Public Art Lab (Art, Culture)</td>
</tr>
<tr>
<td>Sao Paulo, Brasil</td>
<td>Nov 2014</td>
<td>General Public</td>
<td>English, Portuguese</td>
<td>3</td>
<td>School Students, Art Students</td>
<td>Yes</td>
<td>1h</td>
<td>1h</td>
<td>SP Urban (Art, Culture)</td>
</tr>
<tr>
<td>Liverpool, UK</td>
<td>Nov 2014</td>
<td>Students</td>
<td>English</td>
<td>3</td>
<td>General Public</td>
<td>Yes</td>
<td>1h</td>
<td>1h</td>
<td>FACT (Art, Culture)</td>
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</tbody>
</table>
only few participants had iPhones, so that the group sizes became much bigger. In contrast, in the workshops in Riga and Berlin and during one workshop in Liverpool the participants used the application individually. Also the length of the outside walks varied. Whereas the graphic design students in Madrid walked for two hours, participants in Riga returned after 30min due to rain.

In the third part of the workshops, all participants joined together to discuss the experiences made during the walk and the results. The group also reflected ideas for personal use of the Urban Alphabets project.

Between May 2013 and November 2014 seventeen workshops have been conducted in eight cities and seven countries. The main goal in the workshops was to investigate participants’ relation to public space when using the application and how they reflect on it afterwards. Additionally, I wanted to explore different use scenarios of the application and identify different user types.

II.3.1 Participant observation

During the second phase of the workshops this research utilized participant observation. This method can be employed to evaluate individual behaviour in interaction with physical conditions or events (Candy 2013, 17). The technique qualified the work to validate the hypotheses on the changes in user’s behaviour in public space. In some cases it additionally facilitated conclusions about the users’ perceived space. As an example, when observing a participant suddenly walking closely to a wall and capture a photo of a letter, it was followed that she was taking a close look and therefore increased her attention to details in her physical environment.

Rubin also highlights the benefit of combining participant observation and interviews. He emphasizes observation before the interview “sensitizes you to the key issues, familiarizes you with the environment and the language, and allows the future interviewees to get to know you a bit before you start asking them questions.” (2012, 26–27) In this case study, the interviewer acquired higher synergy than the users because I did not observe all participants during the walk. Thus, only some participants had the chance to familiarize themselves with me. However, typically the participants, who had been observed, were more active in the subsequent group interviews. One could follow that the familiarization process made them more open to the questions.

Nevertheless, the use of participant observation always has to be evaluated carefully. Different research discourses have highlighted one main challenge for the observer: She is constantly changing her role between closeness (participation) and distance (observation) (e.g., Linden 2007). Simultaneously the cultural differences between the observer and the
observed need to be considered (Linden 2007). To resolve this deficiency, I have familiarized myself with the local culture before conducting workshops: In each location I spend at least three days prior to the workshops, which were used to observe street life and study local customs. This process was facilitated by the fact that most workshops took place in Western societies, with similar value systems as the ones I have grown up and lived in. I am especially accustomed to German and Finnish habits. By these means it was attempted to overcome the cultural barriers, an attempt which by no means should be regarded as complete. Another valid critique to participant observation is that an observer has a limited perspective because she cannot conceive all aspects of a situation simultaneously (Linden 2007). An attempt to, at least partly, compensate for this deficiency was made by combining participant observation with group interviews after the walks.

Technically, I used a camera to capture video and photo material during the walking tours. An effort was made to hide the camera from the participants, so that they did not feel intimidated. In several workshops (Berlin, Helsinki, Liverpool) other video makers shot additional photo and video material.

In addition to the video or photo material from the participant observation, I also utilized notes made immediately after the workshops. Generally, these notes resemble behaviours and impressions, also concluded

Figure 5: World map with travelled cities
from the photo and video material. In some cases, they provide additional material, especially when no formal participant observation was conducted.

II.3.2 Interviews

The discussions during the last part of the workshops can be described as partly structured interviews (Candy 2006, 16): Several predetermined questions were used, but adapted to the previous responses. All workshops utilized the same stack of questions, but not all questions were posed to all workshop groups. Consequently, the discussions can also be described as responsive interviews. This technique “emphasizes flexibility of design and expects the interviewer to change questions in response to what he or she is learning.” (Rubin 2012, XV) Following this concept, the talk took the form of a conversational partnership, where the interview is regarded “a joint process of discovery” (Rubin 2012, 7) instead of a traditional one-sided conversation, in which the interviewer asks all questions and the interviewee provides the answers (Rubin 2012, 5).

During these conversations I learned from my workshop participants, especially when they went “off-topic”. Discussions ranged from the use of the application for educational purposes to the safety of biking in Helsinki and the connection to concrete poetry7. I deliberately engaged in these “off-topic” discussions during my workshops because it was of major importance to me to learn from the participants. I understood them to be the experts: they engaged with Urban Alphabets in their own ways, with their own knowledge and approach. This meant the workshops were my chance to do user-research in the field and explore options of future development of the Urban Alphabets project.

The interviews were usually recorded with an iPhone and transcribed using “Express Scribe”. The analysis of the material concentrated on the topics predefined by the research questions. Passages, addressing the research questions, were marked with a color code and summarized on the page margin. This technique enabled to gain an overview of the issues addressed. This review was employed to improve the interview technique in the next workshops and summarized the learning from the

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7 Concrete poetry refers to a movement in literature in which the typographical appearance of the text is considered an important element to convey the writer’s intention (for more information see e.g., Hartung 1975).
8 An example of an analyzed interview transcript is included in Appendix 4. All analyzed interview transcripts are enclosed in Digital appendix 5.
individual sessions.

Only eight out of seventeen discussions could be recorded and transcribed:
The workshop in St. Petersburg can be seen as a rehearsal for the succeeding workshops and therefore did not employ the full methodology of the other workshops.
The four workshops in Helsinki were conducted in primary schools. Due to the children's age, the discussions focused on the results, not the space experience.
The workshops in Berlin were held in an informal way. Thus no interviews after the workshops took place. In these instances, the focus was on collecting letters in the urban environment but the participants had no interest to participate in the research. One of the reasons was that frequently only one participant took part in the workshop and most information was already exchanged during the walk.

The language in the interviews was often a determining factor: Whereas in the English and German speaking workshops I could communicate with the participants directly, during the workshops in St. Petersburg, Helsinki and Sao Paulo I needed translators. Interpreters where never professional translators but rather people who were easily available at the time: While the translator in St. Petersburg, Anna Kholina, is herself a researcher interested in artistic interventions in public spaces, the translator in Helsinki, Saija Salonen, comes from an media art and education background. In the three Sao Paulo workshops three different translators helped: Marilia Pasculli is a media art curator, Paula works in the artistic direction of the Federation of Industries in Sao Paulo (FIESP), and Claudia Faij was a local workshop participant, who took over translating the workshop for the convenience of the other participants. Besides these translators it is worth mentioning that the graphic design students in Spain were very uncomfortable speaking English in front of their classmates and teachers, which definitely affected the discussions.

II.3.3 Surveys

Two surveys were designed to answer the research questions that required the collection of quantitative data: The first, paper-based survey was distributed in the end of the workshops and collected immediately. The second survey was sent to the participants, who had consented, two to four weeks after the workshop. Both surveys consisted partly of dichotomous, multiple-choice, and open-ended questions. The first survey additionally utilized semantic differential scale questions. It used a semantic differential scale between 1 and 5, where one equalled either
“no interest” or “scared something goes wrong” and 5 equaled “very interested” or “very comfortable”.

The first paper-based survey consisted of 13 questions ➔1. The paper medium was chosen to enable all workshop participants to answer the questions simultaneously. The survey gathered data on the participants’ background as well as their interest in the topics of graphic design, writing systems, shopping, cities, modes of transportation, advertising, and smartphone apps. It furthermore asked if they expected to look differently at letters during the next weeks. This question was known to be problematic, because it implies the answer partly. However, I do not think that this influenced the results as I handed the survey out in the end of the discussion. The issue of space perception had already been discussed earlier in all of the workshops. The two last questions concerned two of the other research questions: They asked how likely the participants expected to use the application in future and as what kind of tool they would use Urban Alphabets. This last question aimed to answer the research question about the use scenarios of the application. The responses to this open-ended question were grouped into different categories ➔2.

Most of the workshop participants filled the paper-based surveys. Exceptions are the workshops in Helsinki and St. Petersburg, where I did not distribute the paper-based surveys. The workshop in St. Petersburg was a trial session and the survey was only developed afterwards. The workshop participants in Helsinki were school children, thus the design of a specific questionnaire would have been required. This was not considered worth the effort at the time.

The second, so-called follow-up surveys were sent two to four weeks after the workshops to the participants, who had given their consent ➔3. Depending on the answers the questionnaire consisted of seven to ten questions. The survey had two main goals: Firstly, the questions intended to gather data whether the participants had used the application again. Secondly, the follow-up surveys asked the users if they noticed a change of perception towards letters and advertising since the Urban Alphabets workshop. These questions were concluded by statistical questions. The statistical data was meant to be compared to the statistical outcomes of the paper-based surveys, so that deviations could be detected.

The response rate for follow-up surveys was low, so that the responses from all workshops were evaluated together. Even though the participants were reminded to answer the survey one week after it had initially been sent to them, the response rate was only 23% (16 responses to the follow-up surveys vs. 71 responses to the paper-based surveys). However, not all participants of the paper-based questionnaire had given their consent to be contacted about the follow-up survey. Answering the follow-up survey only required 5-10 minutes. Nevertheless, the

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†1 Example in Appendix 2 and all paper-based surveys in Digital appendix 2

†2 See chapter VI.1.3

†3 Example in Appendix 3
participants seemed to lack motivation because they could not see their own added value. Since only 23% of all workshop participants answered the follow-up survey, I did not compare the outcomes of both surveys. The follow-up survey results are in any case of limited validity.

The follow-up surveys used Google-forms and were sent to the participants via their emails. The email-addresses were collected as part of the paper-based survey, so that all participants knew about the existence but not the content of the follow-up survey. Hence, I believe that this knowledge did not affect their use of the Urban Alphabets application between workshop and follow-up survey.

The replies from all workshops were transcribed into one common Excel file. The graphs shown later in this work *4, and in the digital appendix *5 have been generated using Adobe Illustrator.

In order to analyze correlations between the seven topics (graphic design, writing systems, shopping, cities, modes of transportation, advertising, and smartphone apps) and the interest in using Urban Alphabets in future, I used IBM’s predictive analysis software SPSS9. The results of this statistical analysis are shown in digital appendix 8 and discussed in chapter VI.1.2.

All these methods, participant observation, interviews and surveys, were employed specifically to address the research questions. As the research questions mostly aim to reflect on the user’s experience and subjective representation of space, and future use scenarios of the Urban Alphabets project, participant interviews are a big part of the methodology of this work. They are supplemented by participant observation, in order to explore the changes in users’ behaviour in space, and surveys to investigate the more quantitative questions on general interest areas.

*4 e.g., figures 37 to 39
*5 Digital appendix 3, Digital appendix 4

9 The software is available for free use for Aalto students. For more information on the software see *5
Chapter III: Related work

This chapter introduces work related to digital mobile media’s influences on public space and particularly the Urban Alphabets project. In order to provide for the different aspects that concern the project and this thesis, the chapter is divided into three sections: The first subchapter provides an overview of the existing research in the field between digital mobile media and public space. The second section presents artistic and design reference projects, which serve as inspiration for the Urban Alphabets project. The third subchapter presents two other smartphone applications, which take photos of letters in public space as their starting point.

III.1 Previous research in the field

Urban media research is concerned with the possibilities to facilitate urban life through the help of technologies. Much of the research in this field concentrates on community networks (e.g., Foth 2010; Foth, Gonzalez, and Taylor 2006; Bilandzic, Foth, and De Luca 2008) or networks for communication between citizens and city governments (e.g., Nash 2013). Other papers focus on participation as a form of citizenship (e.g., Burgess, Foth, and Klaebe 2006) or ways to enhance collaborative planning (Foth, Hearn, and Klaebe 2007; Foth, Klaebe, and Hearn 2008 focus on narratives as a collaborative planning method). Another article centers around sensing technologies to be used in public space (Madan et al. 2010). However, none of these articles pays any attention to spatiality.

Similarly, in mobile media research much of the analysis remains on the level of technology and its outcomes (e.g., Häkkilä et al. 2012 concentrate on the reasons why users take functional photos with their smartphone cameras; Nielsen et al. 2006 argue why usability testing of mobile media services in the field is a must).

Jan Seeburger’s investigation of his project “PlaceTagz”, which enabled users to interact with a place or other users in the place by scanning
a QR tag, aims to “facilitate interaction with people in the same public space” (2012, 247). Even though the researcher conducted interviews with participants, his analysis remains on the level of sustainability of the used technologies and does not take the step towards spatiality.

Nevertheless, an emerging interest in spatial relations is undeniable: Alison Gazzard in her article “Location, location, location: Collecting space and place in mobile media” investigates three examples of digital mobile media: Argh and Tweeps Around, two augmented reality applications, and Foursquare, a social network built around places for checking-in. In her discussion of these mobile media applications Gazzard identifies one main shift: Whereas traditionally only professionals represented space, the group participating in the making of spatial representations (e.g., maps) has widened through the use of mobile digital technologies. Today smartphone users can contribute to so-called “cultural maps” by annotating items on the map (cf. Gazzard 2011, 409; Humphreys 2010). Gazzard also investigates the focus of attention when using mobile media: In the case of the two augmented reality applications she identifies the main attention remains on the screen instead of the public space around. In contrast, in Foursquare time for actively perceiving the environment remains while waiting for the application to search for the exact location (Gazzard 2011, 413). The author concludes that the mobile applications she examined change spatiality in two ways: Place overrides movement, and places are only important if they give some benefit in the mobile application (e.g., a badge earned from a Foursquare check-in). Simultaneously the applications can heighten the user’s awareness of a certain area (Gazzard 2011, 410). In the introduction I mentioned Alison Gazzard’s article as influential for the development of my interest in the topic of mobile media and spatiality. Her account is essential for my own work and should be understood as one step towards spatiality in digital mobile media research.

Another step was Jason Farman’s book “The Mobile Interface Theory – Embodied Space and Locative Media” (2012). His research focuses on the way we embody spaces through and with mobile digital media. Farman takes a non-technology-deterministic standpoint, arguing that the current shift towards mobile digital media is “less about the devices and more about the activity” (2012, 1). He describes that the relationship between embodiment and spaces are very intimate and follows that mobile media cause changes in spaces and the way media are utilized within them (Farman 2012, 12–13). Farman understands embodiment as an essentially spatial practice, as a simultaneously “site-specific sensory engagement and a reading of bodies as always culturally inscribed” (2012, 31). The researcher argues, similarly to Gazzard, that through mobile devices new forms of representing space are enabled. He emphasizes that users locate space and experience the world as a mixture
between digital and material interfaces, that there is no clear distinction between space and its representation. Therefore the representations of space become more diverse, which essentially highlights space as a socially produced experience. The Mobile Interface Theory contributes a theoretical foundation of embodiment in the mobile digital media age while concentrating on the activities mobile devices facilitate. It is therefore an important theoretical contribution while highlighting the activities rather than the spatial consequences. Farman also points out that his interest is not in covering various examples but in a deeper understanding of embodiment enabled through digital mobile devices (UMD College of Arts and Humanities 2013). He acknowledges that every example he mentioned was obsolete by the time the book was published. In contrast, the emphasis in this thesis is precisely on investigating one example, the use of the Urban Alphabets application, to reveal the relationship between the mobile application and public space in detail. From this detailed analysis I shall then proceed to develop recommendations for the development of other applications aiming to re-connect users with their physical surroundings.

Martijn de Waal’s book “City as Interface – How New Media are Changing the City” argues that the nature of public space changes through the use of new technologies (2014). Public space is no longer the place where all inhabitants of the city are likely to meet. Instead, de Waal argues, today the overlapping of several parochial domains constitutes public space. Parochial domains, a concept by Lyn Lofland, are intermediate spheres between public and private, where people are acquainted with each other. The participants in a parochial space are involved in interpersonal networks, such as neighbours or members of a sports club. In the contemporary society citizens are usually part of several different parochial networks simultaneously (Waal 2014, 15). According to de Waal, places where several parochial domains overlap constitute a public space. De Waal’s interest is mainly in a theoretical approach to the city in the digital age. Similarly to Farman, de Waal is not interested in a specific example but rather an overall understanding.

The research referred until this point shows two tendencies: In much of the urban media research debate spatiality is left out completely. If spatiality is considered the analysis persists on a theoretical level, or examples are employed to illustrate hypotheses. However, one stimulating approach is found in the work of Luigina Ciolfi (2007). In the design process for “The Portal”, an interactive installation installed in an airport setting, the designers took people’s perceptions and experiences of the airport as the starting point for their design. They collected their material through observation and interviews, in order enable themselves to study the connection of the different dimensions of lived space (Ciolfi 2007, 185). Additionally, during the
installation the researchers gathered material to evaluate the success of their installation, whose goal it was to provide for more affective experiences in interaction with technology. The analysis then stays at this level of affective experiences, which the installation successfully provided thereby transforming space into place. For my own work the design and evaluation process of “The Portal” is a confirmation that practice-based research is needed and useful for the evaluation of the relationship between mobile digital media and public spaces.

III.2 Artistic and design reference projects

Examining the field of typography in art I come to the conclusion that letters fascinate humans. Examples of the relationship between photography and letters in public space range from Rhett Dashwood’s project “Google Map Typography” (2009, ‣1), in which he searched for letters on Google Maps, to “Type the Sky” by Lisa Rienermann (2007, ‣2), who photographed the sky shaped in the form of letters in the courtyards of Barcelona. Artist and nature photographer Kjell Sandved has searched for letters on the wings of butterflies (“Butterfly Alphabet”, 1972, ‣3), and Eric Tabuchi photographed the back of trucks on empty highways to complete his “Alphabet Truck” project (2008, ‣4). Whereas the later examples demonstrate a comparatively traditional approach to photography, Dashwood employs the possibilities that the Google maps engine offers for his artwork. Similarly Nick DiLallo utilizes Instagram to showcase his fascination for the numbers of New York (Instagram user: @NewYorkNumbers, ‣5).

Another area of design work has been on archiving letters in different forms, a practice related to Urban Alphabets’ collecting and classifying
Figure 8: Butterfly alphabet by Kjell Sandved

Chapter III: Related work

features. Berlin’s Buchstabenmuseum (letter museum) exhibits a collection of letters dismantled from public spaces and preserved in the museum. The project “Visual dictionary” archives photos of “words in the real world” (The Visual Dictionary 2015). The project started in 2006, but only remained active till 2008. It is still possible to upload new words but the makers do not pursue the project actively at this point.

The third area of interest in art and design work is in commercializing letter photography. In Chapter VII I will propose opportunities for marketing the Urban Alphabets projects in future. However, looking at related ways of commercializing letter art facilitates this process. Three existing projects are of interest in this area:

The Finnish company Character Oy repurposes unused outdoor signs as indoor lamps. Two of their lamps have been rented for the exhibition in Helsinki.

The team of “The Found Alphabet” markets framed black-and-white high-quality prints of custom-made words. In the print, a letter photo from the website’s character collection replaces each letter of the chosen word.

Author Simon Jennings created “Outdoor Types”, a book including more than 500 photographed letters, which, according to the book’s marketing description, is “his tribute to the anonymous talents of vernacular artists around the world” (Jennings 2015). Remarkably, some versions of this book also include a package of 100 magnets.

Especially The Found Alphabet and Outdoor Types will be considered when developing Urban Alphabets further. However, a more extensive market analysis will be needed in future.
III.3 Related smartphone applications

While there are many artistic projects combining photography and letters, there are surprisingly little smartphone apps in this area. However, two mobile applications, which relate to Urban Alphabets’ in different ways, shall be introduced shortly:

Ampergram is an Instagram-based application, which enables the user to write their own words using photos of letters. The photos used in Ampergram are posted as Instagram photos with the hashtag #ampergram and #letter (e.g., #ampergram #A). Writing own words is possible via the smartphone apps (supported platforms iOS and Android) or the Ampergram website. Since the emphasis of this project is on writing, there is no possibility to see a full alphabet, which is one main difference to Urban Alphabets. Users need to use two different apps to make their own words: they upload letters via Instagram and utilize them for writing in Ampergram. This concept of two different applications results in the difficulty to write words only with one’s own uploads. While the community-approach to reusing the typographical elements is certainly appealing to some users, it is also my point of critique: The Urban Alphabets’ workshops have shown that many users find writing with their own letters very exciting.

Urban Type was an art puzzle game, which was available for iOS during 2013/2014. The artist used the sliding puzzle mechanic combined with his own letter photos to create a gameplay with the aim of arranging the letter pieces into alphabetic order. While the puzzle was an unusual use case for letter photos, the application lacked the opportunity to input own letter material. However, this idea will be kept in mind when thinking about the future of Urban Alphabets.
Chapter III: Related work

This chapter presented an overview of three areas of work related to this thesis: Firstly, it pointed out that there is little existing work considering how mobile media change the spatiality of public spaces. The previous work remains on a theoretical level and does not aim at developing a practical approach to stimulate new experiences in public spaces through new media. This is one of the areas this work focuses on. Secondly, the chapter showed that there are various projects related to letter photography and also different ways of commercializing its outcomes. Thirdly, two smartphone applications related to this thesis’ case study object, Urban Alphabets, were introduced. It was shown that only few similar apps exist and these lack the emphasis on filling a full alphabet, writing with the users’ own letters or even generally the opportunity to use own uploads.

In order to go further into the analysis of spatiality of public space as influenced by New Media the theoretical foundations for the field are examined in the upcoming chapter.

Figure 10: (right) Example from NewYorkNumbers Instagram feed

Figure 11: (left) Letter lamps in the Lasipalatsi gallery
Chapter IV: Theoretical Framework

Public space, human behaviour and everyday life often seem overfamiliar concepts that need no further explanation. However, for this thesis it is important to understand the theoretical implications of these terms, which will be introduced in this chapter. The writing focuses on public space as a subjectively experienced concept, and therefore argues for five aspects by which changes in public space from the individual’s perspective can be analyzed. Since people are in the focus of this analysis the chapter also introduces the possible relationships of their bodies and the city in general before it presents different strategies to re-experience the extraordinary in everyday life. Lastly, the chapter turns towards the societal behavioural obligations of individuals in public spaces. These are interesting points of discussion in the Urban Alphabets project.

In short, this chapter aims to lay the theoretical foundations for understanding the nature of public space and the everyday experiences people sense within them.

IV. 1 Defining public space

Public space often appears as a common-sense term, because many disciplines are involved with the concept as their study subject (e.g., architecture, geography, physics, sociology). However, concepts of public space in these varying disciplines clearly contradict each other. Thus, it is critical to make this work’s understanding of public space clear. When defining the term it is important to admit, that the definition can never be comprehensive. This is not just because it is dealt with in many different disciplines, but also because a researcher would need

“to compile a theory, which should include physical space, its use and, as the most difficult aspect, the personal, singular moments of invention and existentially important experiences that are indispensable elements of the lived urban space.” (Lehtovuori 2005, 20)
As a result, every researcher and practitioner has her own understanding of public space. Maurice Merleau-Ponty even argues that every person in a situation has a different subjective understanding of the concept (quoted in Lehtovuori 2005, 120–121).

Thus, the definition of public space developed in this chapter, is not comprehensive; instead the explanation focuses on the aspects crucial for this work.

Furthermore, a more extensive account on the concept has been part of my previous Master's thesis (Miessner 2012, 42–61): Besides a working definition of public space in six aspects, the written part included a deeper exploration of the term “public”, the duality of place and space, the consequences of globalization onto public space and Manuel Castells’ theory of space in the network society (Castells 2010). The current work gives more significance to the relationships between public space and the body on the one hand, and between public space and everyday life on the other.

IV.1.1 Physical vs. subjective space concepts

Different disciplines establish different emphasis, depending on the features important for their work. Thus, research differentiates between physical and subjective concepts of space (e.g., Eckel 1998, 13; Löw 2007, 89):

Physical space concepts, such as Newton’s absolute space, focus on space in the sense of natural sciences. Space is understood as separate, quantified and objective (e.g., Hillis 1998, 53; Schubert 2000, 11).

In contrast, subjective space concepts assume that space always depends on a person to perceive it. Therefore, space does not exist a priori, but “requires making - through the practices and subjectivities of people.” (Sassen 2006, 21)

Panu Lehtovuori (2005) used the term “Concept City” to criticize the physically grounded planning paradigm prevalent in architecture and urban planning. He emphasizes that this objectifying view towards space results in an understanding of space as a designable object, like a stage-set. This account separates physical space from the situated practices taking place within it, and the significance people give their experiences in public spaces. In addition, Schubert has argued that the separation between physical space, which concern planning sciences, and social spatial use, which are subject in social sciences, creates a barrier, which makes it impossible to represent and study public space adequately (2000, 12).

For these reasons, this work employs the subjective space concept. It is profitable for this thesis to conceive space as simultaneously physical and social. Humans use their body to construct space according to
particular concepts: we employ our bodies as the reference point when describing left or right, front or back, above or below (Herrmann 2010, 8).

Supporting the understanding, that space is always socially produced, introduces an additional challenge into this project: Understanding space as holistic and inclusive also means that it cannot be conceived of nor represented objectively. Lehtovuori emphasizes that “we are inside, partaking in the process of production of space” (2005, 74). Also Löw highlights the double existence of the human body in space creation: The body is our medium of perception and simultaneously part of the perceived environment (2007, 82). Consequently following this line of argumentation, an observer always influences the space she is examining. This point is crucial for the methodology of this work: The researcher’s point of view, her experiences and feelings will influence the outcomes. While this fact is important to keep in mind, it also stresses the need for a profound theoretical framework, in order to resolve the research questions.

IV.1.2 Lefebvre’s differential space

Social space theory assumes space is always socially produced (e.g., Löw 2007, 97; Klamt 2007, 31; Schubert 2000, 13). Thus, it is a subcategory of subjective space concepts. It is within this line of argumentation that Henri Lefebvre developed his theory of differential space. This complex theory is not presented here as whole (see e.g., Löw 2007, 82–85 for a summary of Lefebvre’s social space theory), instead only the important aspects concerning this work are introduced.

In the differential space theory Lefebvre suggests three levels for the scientific understanding of the concept: Firstly, perceived space (or spatial practices) emphasizes the perception of space through the human body. It renders humans as passive entities perceiving through their sensory organs (most importantly: to hear, to feel, to touch). Secondly, conceived space (or representations of space) refers to the scientific debate on space. It is concerned with the way professionals, such as planners or architects, think about space and represent it. The third level, lived space (or spaces of representation), describes the concrete, subjective spaces people encounter. Lived space can be considered the space the user thinks to face. Thus, this aspect stresses the individual factors, which determine our understanding of space (Lefebvre 2011; also Klamt 2007, 32; Lehtovuori 2005, 76–77; Löw 2007, 82–85).

10 Mobile digital media in general engender changes in this domain (Gazzard 2011; Humphreys 2010; Farman 2012). For a more detailed description of these shifts see chapter VI.1.1.3
In my opinion, Lefebvre’s trinity of space disproportionately highlights human perception as the key factor for the constitution of space, while overlooking the active role humans play in its making. While this aspect is merely implied in Lefebvre’s differential space concept (only through human perception human action becomes meaningful), Sassen, Löw and Cresswell have highlighted its importance (Sassen 2006, 20; Löw 2007, 86; Cresswell 2010, 29–30). Since this work is especially concerned with people’s intense role in the constitution of space, I use the term “acted space” to emphasize the active role people play in space creation. Secondly, Lefebvre’s trinity of space overlooks the importance of spaces people have encountered before. This stock of “experienced space” is employed as a reference point when encountering new places. Thus, it results in expectations for the new space, but also utilizes the unconscious emotional space memory. It is important to note that the different aspects of this space definition necessarily interact and therefore the purpose of their separation is analytical. The split into different elements helps to examine and organize the findings in this work.

IV.1.3 Public space in seven aspects

In this thesis, the working definition of public space includes seven aspects:
- Physical and subjective
- Principal accessibility
- Encounter – meet – gather
- Heterogeneity – urbanity – tolerance
- The unexpected
- Individual and personal
- Change and permanence

These characteristics mostly reflect the same components, developed in my previous Master’s thesis (Miessner 2012, 53–58). However, I have added “physical and subjective” and “principal accessibility” as determining factors, and summarized, the aspects of “different aspects and influences” and “urbanity” into “heterogeneity – urbanity - tolerance”.

The first aspect of my public space definition highlights that public space is simultaneously physical and subjectively experienced (cf. Lehtovuori 2005, 54). Including the physical in this work’s public space definition emphasizes that this writing is not concerned with virtual spaces without any physical components. Nevertheless, the thesis focuses on spaces as subjectively experienced places.

The second characteristic of this work’s public space definition is principal accessibility (Klamt 2007, 68–70; Rauterberg 2001, 6–7). Regularly public space is opposed to private space, as the space, which is principally
accessible to everyone (cf. Lehtovuori 2005, 55). However, this dualism of public versus private should be replaced by a concept of duality\textsuperscript{11}, where public and private are not defined by land ownership, but are instead understood as two ends of a scale with many steps in between (German Federal Office for Building and Regional Planning quoted in Klamt 2007, 45).

The third characteristic of public space is employed in Richard Sennett’s famous city definition: A city is a place where strangers are likely to meet (Sennett 1986, 268). Public space is therefore understood as the place, where political gatherings materialize (Arendt 2002, 66, 71), where friends gather (Rauterberg 2001, 10), and encounters with and conflicts between strangers happen (Lehtovuori 2005, 127).

The fourth aspect refers to the heterogeneity, urbanity and tolerance produced when different aspects occur in the same place simultaneously (Arendt 2002, 71–72; Klamt 2007, 48; Lehtovuori 2005, 15, 61; Rauterberg 2001, 9). This heterogeneity cultivates tolerance, the necessity to accept different opinions in order to maintain social order (Sennett 1994, 374). Heterogeneity and tolerance are understood as a specifically urban style of behaviour, namely urbanity (Munich’s department for city planning quoted in Klamt 2007, 79).

As the fifth characteristic I introduce the unexpected, which is tolerated in public spaces. Rauterberg has argued, that public spaces can only vibrate out of themselves if we allow for the unexpected (2001, 10). In his study Lehtovuori has used events, as one instance of the unexpected (2005).

The sixth feature concerns the individual and personal understanding each user has of a public space. This characteristic emphasizes that “everyone sees, knows and interprets his environment as part of a unique individual chain of experience” (Lehtovuori 2005, 120). Furthermore, everyone translates these interpretations differently into active behaviour (cf. Klamt 2007, 31).

The seventh characteristic emphasizes the temporal aspect of public space. On the one hand public space is constantly in flux and changing over time (Klamt 2007, 49, 67; Lehtovuori 2005, 131–132, 141–142). On the other hand, Hanna Arendt highlighted that public space is the place where “well-defined things are preserved against the ruin of time” (Arendt 2002, 71\textsuperscript{12}), thus stressing the permanent character of public space.

\textsuperscript{11} Dualism refers to two points excluding each other, while duality relates to two extremes of a spectrum, with many shades in between.

\textsuperscript{12} Own translation; original quote: ”bestimmte Sachen vor dem Ruin der Zeit bewahrt”
IV.2 Public space and the body

As public space is understood as a material condition of society as well as a practice expressing society (Lehtovuori 2005, 80), public space itself is closely related to the practice of establishing it through the practices of people. Thus, people utilize their bodies for making space. Many writers have emphasized the importance of the body for situated experiences (Cresswell 2010, 23; Hillis 1998, 68; Nast and Pile 1998, 1–4).

Following Grosz understanding, by body this work refers to the physical “organization of flesh, organs, nerves, muscles, and skeletal structure” but also “their psychical and social inscription as the surface and raw material of an integrated and cohesive totality.” (1992, 243) Thus the body, similar to space, is understood as a unity of physical and socially inscribed (cf. Grosz 1992; Sennett 1994).

When considering the importance of the cultural inscription of the body for this work, two concepts were recognized essential: Elisabeth Grosz examines the possible relationships between bodies and cities, while Richard Sennett investigates the cultural inscription of the body throughout history.

IV.2.1 Grosz: Relationships between bodies and cities

In her writing “Bodies-Cities” Grosz refers to cities but her understanding of the city and public space appear to be the same (1992). Thus, it is a good basis to examine the possible relations of bodies and public spaces. In her opinion there are three possible relationships between cities and bodies:

The first option is that the body produces the city. In this line of argumentation the city develops according to human needs and is therefore a reflection of the body. Grosz criticizes, the body is seen as a simple tool, a physical entity (1992, 245). Her second criticism concerns the body to be understood as “a machine, animated by consciousness”, thus implying a one-way relationship between bodies and cities (Grosz 1992, 246). The second possible relationship is that cities produce bodies. The city is then seen as a “milieu in which corporeality is socially, sexually, and discursively produced.” (Grosz 1992, 243) Space is understood to produce this corporeality. However, this line of argumentation overlooks the fact that humans actively build cities.

Thus, the third option is the one, Grosz identifies as most appropriate: Cities transform bodies and bodies transform cities. Bodies and cities are portrayed as “assemblages or collections of parts” (Grosz 1992, 249) in which one cannot exist without the other. While the body is “citified” in public space, the same public space is “made into a simulacrum of the body” (Grosz 1992, 242).
Grosz’ work is important for this thesis as it highlights a central claim: When changing one aspect, in the case of Urban Alphabets users’ bodily practices, this change automatically transforms the other aspect, public space.

IV.2.2 Sennett: The modern, passive body

In his book “Flesh and Stone – The body and the city in Western civilization” Richard Sennett shows how the body image has radically changed in history (1994), starting from nakedness as an ideal in ancient Athens to the body rendered passive in modern times. The concept of importance for this work is Sennett’s definition of the “passive body”. He argues, when ease, comfort and user-friendliness of cities came into fashion in the late 18th century, the body was rendered passive. He suggests “the body comes to life when coping with difficulty” (Sennett 1994, 310) but since obstacles are eliminated in modern cities, the body remains dumb. In other words, the master image of the modern body is that of an individual detached body (Sennett 1994, 372–374). Sennett derives the development of the passive body from the age of enlightenment onwards. At this time the ideal city had to feel flow and, for example, large avenues were planned (Sennett 1994, 263).

Sennett’s work highlights people’s bodies have been rendered passive as part of a larger historical development. Thus, his writing serves as evidence that not modern technologies have created the passivity of people, as many writers claim (e.g., Virilio 1997, 384; Hillis 1998, 60 with reference to virtual environments).

Furthermore, Sennett’s concept of the passive body serves as a background for the discussion of public space and everyday life.

IV.3 Public space and everyday life

Just as public space and the human body, everyday life appears an over-familiar concept. However, as Blanchot notes, the everyday “allows no hold. It escapes.” (Quoted in Highmore 2002, 16) It has to be understood as “both ordinary and extraordinary, self-evident and opaque, known and unknown, obvious and enigmatic.” (Highmore 2002, 16) On the one hand, everyday life is signified by repetitive boredom, best represented by modernity’s synchronization of time into minutes and seconds. On the other hand, the exceptional is also at the very heart of the everyday (Highmore 2002, 1–6).

Much of our everyday life happens in public space, which is the reason why two accounts to everyday life are investigated here. The aim is to look at the Surrealist and Lefebvre’s strategies for overcoming everyday life’s boring aspects. These strategies shall later be compared to Urban Alphabets as a tool to re-connect users with their physical
In the Surrealist’s understanding, the everyday is where the marvellous exists. Thus, finding strategies to discover the marvellous in the everyday becomes their main goal. A crucial tool for finding the wonderful is juxtaposition. The Surrealists use montage techniques to render the everyday “strange so that its strangeness can be recognized.” (Highmore 2002, 47) In other words, the ordinary is made strange by transferring it to unanticipated contexts.

Lefebvre understands the everyday as simultaneously repetitive and boring, and a source of rich surprises. Lefebvre uses the term alienation to describe the boring, repetitiveness the capitalist society produces. On the other hand, he also admits that “it is only by defamiliarizing the everyday that the everyday can be recognized as alienation.” (Highmore 2002, 143) The sociologist argues many different strategies for alienating people must be employed. La fête is one approach, which Lefebvre repeatedly refers to: La fête is, on the one hand, part of popular everyday life but simultaneously holds potential for “a radical reconfiguring of daily life” (Highmore 2002, 122). Another strategy Lefebvre suggests is the dérive, a concept developed in the 1940s. The dérive wonders aimlessly around in the city, observing her environment. Using free association, Lefebvre suggests, can reveal the “hidden secrets of the urban everyday.” (Highmore 2002, 139–140)

These two, the Surrealist’s and Lefebvre’s, strategies for alienating individuals from their everyday environments are important inspirations in the Urban Alphabets project. Looking strange at the familiar can raise our awareness for space’s specificity.

IV.4 Behaviour in public

Behaviour and human practice are important concepts in this thesis. Thus, introducing their meaning and interconnections will be useful for understanding this work.

Classical behaviourist theory defines behaviour within a stimulus-reaction-schema: A certain stimulus (cause) produces a certain behaviour-controlled reaction (Klamt 2007, 95–96). This view excludes individual experiences, attitudes and other factors. Thus environmental psychologists argued that human behaviour arises from perception of objects, other people and events, and own requirements (Klamt 2007, 100). Following Klamt, this work understands behaviour in comparison to action as the less specific concept. Klamt considers behaviour as a relatively neutral (in terms of intentionality) human practice (Klamt 2007, 99–100). Behaviour is what I refer to as acted space 2.

In contrast to behaviour, action refers to intentionality. Giddens
emphasized action is characterized by subjective reasoning and the intention to gain an impact. Weichhart highlights that action often refers to interaction with other people (2003, 32).

Behaviour in public spaces is always ruled by certain communication regulations, which Erwin Goffman has investigated in his book “Behaviour in Public Places” (2008). Goffman examines a number of concepts important for this work: proper and improper behaviour in situations, the right to civil inattention, involvement, and involvement shields. These are described in the next subsections.

IV.4.1 Proper and improper behaviour in situations

Goffman defines situations as “the full spatial environment anywhere within which an entering person becomes a member of the gathering that is (or does then become) present.” (Goffman 2008, 18) A situation is established when two or more people start monitoring each other and ends when the second-last person has left (Goffman 2008, 18).

All situations employ a certain rule of behaviour and require participants to ‘fit-in’. Thus, if a participant in a situation decides not to operate according to this rule set or does not know the rules, she is felt to act improper in the situation. Proper or improper behaviour in a situation is always judged by a specific group or person (Goffman 2008, 5). In other words, behaviour in the same situation can be proper to one person and improper to another person. Goffman highlighted that the use of this familiar distinction relies on acts that are felt to be proper or improper, therefore allowing to bypass unresolved issues around the concepts of proper and improper (2008, 4).

IV.4.2 The right to civil inattention

According to Goffman, proper behaviour guarantees people in Western societies a “right to civil inattention” (Goffman 2008, 87). Civil inattention is the act of noticing another person is present (and admitting it openly), followed by withdrawing the attention from the person. This behaviour guarantees the people present in the situation, they have “no reason to suspect the intentions of the others present and no reason to fear the others, be hostile to them, or wish to avoid them.” (Goffman 2008, 84)

The right to civil inattention is increasingly leading to disengagement between all people in public spaces. Later in this work, I will highlight that the right to civil inattention was not obeyed in several workshop situations. However, this did not automatically lead to improper behaviour.

See chapter VI.1.1.4

Chapter IV: Theoretical framework
IV.4.3 Involvement and Involvement Shields

The term involvement is used to describe an individual’s handling of activities within a situation. Involvement refers to the allocation of involvement in different simultaneous activities (Goffman 2008, 37)

A challenge for research is that involvement cannot be measured directly and therefore the term “effective involvement” is used to refer to the “involvement that the actor and the others sense he is maintaining, or sense he is (or might be) sensed to be maintaining.” (Goffman 2008, 38) Goffman argues, within public a participant is obliged to maintain a main involvement. Main involvement refers to the activity, which is the major part of her interest or attention (Goffman 2008, 43, 56). If someone is not perceived to engage in a main involvement, another person might approach her, because her right to civil inattention is temporarily suspended (cf. Goffman 2008, 139). Thus, in some situations there can be a need for what Goffman calls “involvement shields”. Involvement shields are media or practices, which can be employed to signify one has an appropriate main involvement and therefore the right to civil inattention. Goffman uses newspapers as an example of involvement shields often used in public transport (Goffman 2008, 139). This example of a popular non-digital mobile medium, the newspaper, highlights a common misconception: It is not only since the advent of digital mobile media that individuals cocoon in public spaces. However, in recent times smartphones have replaced newspapers as the main involvement shield in the Western world. Examining if Urban Alphabets serves as an involvement shield in public space, will be one task in the discussion of the workshop results.

This chapter introduced the main concepts important in this work and emphasized their importance for the methodology and analysis of this thesis:

Public space is characterized as a simultaneously physical and socially produced, generally accessible, heterogeneous place where city inhabitants encounter strangers or gather with friends. It remains an individually perceived concept, also described as constantly changing while simultaneously preserving well-defined entities over time.

Lefebvre’s trinity of space, perception, representation and lived experience have been extended by people’s active behaviour, acted space, and experienced space, the stock of memories of places visited previously.

13 The term cocooning is used, for example by Mizuko Ito, to describe “private, individually controlled infrastructures, temporarily appropriating public space for personal use.” (Quoted in Farman 2012, 4)
These aspects will be employed to analyze the changes in public space in this practice-based research. Grosz’ characterization of body and city as mutually influencing each other, justifies one of this work’s hypotheses: When changing people’s behaviour in or perception of public spaces, this automatically changes the public space itself.

Sennett’s concept of the passive body serves as a background for alienating participants from their everyday experiences in order to find the extraordinary in the everyday.

Lastly, behaviour and involvement were characterized in order to enable this research to examine people’s actions during the participant observation.

With these concepts in mind we can now turn to a more detailed description of the Urban Alphabets project. As the case study object it is crucial to see its relationships with other areas, understand its development process and look at its outcomes.
Chapter V: The Urban Alphabets project

The Urban Alphabets project was developed as a case study, to serve as an example of a mobile application designed to re-connect users with the public spaces they inhabit. Thus, it is essential to highlight the development process of the project, its fundamental ideas, the way the project functions as well as the means of presentation and the project outcomes. To document Urban Alphabets this chapter starts with an outline of the process of the entire project, which is illustrated in Figure 12.

V.1 Project timeline: From a vague idea to the current project

The project idea developed when I moved to Helsinki in 2010: One day in winter 2010/2011 I walked on Helsinki’s Mannerheimintie, a central street leading to the city center, and started to take photos of letters, which I edited into my first Urban Alphabet when I arrived at home \( \bullet 1 \). This was the starting point for the Urban Alphabets project: My attention to letters had increased, and I realized that letters by themselves disclose information about their environment. As an illustration we can think of the contrast between characters in the three following settings: The font used on freeways emphasizes readability and therefore frequently uses a big and simple san-serif font with high-contrasts \( \bullet 2 \). In comparison, the branding of H&M serves as an example of a much more playful font, whose red color and additional backlight call our attention \( \bullet 3 \). On the other hand, in a purely residential area we rarely see letters that we recognize on first sight. Most of the characters here provide simple orientation \( \bullet 4 \).

Following this line of thought, the idea of the Urban Alphabets project is to capture alphabets from different neighbourhoods in a city or from
First Urban Alphabet using my DSLR camera when I moved to Helsinki

First iOS prototype during Multitouch Interaction course

www.ualphabets.com goes online

Demo spot at SIDER (Student Interaction Design Research Conference)

Workshop at Makelt-Center in St. Petersburg/Russia

First version of iOS App launched in App Store (v1)

Workshop at Walk21 in Munich/Germany (conference on walking and livable communities)

Development of new iOS App started; user-testing of the prototype

Major update to www.ualphabets.com online

New version of iOS App in the App Store (v2)

Accepted into Connecting Cities “Participatory City 2014”; artists and curators workshop

Arko 2014 at Medialab Prado in Madrid/Spain (1 workshop; media facade)

Funding through Digidemo, AVEK/ Finnish Ministry of Education and Culture

Android App launched in Play Store

Blank Canvas Street Art Festival in Riga/Latvia

www.ualphabets.com becomes mobile-friendly

workshop in Riga/Latvia

Media Facades Festival Helsinki (urban screen, 3 workshops, 3 public walking tours)

Balta nakts Riga/Latvia (2 urban screens)

Urban Reflections Festival in Berlin/Germany (2 urban screens in neighbourhoods; 3 workshops)

CCN Event at Medialab Prado, Madrid/Spain (media facade)

iOS app for iPads

SPUrban, Sao Paulo/Brasil (media facade, 3 workshops)

Type Motion exhibition at FACT Liverpool/UK (urban screen; gallery screen; 3 workshops)

Media Architecture Biennale 2014, Aarhus/Denmark (urban screen)

legend

- application
- workshop
- website
- urban screen + workshop
- screen
- other
different cities or countries, and compare their visuals. One of the aims when starting the project was to capture a visual identity of a city or neighbourhood. In other words, I expected comparing letters from different cities reveals something about the city itself. Already during the first presentation of the initial prototype (v1) of the application in December 2011 it became clear that this project has more potential than being a proof of attendance for the Multitouch Interaction course. However, it was only over time that I started to realize the hidden implications and consequences for the users’ connection to physical space such a simple application could have. Certainly, looking different at the everyday surroundings was not a deliberately designed feature, but after making the first few alphabets I discovered myself “hunting for letters” also when I was without a smartphone. I encountered the alienation effect towards my physical environment, which was discussed by famous sociologists and philosophers such as Walter Benjamin, Georg Simmel and Henri Lefebvre. They debate alienation as a tool rethink everyday life experiences (Highmore 2002), which is clearly connected to my goal of re-connecting city dwellers with their physical surroundings.\footnote{See also chapter IV.3}

By chance I got invited to give a workshop and lecture about my work and the Urban Alphabets project at Make It center in St. Petersburg/Russia. During the first workshops and presentations in 2013 the project idea developed further and it became apparent that the local archive of letters on the user’s smartphone does not fulfill the project’s ambitions: During the discussions in St. Petersburg and Munich I received valuable feedback: Participants wanted to compare their own letters with the characters captured in other cities or countries. At this time the features for the next version (v2) for the iOS application became clearer:
Firstly, looking at other users’ letters required an Internet connection in the application, which could upload the letters to a database. Secondly, there was a need for a website to display all uploads (letters, alphabets, postcards). These were the main changes implemented in autumn and winter 2013/14.

When this step was not even completed the Urban Alphabets project got selected into Connecting Cities Network’s (CCN) “Participatory City 2014” program. Connecting Cities is a network of media art and culture organizations aiming to circulate cultural content for media facades, urban screens and projection sites among the partnering cities. After an open call the partner institutions themselves decide which project they show in their local contexts.

Urban Alphabets was selected to travel to seven cities: Madrid, Riga, Helsinki, Berlin, Sao Paulo, Liverpool and Aarhus. Apart from workshops using the new Urban Alphabets application (v2) the proposal included the idea to use the application as an input to collectively create the respective city alphabet. In other words, the geotagged letters uploaded through the application formed an alphabet representing the city. This city alphabet was generated in real-time and projected into public spaces during the CCN events. The fact that the alphabet generated in real-time also introduced a new interesting experience: The city alphabet changes over time. It becomes a metaphor for the city itself, which is always changing. The city is never ready, it is never done; instead the city is continuously in flux, it is permanently changing.

Therefore the city alphabet also changes over time. It becomes the representation at a certain moment in time instead of being made-up once and staying like this forever.

Moreover the urban screens also incorporated the last letters and recent postcards uploaded from the city in question. This encouraged users’ to participate during the actual event, not just in the workshop usually taking place before the opening of the urban screen. As part of the CCN events I also conducted at least one workshop in each participating city. In addition the CCN workshops required expanding the range of devices the Urban Alphabets app supports. Therefore the
Chapter V: The Urban Alphabets project

development of the Android version started in January 2014. For this task I selected an external developer, a recent graduate from Aalto University’s Computer Science program. After many technical challenges the Android application premiered in the Play Store in May 2014, just in time for the workshop in Riga, Latvia.

My main motivation to take part in the CCN events was to get more user feedback on the current application prototypes, which were improved in several updates during the year 2014 (12 updates for iOS, 7 updates for Android). Furthermore the workshops held during the events serve as the main basis for this thesis. In group discussions or individual interviews and during the walks outside I collected feedback to answer the research questions this thesis is concerned with.

After conducting 19 workshops, while writing this thesis I am confronted with many different opinions on how Urban Alphabets could be used and developed in future. The CCN events and other workshops have significantly shaped the project until now and will be the main basis for its future development. Some of the workshops opened my eyes for thinking differently about the project, while others mainly confirmed working hypotheses and others primarily revealed usability issues of the smartphone applications.

In brief, the Urban Alphabets project has developed quite far from the initial idea into three interfaces (the applications, the website, the urban screens); further then could have been imagined in the beginning. However, the main goal has stayed the same: Urban Alphabets enables users to capture letters from their environment and re-use the typographical elements to write their own messages. Most importantly Urban Alphabets thereby aims to re-connect users to their physical surroundings. In other words, Urban Alphabets makes users explore their environment in an unusual way by expanding their vision to little details they have not noticed before. Additionally, Urban Alphabets can be understood as a tool for or “miss-used” in many different tasks, a fact that I will return to several times within my writing.

Figure 16: Street sign in residential area

See chapter I.3 for more details
V.2 Interfaces and functionalities

Even though the main interfaces the project uses have been mentioned in the previous part it is important to explain their current functionalities (v2) in more detail.

V.2.1 Smartphone applications

The smartphone applications for iOS and Android are the main interfaces Urban Alphabets relies on. Users are able to capture, crop and assign an individual letter of the alphabet. The letter is geotagged (if enabled by the user) and sent to the online database while Internet connection is available. In the current version the letters can only be uploaded immediately, that means if no Internet connection is available at a certain moment they are not uploaded later on.

Each alphabet consists of 42 characters. They contain letters, numbers and a varying number of special characters and do not differentiate between uppercase and lowercase letters.

The alphabet language can be changed, depending on the country the user is in. Currently the application includes the following languages:

- Danish/Norwegian
- English/Portuguese
- Finnish/Swedish (default language)
- German
- Latvian
- Russian
- Spanish

Whenever the user takes a second photo of a letter the older one is replaced. In one example if a user already captured the letter “C” and finds a new “C”, the newer “C” overwrites the older “C”. There are no two versions of the same letter, which is grounded in one of the conceptual ideas: The city is always changing and there is no “reverse-button” for city life. We cannot go back in time and therefore the alphabet develops exclusively in one direction: forward.

Besides it is possible to make more than one Urban Alphabet in the application. This feature was implemented to accommodate users, who want to capture different alphabets in different neighbourhoods or cities while still being able to look at their other alphabets or continue them later. The user can store up to eight alphabets simultaneously, which can include different language versions. They must be called differently, because the name is the main identifier for the individual alphabet.

Once enough letters have been collected a user can apply these characters in writing their own short messages, called Urban Postcards. The
The length of the texts is limited to 42 characters, which has mainly technical reasons: We did not want to introduce scroll views as the programming knowledge of the people involved is limited and it would increase the difficulty disproportionally. Additionally, Urban Postcards are not easy to read; they need to be “de-coded”, which becomes harder with longer messages. The Urban Postcards, just as the Urban Alphabets, can be saved as png-images on the device and/or sent to Twitter, Facebook or via email.

Though the features described above are the main functionalities there are few other functions in the application: It is possible to reset or completely delete an alphabet, change the alphabet name and language after it has been created and change the username (the username is required in order to send the letter to the online database). Furthermore the user can look at individual letters in bigger scale and delete a letter.

During the course of this research many usability issues have been reported. The paper-based survey asked the participants in an open-ended question what would make it more likely for them to use the Urban Alphabets application in future. Many answers reveal problems in the usability of the application. Since the results of each workshop were analyzed immediately after, many usability issues could be solved before the next workshop. For example, a user during a Helsinki walking tour (August 2014) noticed that instead of the original captured photos only the cropped individual letters were saved in the device’s photo library. This was changed for the next workshop in Berlin in September 2014.

Many of the comments made during the discussions as well as in the answers in the paper-based surveys especially addressed the Android application. One reason is the large range of devices that utilize the...
Android operating system. An additional challenge was introduced because the Android developer often did not see the problems on the devices himself but only received the error reports from me. However, we tried to incorporate feedback on usability of the Urban Alphabets apps whenever possible. Nevertheless, some technically more challenging issues have not been addressed yet. For example, zooming to the center of an image is technically more challenging than often thought. These and similar problems should be solved in the third iteration (v3) of the Urban Alphabets applications and are included in more detail in Chapter VII 1.

V.2.2 Web interface

The main affordance of the web interface (www.ualphabets.com 2) is to explore all contributions made to the Urban Alphabets project. In its main part the website incorporates the uploaded letters, alphabets, and postcards on a geotagged map, and the city alphabets made during the CCN events. Additionally the website includes information about the project, a timeline, a project blog and other information. The current web interface was developed simultaneously with v2 of the Urban Alphabets application and updated and extended several times since. One of the major updates was introduced in July 2014 when the website became mobile- and tablet-friendly.

At the home page the user interacts with a world map marking where individual contributions were made. Several uploads in the same area are clustered in bigger circles, including a number indicating the amount of uploads from that area. These clusters change with the map’s zoom scale. The main purpose of the world map is to explore the uploads’ geolocation. Some users might get to know other places only by looking at this two-dimensional representation. By zooming in, the user can explore a certain area on a relatively small scale and sometimes even follow the routes people have taken during the workshops.

As a second main section the visitor can look at all letters, alphabets, or postcards that have been uploaded. By default the newest uploads are shown first, whereas older ones can be looked up by clicking “Load more images” on the bottom. Letters can also be sorted by alphabet, while postcards and alphabets can be organized by language. As we will see later, looking at different versions of one letter can become insightful.

Thirdly, the website includes the City Alphabets 3 introduced as part of the CCN events. Each of the CCN cities holds their city alphabet. Some, such as Helsinki and Berlin, additionally include neighbourhood alphabets, which refer to the different city parts where workshops were conducted.

1 See chapter VII.2.1
2 Link 13
3 e.g., Link 14 shows the current Helsinki city alphabet Link 14
The other sections of the website are less important than the aforementioned: In the “Project Blog” I try to write updates after each event or about other news connected to the project. The “Change Log” was thought to be an almost daily more technical archive of changes that have been made to the applications or website during the project’s development phase. However, it was not used as frequently as imagined. The main reason was the use of a Git for the smartphone applications, where all changes were committed with a message indicating the changes in the code. Therefore the use of an additional Change Log seemed redundant. Nevertheless, some updates can be found there.

Lastly, the website contains an “Info” section, where visitors can find general facts about the project and how to participate. Besides there is information about the accompanying research and related art and design projects.

V.2.3 Urban screens

As has already been mentioned the urban screens, media facades and projections in public spaces have not been part of the project idea from the beginning. Rather their concept developed when making the proposal for CCN’s call for “Participatory City 2014”.

The main idea of the urban screens was to project the resulting City Alphabets and postcards back into public space and to visualize the change of a City Alphabet over time. Both these aspects reveal the essence of the project idea: The city is always changing and so is the alphabet. While using the application, the user also captures public space. Projecting this back into the same or a different public space generates new questions. In particular I got involved in many discussions about who is allowed to speak and be visible in public space? The idea was to open up the contribution not only to people who have made their own Urban Alphabet, but also to accidental passers-by.

The urban screen’s content always consisted of three elements:

- the current alphabet of the city (as overview and individual letters as close ups), (A)
- latest letters uploaded from the city, and (B)
- latest postcards uploaded from the city. (C)

These three elements alternated on the screen. Urban Postcards (C) were usually shown more often as it was the interactive part that visitors liked most.

In order to empower passers-by or city dwellers who do not own smartphones I developed a tablet interface, where they could use the current city’s alphabet, write their Urban Postcard, and send it to the screen. Technically, during the first CCN events this has been a special webpage but later I programmed it into an iOS application for iPads. This tablet was usually freely available for the event visitors, so that they could go
themselves to write their message and send it to the screen. In order to give the visitors in the locations some indicators for meaningful messages each display showed one of the following questions (starting from the event in Riga):
- What do you see?
- What is happening around you?
- Who are you?
- Where are you from?
These questions were thought to be easy to answer and open for a wide range of replies, not just a single meaning. Besides, the answers could be short and potentially reveal something about the environment the screen was in.

For an overview over the CCN events Urban Alphabets was shown in and more details refer to Figure 19. Whereas the medium and time-frame of the screenings are meant as informative assets the column called “input devices” is of major importance. It does not only state how many iPads have been used but also how they have been made available to the visitors. During the events where the iPads were in individual stands by
themselves and a guarding person only in sight of them, visitors freely went to write by themselves. In contrast, when a person was holding the iPad the first step to encouraging a visitor to write something was at least a short conversation. Also the participants seemed to feel more controlled and were more likely to answer the question posed instead of writing candidly. Personally, I preferred the situations where visitors could freely approach the project without being forced to communicate about it first. Additional information could still be given if participants seemed confused, were searching for help, or had questions.

In addition to the screenings in individual cities I also implemented a so-called “connected scenario”. In a connected scenario two cities or two locations within the same city could see the alphabet, postcards and letters of the connected other location next to alphabet, postcards and letters from their own city. By uploading Urban Postcards in each location a small, slow dialogue could evolve. Connected scenarios were installed in September 2013 in between Berlin and Riga and between two locations in Berlin (Brunnenkiez, Gerichtsstrasse both situated in the same district). Each connected scenario lasted for two evenings. The main challenge was to get visitors in both locations to upload postcards simultaneously and react to the messages the other location sent. As the postcards were not shown in real-time but with a delay of 1-2 minutes, visitors often lost interest before receiving an answer to their postcard.

As I have explained above the three different parts of the project are developed and technically fully functional. However, there is room for improvement: New features suggested for the smartphone applications and the project website will be outlined in a later section.

V.3 Gallery setups in Helsinki and Liverpool

In addition to the three main ways that Urban Alphabets was presented during the CCN events, in two cities I had the opportunity to use gallery spaces: in Helsinki during the local Media Facades Festival and in

*Figure 20: Photo of connected scenario

See chapter VII.2.1

Chapter V: The Urban Alphabets project
Liverpool as part of the Development Lab during the Typemotion exhibition. As the requirements were very different the setups are described separately:

In Helsinki the exhibition took place in the Lasipalatsi gallery for four days (Aug 21-24, 2014). Approximately half of the gallery space was dedicated to Urban Alphabets whereas the other half was used by Timo Bredenberg's installation "I,Cloud / Uncharted". The presentation of Urban Alphabets consisted of five parts:

- An alphabet in development where every hour the gallery staff replaced an empty paper with the printout of the current Helsinki alphabet. Over time visitors could experience how the alphabet differed from the opening to the closing day.  

- A world map where the locations of previous Urban Alphabets workshops and travels were marked. Each spot was connected with a red yarn to an iPad, where these alphabets were shown in a slideshow.

- A magnetic board with magnets from the letters captured during the four Helsinki workshops. Visitors used the magnets to form their own words or short messages.

- One iPad to explore the project webpage.

\(^1\) Figure 21: (left) Helsinki gallery: alphabet in development

\(^2\) Figure 22: (right) Helsinki gallery: world map and iPad

\(^3\) Figure 23: (left) Helsinki gallery: magnetic board

\(^4\) Figure 24: (right) Helsinki gallery: interactive iPad
The Urban Alphabets project results in a number of different outcomes. Besides the results mentioned in the following subchapter there are also the discussion outcomes from the workshops and screening events. Those are part of the main research this work is concerned with and will therefore be mentioned in detail during the discussion of the workshop outcomes. 

Digital

By nature a smartphone application aiming to create a visual archive of letters produces a number digital outcomes. Most importantly the outcomes include the archive of geolocated letters photographed mostly in urban environments, but also from books and in indoor spaces. This archive is made available through the project website. Furthermore these geotagged, photographed letters form Urban Alphabets, the main aim of the application, and Urban Postcards, the elements that make
the application a communication tool. Both are also presented on the project website.

Furthermore over the course of this project several project videos have been created. The first video stems from January 2013 immediately after the first prototype of the application was implemented. It presents the project idea and documents the first prototype (v1) of the Urban Alphabets application. The European Capital of Culture 2014 Riga produced the second video with the aim to promote the application in Latvia. The yet most extensive video overview of the Urban Alphabets project has been created by m-cult as part of the Media Facades Festival Helsinki 2014 and the Connecting Cities Network. This video includes not just the smartphone application but also explains the urban screens and workshops.

Physical

After working on the project intensively for more than a year and all outcomes remained digital, I personally had the urge to aim for a physical outcome: Using the applications the user transforms something physical, letters in the environment, into something digital, the digital photographic representations of individual letters that form alphabets or postcards. Reversing this process by making this digital representation of the physical environment back into something physical seemed a new approach that could broaden the audience of the Urban Alphabets project:

For most of the CCN events during the year 2014 City Postcards were produced, so that workshop participants and visitors during the events could take something physical with them. The front side the postcards always featured an Urban Postcard with the message “Hello [city name]!” The slogan plays with the programmer’s tradition to write “Hello world!” when learning a new programming language. The backside of the postcards featured the link to the project website, in human readable form and as a QR code, and some more information about the local CCN events and its sponsors.
The other important physical outcome was already mentioned as part of the gallery setups in Helsinki and Liverpool: Urban Alphabets magnets. The magnets enabled gallery visitors without a smartphone or without the patience to make their own Urban Alphabet, to participate in the Urban Alphabets project. By using the magnets, each featuring one letter, people could form their own words and leave short messages in the gallery. Most messages consisted of individual words, forming the own name was very popular, but few visitors also formed short sentences 5. In fact, the magnets were conceived so well, that I consider making them into a product: It could work well in a tourist shop as a box of magnets featuring one city 6.

During the workshop in St. Petersburg, the participants also printed the individual letters, cut them out separately and formed words and short messages out of them 7. Though the idea was born because the app was not yet publicly available, it illustrated that this method worked well and could be utilized especially in educational settings.

V.5 Statistics

This subsection is different from the other parts of this thesis. Instead of a written comprehension the section consists of seven pages of visualizations 8. The pages reflect the statistics of the Urban Alphabets project: While figure 29 gives a first overview about up- and downloads and user numbers, figures 30 to 32 show a more detailed picture of the uploads and downloads over time. The annotations in these figures also highlight the CCN events and showcase that in some the down- and upload numbers increase erratically while others do not have a big impact on the statistics. Figure 33 sorts the uploads to the Urban Alphabets database by country. Figure 34 gives an insight into the user numbers and highlights that many users do not just use the application once but more than one third of the users upload more than 10 letters. Figure 35 shows which letters were the most popular ones for upload to the Urban Alphabets database.

The data for these statistics has been gathered on a weekly basis between

Figure 28: Writing with printed letters in St. Petersburg

5 Figure 27
6 See chapter VII.2.1
7 Figure 28
8 Figures 29 to 35
the sixth week 2014 (February 3, 2014) and the eighth week 2015 (February 17, 2015). Download data for the Android application has only been gathered from July 14th 2015 (week 29/2014). Therefore the dotted line in figure 30 is an approximation of the download curve and the downloads of the Android app are missing until week 29/2014 in figure 31.

these figures appear on the succeeding pages (in order of appearance):
Figure 29: Statistics: overview
Figure 30: Statistics: development of app downloads
Figure 31: Statistics: app downloads per week
Figure 32: Statistics: development of uploads
Figure 33: Statistics: Uploads per country
Figure 34: Statistics: users
Figure 35: Statistics: ten most uploaded letters
Statistics overview

900 App downloads

263 Users
(User names)

4804 Uploads to the project database

Chapter V: The Urban Alphabets project
Chapter V: The Urban Alphabets project

App downloads per week

- iOS App in Store
- Android

- Arko 2014 in Madrid
- Workshop in Riga
- Workshop in Riga
- Media Facades Festival Helsinki
- Workshops in Sao Paulo
- Workshops in Liverpool
- Teemu Leinonen posted in Facebook group “ICT for education”

Number of downloads

Year:
- 2014
- 2015
This page visualizes all uploads made to the Urban Alphabets website between week 07/2014 and 08/2015. It does not include photos captured by users without an Internet connection.

Networked Facades Media Facades Festival Helsinki

Connected Scenario Berlin - Riga

This page visualizes the Urban Alphabets uploads made to Week 07/2014 and Week 08/2015. It does not include photos without an Internet connection.
Chapter VI: Discussion

Uploads per country

0;0 refers to longitude 0 and latitude 0. This is where uploads are displayed when the user denies to use geolocation.
In this statistic users refers to the user names that a user chooses. Two choices potentially influence this number:

- Users can change their usernames, so one user might appear multiple times.
- The database currently accepts double user names, so different users might only be registered once if they chose the same name.

Two choices can influence this number:

- The database currently accepts double user names, so different users might only be registered once if they chose the same name.
- Users can change their usernames, so one user might appear multiple times.

### New users per week

<table>
<thead>
<tr>
<th>Week</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New users per week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uploads per user</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Uploads per user

<table>
<thead>
<tr>
<th>Category</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 1 upload</td>
<td>263</td>
<td></td>
</tr>
<tr>
<td>More than 5 uploads</td>
<td>169</td>
<td></td>
</tr>
<tr>
<td>More than 10 uploads</td>
<td>95</td>
<td></td>
</tr>
</tbody>
</table>
10 most uploaded letters
(the small number inside the letter shows how often it has been uploaded)
This chapter documented Urban Alphabets for the reader. The project was developed to answer the research questions of this work. Urban Alphabets specifically aims to re-connect users with their physical surroundings by directing their attention to the characters in the public spaces they inhabit.
Chapter VI: Discussion

In the last three chapters I introduced the methodology, the underlying theoretical framework and presented the Urban Alphabets project. These sections served to build the basis for this main section of the work. This chapter presents the key findings of my research. It focuses on answering the research questions in regard to the case study but will also present two outcomes apart from the research focus of this work. The generalization of the results of this case study will be kept for the concluding chapter.

VI.1 Answering the research questions

The substantial part of this section answers the research questions raised in the beginning of this work. First, I will be concerned with the changes regarding perceived, conceived and acted public space as well as the bystanders’ reaction when participants used the Urban Alphabets App in public space. Furthermore I will discuss the durability of these changes and the place-specificity of the photographed letters. Lastly, this section will discuss the different user types and the possible future use scenarios suggested during the development phase of this project.

VI.1.1 Changes in public space

In Chapter IV it has been argued that public space can be analyzed in five aspects: (1) perceived space is the space passively observed by the participant, (2) acted space is the active behaviour resulting from these perceptions but also the individual’s intention in the space, (3) conceived space specifies the way space is represented by the participant and the image this representation produces of an unknown space in her mind, (4) experienced space refers to space memory, the spaces encountered before, (5) lived space involves the subjective experiences users have in space. Three of these aspects are useful points of closer
analysis: perceived, acted, and conceived space. It can be argued that the stock of experienced space always increases and therefore an analysis of its change is unproductive. I additionally acknowledge, that exactly differentiating between lived, perceived and acted space is problematic. However, for this work it is still useful to understand perceived space in terms of the more passive perception and acted space as the active behaviour in space.

VI.1.1.1 Perceived space

In all transcribed workshops participants reported a change of their perception of space ¹. Frequently, the attendants disclosed they paid attention to details usually unnoticed: a participant in Munich pointed out that she looked at posters even though she did not speak German and could therefore not understand their content. In Madrid a participant highlighted that she would usually not pay as much attention to letters, and in Liverpool a participant mentions that she looked much closer at the streets, she passes almost every day. In Liverpool the participants also discussed among themselves if a certain shop had been in the street for long as they had not noticed it before. This shows that they paid closer attention to their surroundings than in everyday life. This change in perception could indirectly also be evidenced in the participant observation ².

A participant in Munich elaborated whether she was walking or wondering around while using the application. She suggests that she spent more time than she would usually do in an unknown place. While as a tourist she would frequently only look at the tourist sights suggested by others, she noticed that during the workshop she observed the locations in between these destinations. A participant in Sao Paulo made a similar point ³: In everyday life we are used to “walk around fast; to run from one point to another point and in between the two points you see basically nothing. You put your earphones and you are alone with your thinking.” When using Urban Alphabets, she pointed out, that she practiced her observation skills in a creative way. A Munich workshop participant also mentioned this observation experience: She reported

Figure 36: (left) Things as letters: door handle as an S

Figure 37: (right) Outcomes of the paper-based survey: letter-perception

¹ Digital appendix 5-1 to 5-8
² See chapter VI.1.1.2
³ Digital appendix 5-5
on noticing smells and colors, which add on her experience of the public space. In particular she talks about the market square (Viktualienmarkt), where the participants had spent a considerable amount of time during the workshop.

Looking at things as letters was another frequently mentioned aspect. In everyday life we are used to see letters where they seem to convey a message. However, participants reported that when using the Urban Alphabets application they started to see things as letters, which are not meant to be letters •4. This change in perceived space has been reported numerous times in the interviews •5 but also during the outside walk in the 3rd workshop in Liverpool. In Sao Paulo •6 a participant referred to the change of perception when using different modes of transportation: While on the bus she notices very different things compared to walking the same route. Following this line of thought, Urban Alphabets demands yet another mode of city observation from the user: paying attention to letters in the city.

Another participant in Sao Paulo established an interesting connection between the accessibility classes she has attended, and Urban Alphabets •7: These classes required her to comprehend a situation from another person’s point of view. She revealed, when using Urban Alphabets she needs to change her perception in a similar way, towards the letters in the city.

The survey results also confirmed a change in user’s perception: 45% of all paper-based survey respondents definitely expect to look at letters differently during the next weeks, and another 28% tend to expect the same •8. Even though the response rate of the follow-up survey was low, its results also clearly indicated a change of perceived space •9: 56% of the respondents reported to look at advertising in public space differently and even 75% noted to pay particular attention to letters in public spaces after the workshop. In the follow-up survey the respondents also qualitatively replied to the way in which their perceptions of letters and advertising has changed. Participants disclosed that they increasingly noticed the presence of advertisement and letters in public spaces around them. Some respondents also recognized that they analyzed advertising and letters in public spaces more carefully or more often saw objects as letters.
VI.1.1.2 Acted space

Some of the changes in perception cause immediate shifts in behaviour in public spaces: When participants reported to look more closely at details, participant observation often revealed that they walked very close to capture letters not seen on first sight. “Things as letters” are a good example but also letters that participants have made up themselves serves as evidence for participants’ behaviour shift 1.14 The attention to details that some participants reflected on in the interviews can also be evidenced in the participant observation: A participant in Munich looked at the decoration on the market square very closely 2. In Riga I observed a participant investigating stickers carefully 3. Two participants in Berlin spent several minutes next to a container for donating clothes, a place generally considered undesirable to spent time at 4. A video recording shows how participants in Sao Paulo paid close attention to the shop window of a drugstore 5. In Liverpool a participant took a photo of a plant’s leaf at a plant tub hanging in front of a window 6. These examples clearly show that participants do not just think to perceive public space differently when using the Urban Alphabets app but it also causes them to act differently.

The most important shift in the observed behaviour is the constant switching of attention between the smartphone screen and the physical surroundings 7. Whenever a participant captured a letter she has to stop to do so. Yi-Fu Tuan’s states a “place is a product of a ‘pause.’” (Quoted in Cresswell 2010, 20) Thus, when the participants stopped, abstract space frequently transformed into experienced place. Every letter captured personalizes public space a little more.

Spending time in unusual locations is another change in the participants’ acted space observed frequently: In Berlin participants captured photos of letters at containers for donating clothes 4 and for construction waste 8. Similarly participants in Liverpool looked closely at a

14 Letters that participants make by themselves are also called “handmade letters”. 9

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1 e.g.,
digital appendix
6-6 scene 04;
6-7 scene 03

2 Figure 40

3 Figure 41

4 Figure 42

5 Digital
appendix 6-6
scene 01

6 Figure 43

7 e.g.,
digital appendix
6-2 scene 07;
6-7 scene 04

8 Figure 44

9 See chapter
VI.2.1
In Madrid participants kneeled down next to a motorbike. During a walking tour in Helsinki the two participants spent several minutes at a safety island of a street. When it started raining during a workshop in Sao Paulo the participants passed time in front of the FIESP building, a space empty in everyday life. In Riga a participant decided to walk on the grass next to the walkway instead of the sidewalk itself.

As another example of changes in acted space serves that participants often made an active effort to capture photos in the best possible way: They climbed balustrades (St. Petersburg), bollards (Madrid) or even other participants’ shoulders (Helsinki). Some participants kneeled down for the best possible images while others tiptoed. One participant blocked the sun, so that the letter the group captured was fully in shade. In Liverpool several participants walked onto the street to capture photos of letters written on the asphalt.

Pointing at letters was a common practice among workshop participants, especially if they used the devices in groups. Evidence of this behaviour could be found in Madrid, Riga, Helsinki, Sao Paulo and Liverpool. In several cities participants gathered to see the current alphabet (Madrid, Helsinki, Sao Paulo, Liverpool). This is a practice rarely seen in contemporary public spaces. Smartphones are highly personalized devices. Thus, they are currently utilized as individual’s own screens rather than for distributing content to several people.

Switching attention between the smartphone and surroundings, spending time in unusual locations, active efforts for the best photos, pointing at letters and gathering around the smartphone screen are the clearest proofs of changes in the acted space of the participants. However, many other changes in the participant’s behaviour have been observed. Some of them seem to be as unlimited in terms of cities as the aforementioned shifts, while others only occur in a single city.
Figure 44: Taking photos next to a construction waste container (Berlin)

Figure 45: Participants in Madrid kneeled down next to a motorbike

Figure 46: (left) Participant spending time at a safety island in Helsinki

Figure 47: (right) Participant in Riga walking next to the sidewalk
Figure 48: (left) Participant on a balustrade in St. Petersburg

Figure 49: (right) Climbing a bollard in Madrid

Figure 50: Blocking the sun for the best possible picture

Figure 51: (left) Tiptoeing for the best photo (Madrid)

Figure 52: (right) Participant on the street in Liverpool
Especially the children in Helsinki often speeded up their walking or even started running when they had descried a letter they wanted to capture. Though in other cities participants did not start to run, they also speeded up their walking when they saw an interesting letter (Berlin, Madrid, Helsinki public walking tour). This also has to do with the notion of “owning a letter” if discovering it first: A participant in a Helsinki walking tour told me that I was not allowed to capture a certain letter because she had detected it before and wanted to capture it for her own Urban Alphabet.

In almost all cities there is also evidence of making the letters, which could not be found, by oneself. This also shows that participants often had a high motivation to complete a full alphabet.

Participants occasionally also engaged with their smartphone instead of looking up: In Sao Paulo a woman waited at the traffic light and filled the time by exploring the application’s functionality. Generally during the initial phase of unfamiliarity with the app’s workflow, participants were more likely to be bound to their smartphone screen. During the workshop in Munich this happened more frequently than in the other workshops. Participants explained their screen focus with the fact that the app crashed several times and they tried to redo the alphabet to the point they had reached before.

Another undesirable outcome is that participants sometimes stopped to pay attention to traffic: One participant during rush hour walked onto Avenida Paulista in Sao Paulo, the most frequented street in the city’s business district. But also in a less frequented street in Liverpool a group of participants did not notice the traffic coming.

Other frequently witnessed behaviours include following each other.

15 Letters made up by one of the participants are referred to as “handmade letters”.
16 V1, which was used during the Munich workshop, did not save and reload the alphabet when it was closed or crashed. This feature was only implemented in v2.
closely within the group who produced one alphabet (Riga, Sao Paulo), frequent looking up and around (all workshops), and asking the group whether a captured letter was “good enough” to become part of the alphabet (Helsinki Munkkiniemi workshops). The children in Helsinki also assisted one another in how to work with the application; similarly in Riga during the phase of initial unfamiliarity participants helped each other.\footnote{9}

VI.1.1.3 Conceived space

Through the use of mobile digital media the ways that space is represented has drastically changed: Whereas traditionally maps were only to be understood by professionals, the audience of maps and other spatial representations has already widened with the advent of the computer. Through mobile digital media more people have become involved in the production of these artefacts (e.g., Gazzard 2011, 406 reports on the production of cultural maps). This also leads to different kinds of representations of space (Farman 2012). Most recognized is Google’s Street View\footnote{10}, which enables users to “travel” through 3D space in their web browsers without downloading any additional software.

During the interviews I showed the participants not just their own uploaded letters and alphabets but also examples of alphabets from other cities. Participants often generally acknowledged the difference between the alphabets they had produced and the other shown alphabets\footnote{11}. In order to collect more detailed material the discussions in Liverpool emphasized this topic more than the other workshops. Two central aspects were discussed: On the one hand, the participants reinterpreted the letters they had captured in regards to the ideas they reveal about their own city, Liverpool\footnote{12}. One participant expressed she found the images fairly diverse but overall dull. I posed the question whether Liverpool is quite dark, because many of the letters uploaded during the first workshop in the city had black backgrounds. The participants agreed, but one student
blamed the missing sun. However, when she later compared the Liverpool alphabets to the ones from Helsinki, she agreed that black backgrounds were specifically found in Liverpool.

On the other hand, interesting realizations were reached when looking at letters from cities that the participants had never been in. I frequently showed them the alphabets from Neuruppin, my German hometown, and from Las Vegas, USA. Especially the Las Vegas alphabet provoked strong reactions. Interestingly, the alphabets were often attributed a nationality. One participant mentioned the Las Vegas alphabet looked “quite fake.”

The participant in the third Liverpool workshop reinterpreted the 90's design of the Finnish K- and S- Market letters as un-progressive. When looking at the letter development video of Helsinki the same participant mentioned that there is a competition between the different letters in the alphabet, particularly between the S-Market “S” and the Suomalainen Kirkukauppa “S” (Finnish Bookstore). In another Liverpool workshop the letters from Helsinki were named “bold”, “standard”, and “not very diverse”, even “quite sad”. However, none of these attributes particularly describes Helsinki as a city, but rather stays on the level of characterizing the letters.

Generally, the reinterpretations of known and unknown spaces were interesting but did not reveal precise patterns. However, it can still be noted that the Urban Alphabets project adds another form of conceiving space to the diverse list: photographically captured letters are used as identity markers.

Another crucial point to mention is that the representation of space can be distorted consciously or unconsciously: This opportunity I realized

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1 Figures 56, 57
2 Digital appendix 5-6
3 Figures 58, 59 and digital appendix 5-8
4 Link 11
5 Figure 60
when a workshop group in Madrid captured an entire Urban Alphabet out of “things as letters”\textsuperscript{17}. Also a misleading representation of space necessarily results in a distorted reinterpretation of the representation. Thus the way that letters are captured and composed together into an Urban Alphabet is a decisive factor for the conceived space of others.

VI.1.1.4 Bystander’s reaction to using the app

Goffman has used the term bystander in a situation “to refer to any individual present who is not a ratified member of the particular encounter in question” (2008, 91).

In several situations bystanders’ reaction to participants using the Urban Alphabets app in public space has been investigated in the participant observation. In one instance a participant also reflected on the reaction of bystanders during the interview (Liverpool \textsuperscript{8}). She reported that bystanders on the street “looked at us quite bizarre, like staring at me.” She felt her right to civil inattention temporarily suspended \textsuperscript{9}. Similarly, participant observation in other cities revealed that bystanders stared at the workshop participants, seemingly asking: “What do you do there?” \textsuperscript{10}

In Madrid and Sao Paulo the workshop participants themselves sometimes broke bystander’s right to civil inattention: In Madrid, the group I observed helped a shopkeeper to open the wooden window blind in front of her shop. Afterwards they continued taking photos of her shop’s font whereupon the shopkeeper asked the participants what they do there with their smartphones. One participant shortly explained that they take photos of letters to analyze them later on \textsuperscript{11}.

In Sao Paulo a participant communicated with an owner of an outdoor shopping stall \textsuperscript{12}. As I do not speak Portuguese I did not understand what he said, but from the observation it appeared that he asked her if he was allowed to take a photo of the legs of her stall. After she had given permission, he asked her to move out of the image, so he could capture the best possible letter.

Generally I noticed more direct communication with bystanders in

\textsuperscript{17} “Things as letters” refers to the act of perceiving objects as letters, which are not meant to be letters. \textsuperscript{13}
Madrid and Sao Paulo, while in the other cities bystanders rather looked and stared but did not engage actively. I do not want to hypothesize on the reasons but instead I leave this as an observed fact.

The bystander’s reaction to participants using Urban Alphabets in public spaces can be summarized as follows: often the activity went unnoticed, frequently bystanders gazed at the participants, and occasionally participants and bystanders engaged in short conversations. In these last cases bystanders became active participants of the situation for a limited time. However, none of these situations appeared to showcase improper behaviour, neither from the participants nor the bystanders.\textsuperscript{18} Urban Alphabets is not primarily designed to engage strangers in discussions. However, participant observation has proven that in certain situations the application can serve as a trigger for conversations.

VI.1.1.5 Urban Alphabets as an involvement shield
In chapter IV I described that smartphones are often used as involvement shields, to signify appropriate main involvements in order to preserve the individual’s right to civil inattention. When conducting the workshops I also aimed to determine if Urban Alphabets serves as an involvement shield in particular situations. Even though the application aims to re-connect users with their surroundings, the possibility to use it for cocooning\textsuperscript{19} exists.

\textsuperscript{18} In chapter IV.4.1 I have pointed out that proper or improper behavior always depends on the point of view of the observer, in this case my point of view.
\textsuperscript{19} The term cocooning is for example used by Ito, Okabe
During a workshop in Sao Paulo a woman filled the waiting time at a traffic light with exploring the Urban Alphabets application. Her smartphone was clearly her main involvement in these circumstances. The device serves as an involvement shield signifying her proper main involvement and therefore her right to civil inattention. However, waiting time at a traffic light is rarely the situation where one has to signify another main involvement than waiting for the traffic light to turn green. Thus, I do not think that the participant used her smartphone deliberately as an involvement shield. Nonetheless, even if unknowingly the device serves to signify a main involvement.

A study of access patterns to news suggests, that in Western countries smartphones have taken over print media to access news during public transport rides (Newman and Levy 2013, 29). Further increasing the use of smartphones in public space diminishes the probability of meeting strangers or noticing the unexpected because the main involvement is already pre-given: looking at one's smartphone. Nevertheless, I want to argue that Urban Alphabets occasionally provokes reactions from bystanders who understand the use of the application as an improper main involvement, and therefore suspend the users’ right to civil inattention.

During many workshops participants reported they spend more attention to details often unnoticed in everyday life. The participants in a Sao Paulo workshop gave this discussion a different emphasis: They pointed out in everyday life the default mode is to zoom out of a situation or zoom in to the smartphone’s screen, both actions being the same with a different emphasis of the description. Often city inhabitants only comprehend the information needed in order to fulfill a task. One participant cited previously stated: “to run from one point to another point and Anderson to characterize “micro places built through private, individually controlled infrastructures, temporarily appropriating public space for personal use.” (2007)
and in between the two points you see basically nothing. You put your earphones and you are alone with your thinking.” I argue that this is a tactic adapted by modern city dwellers in order to cope with the complexity of urban everyday life (cf. Waal 2014, 78). Urban inhabitants are not able to comprehend all information the city conveys, so focusing on messages of personal importance at a certain time is a survival instinct, which is also implied in Sennett’s account of the modern passive body \(^1\). Urban Alphabets provides an incentive to withdraw from this survival instinct and focus on details usually unnoticed. In other words, the modern city dweller deliberately chooses to distract herself whereby obstacles disturb her passively rendered body. Thus, the passive body becomes active again. In this line of argumentation Urban Alphabets can be understood as a strategy, similar to *la fête* or the *dérive* \(^2\), to defamiliarize the everyday.

VI.1.1.6 Temporality vs. durability of changes
When using the first version (v1) of the Urban Alphabets app I realized that I did not just change my letter perception when I purposefully employed the application to create an Urban Alphabet, but the shift maintained when I did not use my smartphone. I switched into a “hunting for letters-mode” when in public spaces.

To verify this personal observation I used the follow-up surveys two to four weeks after the workshops. Though the response rate was small (only 23% of all participants answered the follow-up survey), the results clearly indicate that the change in perception lasted much longer than just the workshop: 56% of the respondents report to look differently at advertising in public space since the workshop \(^3\). Even 75% of the participants indicate to see letters differently after the workshop \(^4\).

Already during the workshop a participant in Sao Paulo by himself highlighted that he expects his attention to letters to change, even when being without a phone \(^5\).

These facts indicate clearly that for most users Urban Alphabets does not just change their attention to details while using the application itself, but these shifts certainly last longer. However, to determine how long the effect lasts and if eventually the shift in attention depends on whether participants use the application repeatedly, the present data is not sufficient.

VI.1.1.7 Site-specificity of the letters
One of the aims when starting the Urban Alphabets project was to capture a visual identity of a country, city or neighbourhood. I assumed the analysis of letters from different cities would reveal the character of the city itself. This was often a point of discussion in the workshops.

While some participants call particular letters very place-specific, they were simultaneously not. The “V” from Liverpool serves as an excellent

\(^1\) See chapter IV.2.2

\(^2\) See chapter IV.3

\(^3\) Figure 39 or digital appendix 4-2

\(^4\) Figure 38 or digital appendix 4-2

\(^5\) Digital appendix 5-5
example 6: A participant called this letter “really Bold Street” 7. In her eyes it was specific to one street in the city. However, she also pointed out that the company “Voodou” is a chain of hairdressers in Liverpool. Thus, she acknowledged the letter is not place specific to a particular street in the city but rather the whole city. She continued on to explain that the sign is so big and therefore prominent in the street that she instantly connects it with the identity of Bold Street.

Interestingly, the participants in the same interview in Liverpool also attributed photographed letters a nationality: They called letters “American” on the basis of belonging to logos of originally US-American companies: the “S” and “Y” of Subway and the “M” from Disney’s Mickey Mouse 8.

There are also Finnish equivalents of the US-American letters: Several Finnish supermarkets use brand names consisting of a single letter + shop type: S-Market, K-Market, and R-Kioski 9 are the most typical contemporary examples. These letters commonly exist in many public spaces in Finnish cities and even villages. These companies are only operating in Finland and therefore the letters can be attributed a nationality. However, this is an understanding that developed while realizing this project. These letters are so common in Finland that their presence is considered self-evident. Only when holding workshops in other countries I personally realized their ubiquity in Finland.

Another example, the considerably worldwide “P” of the permissive parking-sign 10, lead to a similar conclusion: In many countries the Parking-“P” is taken for granted. It exists as a white letter on blue background in England, Germany, Finland, Latvia, Russia, Spain and many other countries 20. Only during the workshops in Sao Paulo I realized that the Parking-“P” is not a worldwide sign: Brazil uses an “E” to signal parking 11.

The attribution of letters to internationality or locality lead me to the realization that these attributes should be understood as a continuum between worldwide and place-specific. This scale includes, for example,
concepts of multinational, international, national, regional, citywide or neighbourhood letters \(^1\). Among these concepts there are still many other possible nuances and a specific letter might not be easily located precisely on that scale. Instead, being “more worldwide” or “more place-specific” than its neighbours should identify a letter in the continuum.

In several workshops the participants agreed on my hypothesis that the captured letters reveal a specificity of the place they have been captured in \(^2\) but repeatedly they expected neighbourhoods within a city not to reveal such a difference \(^3\). During the Madrid workshop we also considered the intentions that users of the application have while capturing an alphabet \(^4\). It can be argued that the place-specificity of an Urban Alphabet enormously depends on which letters are captured and which are not.

Lastly, I want to highlight that Urban Alphabets specifically uncover intentions or preferences of the maker: Whether the alphabet is captured fully within a short time or made during a longer period, whether the maker is testing with indoor types she finds around herself or making visible efforts for the best possible framing, whether a group is using the app for educational purposes or an individual captures particular letters from books and magazines. These are only few examples of how Urban Alphabets has been used to highlight that many of these intentions are visible in the final results.

VI.1.2 User types and interests

One aim of this research was to investigate what particular interests the (potential) users of Urban Alphabets have.

Already in the workshop in Munich, when the second version of the application was not even in development, the participants identified two main groups of potential users for Urban Alphabets \(^5\): The users from the first group want to explore public spaces and capture their own letters. The second user group prefers to use items uploaded by others to write their own postcards or combine them into custom alphabets.

This opportunity to re-use existing material from other users has been a request also in other workshops (e.g., in Madrid \(^6\)) and will therefore be considered in the future development of the project \(^7\).
This distinction of two user groups is very practical, however, the following results regarding interests do not follow this distinction but rather focus on the users' interests in certain topics.

As the basis to correlate user's interests in the topics graphic design, writing systems, shopping, cities, modes of transportation, advertising, and smartphone apps, with their interest in Urban Alphabets I used the answers from the paper-based survey. All answers were rated with 1 to 5 points. The rating in the topics regards the answer "no interest" as 1 and "very interested" as 5. The rating in the future use expectancy of Urban Alphabets regards "I will never use it" as 1 and "I will definitely download it" as 5. In order to reveal statistically relevant correlations a combination of cross-tabulations and Fisher's Exact Tests were used. Even though the computed cross-tabulations include the outcomes of the Pearson Chi-Square test, its results cannot be used because the sample sizes are too small. Fisher's exact test assumes the null hypothesis of independence indicated by a p-value bigger than 0.05.

Additionally to the cross-tabulations I visualized the answers in two different ways: The upper-part of the visualizations reflects the cross-tabulations, but gives a visual understanding of emerging clusters. The size of the circles reflects the number of participants in the paper-based survey who have answered a particular combination (e.g., 18 participants answered they had a very high interest in graphic design and will definitely use the Urban Alphabets application thereafter this workshop). Figure 71 shows the rationale behind the variance of interests' visualizations: Adding the number of participants with a similar or very different interest in one or the other field shows the variation in the interests. For example, all participants who have answered to have an interest of 1x1, 2x2, 3x3, 4x4, 5x5 are summed up in the 0-field of the lower visualization.

On the basis of Fisher's Exact Test only two (advertising, smartphone apps) of the seven fields show a statistically significant association of interests in the topic and in using Urban Alphabets in future (p-value for advertising: 0.027; for smartphone apps: 0.050). In the other five fields (graphic design, writing systems, shopping, cities, modes of transportation) the p-values are larger than 0.05 and therefore no association with the interest in using Urban Alphabets could be discovered.

Nevertheless, the analysis of the variation of interests shows significant differences in the results and can be used as a strong indicator of an
Appendix 6-1 shows a cluster of high interests in both graphic design and the future use of Urban Alphabets. 40% of all users report the same interest in graphic design and their future use expectancy of the application. Another 41% show a 1 or 2 point higher interest in graphic design than in the future use of Urban Alphabets.

Appendix 6-2 presents a much more diverse variation with only 31% of the participants mentioning the same interest in writing systems and the future use of Urban Alphabets. The interest tends towards the future use of Urban Alphabets: 46% of the answers indicate such a tendency.

Appendix 6-3 also reveals a diverse picture: Overall the interest in using Urban Alphabets in future exceeds the interest in Shopping. 66% of participants have a higher interest in using Urban Alphabets in future, compared to only 18% reporting a higher interest in shopping, and 16% having a similar interest in both topics.

Appendix 6-4 shows a similar allocation of interests as appendix 6-1 (future use expectancy – graphic design). Almost all participants have the same or a similar interest in cities and the future use of Urban Alphabets: 81% report a variance of -1, 0 or +1.

Appendix 6-5 shows a marginally higher interest in using Urban Alphabets in future than in the different modes of transportation: 73% disclose a similar interest in both topics or a lightly higher interest in the use of Urban Alphabets (reported variance 0, +1 or +2).

Appendix 6-6 and Appendix 6-7 concern the interests in shopping and smartphone apps, and the future use expectancy of Urban Alphabets, which according to Fisher's Exact Test correlate. However, the variance analysis on both sides shows a slightly higher interest in using Urban Alphabets in future than in shopping or smartphone applications. Respectively 90% of the respondents indicate a variation in their interests between -1 and +2, with 19% reporting an interest variance of +2 in shopping and 20% in smartphone apps.

When evaluating these results it is critical highlight that there are no significant differences between the interest in the seven topics and the future use expectancy of the Urban Alphabets app. A statistical method, Fisher's Exact Test as well as the analysis of the variance of interests has proven this fact. Fisher's Exact Test indicated an association between
respectively shopping and smartphone apps, and the future use expectancy of Urban Alphabets. The analysis of the variation of interests showed the most linear interest distribution between cities and the future use of Urban Alphabets and a generally high interest in both topics in graphic design and the future use expectancy of the application.

Three factors limit the validity of these results: Firstly, the seven topics have been chosen in the very beginning of the research. The aim was to find areas that are considerably obvious in their relationship to the Urban Alphabets project and see if there could be a significantly higher correlation of a certain topic and the interest in Urban Alphabets. Thus, all topics have a certain relation with the project and significant differences failed to materialize. During the study I could have also extended or changed the topics in the survey to widen the picture onto additional areas. At the time I decided against this option, mainly because I wanted a larger sample of participants. However, in future workshops I will perhaps adjust the survey.

Secondly, all seven concepts were common-sense terms. Thus, their understanding might have differed in different cultural contexts, or depending on personal backgrounds of the participants. Therefore the rating of interests can be distorted to a certain extent.

Thirdly, the use of the semantic differential scale for rating has its advantages and disadvantages: It was chosen to make the analysis of the results straightforward (translation of the scale into points). Simultaneously, it limited the participants to only five options. Thus, the correlation analysis might partially distort the true relationships.

VI.1.3 Use scenarios

One aim of this thesis was to identify more ways in which Urban Alphabets could be used. In February 2011 I developed three personas and two use-scenarios, which will be introduced shortly, before I go on to describe which scenarios and use-ideas have been collected during the Urban Alphabets workshops.

VI.1.3.1 Initial personas and scenarios

The initial personas and scenarios were not intended to show the variety of uses of the Urban Alphabets app but rather to demonstrate new features the next version\(^{21}\) of the application could incorporate. Scenario-based design\(^{22}\) was employed to concretize the experiences and

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\(^{21}\) The next version at the time meant v2 of the application.

\(^{22}\) See e.g., Carroll (2000) for an introduction to scenario-based design.
demonstrate particular use-cases in which Urban Alphabets could be imagined.

Three personas were developed to demonstrate three different user-types:
Lisa ‣ 1 is a first-time user who explores the application while walking her dog in Berlin.
Tapio ‣ 2 is a recent graduate from a graphic design program in Helsinki who uses Urban Alphabets frequently to take new photos but is also very active in sharing his alphabets in social media. Additionally he follows his friends’ uploads and comments regularly.
Astrid ‣ 3 is a Swedish woman in a long-distance relationship using Urban Alphabets to send personalized messages to her boyfriend in Norway.

Two of these personas have been used to develop more detailed scenarios:
Lisa’s first time experience using the Urban Alphabets application is depicted in Digital appendix 9-1. The super-user Tapio already owns several thematic collections of letters. A friend’s upload he encounters while on public transport motivates him to arrange a meeting to complete her alphabet of snow-letters together.

VI.1.3.2 Suggested use-cases during the workshops
The use-cases suggested during the different workshops have to be understood as singular ideas rather than as use-scenarios in the way introduced before. The aim was to identify in which situations workshop participants want to employ Urban Alphabets themselves or could imagine other people use it. These ideas can be separated into three main categories: overall ideas for the project, ideas regarding the smartphone app or ideas regarding only the website.

Ideas for the overall project
A common idea was using Urban Alphabets as a tool for education. This has not just been suggested in Riga (Digital appendix 5-3) but has also been implemented by the University of Vigo23 in Spain and practiced

23 Three students at the University of Vigo used the Urban Alphabets application as the basis for their degree work: One student investigated how the application can be used for educational purposes in school, while another focused on children and literacy in a sociocultural association in Ourense, Spain. A third thesis concentrated on teaching habits of healthy eating by means of new media and uses Urban Alphabets to facilitate this process. Maria Isabel Doval Ruiz supervised the works. Some of the outcomes of these projects can be found in Link 21 ‣ 4.
Lisa

is a single woman, in her mid-30s. She works as a tax consultant in Berlin (Germany). Lisa is new to the “Urban Alphabets” app and wants to explore the functionalities...

Lisa walks her dog Tommi twice a day. She always tries to find new routes so dog walking does not become boring. Especially in the evenings she prefers walking in the center rather than inside the nearby Tiergarten (public park in Berlin) as she does not feel secure there in the dark.

Tapio

is in his mid 20th. He just graduated from university and started working as graphic designer in Helsinki (Finland). He uses “Urban Alphabets” several times a day.

Tapio not only takes photos frequently, but he also shares his collections to different social media services. He is also active in following what his friends posted and comments on friends’ posts.

Astrid

is a 31 year old Swedish woman in a long-distance relationship with a Jørgen, who lives in Norway. Astrid uses “Urban Alphabets” mainly to send personalised digital postcards to her boyfriend.

Astrid is very concerned about privacy issues. That is why she does not connect “Urban Alphabets” to any other social media service. She frequently browses other users’ collection and uses them to send her own “urban postcards”.

Chapter VI: Discussion
myself in the workshops in Helsinki and Liverpool. Creatively teaching the alphabet to young children is the main objective of this idea. In the workshops in Liverpool we also explored the opportunity of employing the application with older students to introduce them to the topics of typography and branding. Personally, I regard both options as significant for the future of Urban Alphabets. A participant in Riga proposed utilizing Urban Alphabets for team-building. She suggested to divide companies into groups and give them specific tasks that they need to achieve together. Different users have also asked me to build a social network similar to Instagram around Urban Alphabets. However, I do not believe Urban Alphabets itself has the potential to be used by enough users for an independent social network. Instead, I think, well-done integration with other social networks is the key for Urban Alphabets’ future success.

Ideas regarding the smartphone app

A participant in Munich suggested employing Urban Alphabets to entertain his 8-year-old daughter during walks through the city. He mentioned that challenges could give her a specific goal and she would playfully get to know her hometown better. He saw a potential that Urban Alphabets could be used as an inexpensive weekend activity. Similarly, other users mentioned in the paper-based survey that “rewards for filling the alphabet” would make it more likely for them to use the application in future. This idea can be understood as part of the gamification trend and will be considered in the future development of Urban Alphabets.

During the workshop in Munich the participants also imagined Urban Alphabets combined with a location-based tourist guide: Travellers get hints on tourist locations nearby, see where they are on a map and also get directions and route suggestions. When completing an Urban Alphabet they could then get a reward connected to tourism in the city, for example, free entry to the city museum.

Users in Madrid also highlighted that they want to use Urban Alphabets in a touristic context: Either they state generally they intend to use the app during travels, to write postcards from travels or they even demand more information behind individual letters. Other users in Madrid criticized the Urban Alphabets application for emphasizing the alphabet rather than the specific message. For them the motivation was higher if they could use the app to achieve a specific goal, such as writing an Urban Postcard. They also demanded the

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24 Gamification is the use of game thinking in non-game contexts (see Deterding et al. 2011 for a closer investigation of the term).
possibility to customize the postcards: letters should be scalable, letter spacing variable and the format of the individual elements freely adjustable.

A user in Riga introduced a personal use-case: At present she captured photos of letters, which she made by herself. She then used the letters to write friends’ names and gave the prints as presents to them. Urban Alphabets could facilitate her in this process if it was more flexible and the quality of the written Urban Postcards was higher.

Repeatedly users asked for the same experience in the application that they have in the website. There is certainly a demand to see other users’ uploads as well as own contributions on a map. This is connected to another feature that has received positive feedback: A search-functionality, which automatically generates an Urban Alphabet from a search term or a location. This does not only require all uploads to be geolocated but also the possibility to tag letters. The feature will be considered in the future development of Urban Alphabets.

I ideas regarding the website

Workshop participants wanted the opportunity to download their own letters easily. This request did not specifically aim at the web. However, it is the most straightforward technical solution, which only requires common user-names and passwords across the platforms. The download should be high quality so that users can employ the photographs for further editing.

When participants saw the alphabet in development videos, where they watch the alphabet developing over time, they repeatedly asked for a similar feature on the web. They requested the control to stop at a specific point in time and integrate it overall better into the webpage.

Urban Alphabets as a tool

In most of the paper-based surveys I asked the participants to continue the sentence “Urban Alphabets is a tool to/for …” A participant in Madrid had pointed towards this direction when I asked her whether she could imagine using the application in London: “It is a good tool to….” To me it was important that she did not continue the sentence as it made me think about how I would end it myself. Ultimately I realized that the application has the potential to be a tool of many kinds. Thus, it was beneficial to ask the workshop participants in the paper-based survey for what they recognize Urban Alphabets as a tool.

The answers to this question differ widely, but they can be classified in

25 See City Alphabets in development-videos
26 Surveys in Riga, Helsinki, Berlin, Sao Paulo and Liverpool include this question.
different categories:
Firstly, participants see Urban Alphabets simply as a tool to make Urban Alphabets.
Secondly, users emphasize that Urban Alphabets has a primary relation to typography. They understand it either as a tool to “expand your horizons on typography” or to “create [and explore] a variety of different fonts”. One participant mentions that Urban Alphabets enables her to “discuss the typography of a city more ‘concrete’”.
A third group of participants highlights Urban Alphabets’ relation to culture and city specificity: They either emphasize that the app helps them to get to know other visual cultures around the world or to explore their own city or neighbourhood and create a city-specific font.
A fourth group of users understands the project as a fun and entertainment tool. Their answers are mostly short stating, “Urban Alphabets is a tool…” “for fun and games”.
A fifth group of answers relates Urban Alphabets to education. Other individual answers include Urban Alphabets as a tool for communication with friends, for advertising, for event making and tourism, to tell a story or simply to “explore”. A participant from Liverpool understands the application as a tool to “catalogue the language(s) we see around us everyday”. Another answer highlights that it “represents letters as more than what their original purpose once was.” A participant in Riga gives another explanation: The project is a “tool to make me look at simple things (letters on the streets) different”. Lastly a participant in Sao Paulo wrote Urban Alphabets is a tool to “see and feel the city with another time, a time to think.”
None of these answers is more right than another: All are appropriate ways to understand the Urban Alphabets project. These answers have additionally been classified centered on the activities (verbs) rather than the relationships (nouns) described above 1. This categorization gives another overview of the same answers: The largest groups of participants understand Urban Alphabets as a tool to entertain, educate, communicate, feature a place or change space.

The amount of different ideas mentioned illustrates that the Urban Alphabets project triggers users’ creativity. The quantity of directions also challenges me, as the artist, designer and developer of the project, to decide which opportunities to take and which ones to discard, a question further discussed in Chapter VII. From a research standpoint, the participatory design methods employed in this work empowered to collect a number of ideas and directions never possible to imagine by a single designer.

1 Figure 76 or digital appendix 3-5
Urban Alphabets is a tool ...

... to create a different style within typography
... to expand your horizons on typography
... to create a variety of different fonts
... to explore different typography types
... that enables me discuss the typography of a city more ‘concrete’

... to know other cultures
... to show the commercial world through different cities
... to find out what type of text is used in different regions of the world
... to find out the difference of text/fonts in different cities
... to get to know the city, explore the neighborhood
... know the city and art in general
... to create your own alphabet and gain a sense of perspective from other cities and cultures
... to help people across the world see how different letters are across the world in streets
... to feature a town/community
... to find letters, create a city font specific
... to find letters in an urban environment and in the commercial world
... to open your eyes to the details around us that often go unnoticed, see the city otherwise
... to make me look at simple things (letters on the streets) different
... to see and feel the city with another time, a time to think

... to take pictures of the environment that represents letters
... to create alphabets in an easy way, very easy
... to create an urban alphabet
... for creative alphabets
... to create your own alphabet
... to develop your own alphabet
... to take pictures of different letters
... to create an alphabet influenced by your surroundings and society

... for fun and games
... to use for fun
... that provides fun

... to entertain, educate, have fun
... for education, advertising, event making, tourism

... to communicate with friends in a different way
... to catalogue the language(s) we see around us everyday

... to explore
... to explore urban space

... to tell a story
... for poetry

... to increase the perception of the means
... that represents letters as more than what their original purpose once was

... to realize surroundings

**Figure 75:**
Urban Alphabets is a tool to/for...
- answers from the paper-based survey

participant from Riga
Berlin
Liverpool
Sao Paulo
VI.2 Other issues the project raises

Apart from answering the research questions stated in Chapter I I also want to present two other important findings of this research. Though they have not been explicit part of the research they appeared multiple times during the implementation and are closely connected to the different aspects of the Urban Alphabets project.

VI.2.1 Types of letters in public spaces

The outcomes of the Urban Alphabets application shown on the website mlink{22} reveal three types of letters in public spaces, which were also repeatedly discussed during the workshops e.g., digital appendix 5-6 and the Connecting Cities events.

“Letters as letters” refers to the signs surrounding us in everyday life, for example, the advertising in public space that is intended to convey a specific message. They could be called the ‘obvious’ letters e.g., figures 58, 59, 64, 65. They were the letters I expected and intended to collect using the Urban Alphabets application in the beginning.

“Things as letters” identifies the letters less obvious, seeing a door-handle as an “S” or a part of a ladder as an “H”. They are the letters people perceive, when Urban Alphabets triggers their creativity. Users report on seeing an alternative city full of these things, which can be perceived as letters though they have not been designed as such.

“Handmade letters” are made by the participants: Written in sand or made from different found objects. In Liverpool participants also used a condensed glass to write using their fingers. Often these are the letters hard to find in the urban environment, such as the “Q” or “Å” in Finland.

These three categories might seem obvious. However, in everyday life we do not think of letters in these ways as we concentrate on the first form. Thus, this grouping of letters is an unexpected research outcome of this work.
VI.2.2 Who is allowed to speak in public space?

Another issue worth mentioning is the ongoing discussion on who is allowed to speak in public space. Especially with the curators of the CCN and during a public discussion in Berlin in September 2014, the question emerged: Do we need to censor messages that are sent using Urban Alphabets? During the CCN events users’ uploads were projected into public spaces in real time. Thus, the curators often asked beforehand how to deal with offensive messages and how to identify those. It has been a point of concern during the entire time of the project, that people could miss-use Urban Alphabets for political statements or sexual harassment: When the iPhone app went online a few penis letters appeared, which was the point when I personally realized this potential. These letters were eliminated from the database. In contrast, no offensive, harassing, fanatic, or racist uploads occurred during any of the CCN screenings. However, the discussion accompanied me especially during 2014: I developed an user-friendly web interface so that curators themselves had the opportunity to turn individual uploads invisible. This feature was especially important during the longer festivals, where I could not personally check all uploads and when Urban Postcards where written in languages I do not speak.

The question of who is allowed to speak and be visible in public, to me, is still unanswered. Through the use of technology Urban Alphabets already excludes many users. But not just the digital divide\textsuperscript{27} of regions

\textsuperscript{27} The term digital divide refers to the inequality of re-

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Additionally to these categories a user in my hometown, Neuruppin, Germany, has uploaded an alphabet I call “objects for letters”: Each photo showcases an object. The first letter of that object, in German language, stands for the letter it is assigned to in the alphabet. For example, “B” stands for “Blume” (translated: flower) and the image features a flower; “K” stands for “Katze” (translated: cat) and shows a cat. This alphabet completely depends on understanding the system and the knowledge of German. When using it to write a postcard, deciphering becomes a big challenge, much more than with other Urban Alphabets.
is of importance here, also the divide between generations. Additionally, the target groups in workshops but also during the screenings are an issue: All festivals were local initiatives, most neighbourhood festivals. What particular relevance had Urban Alphabets, for example, in Berlin’s Brunnenkiez in comparison to other neighbourhoods in the city? Who can access smartphones and who wants to participate? Who can be visible in public space and who cannot?

These are questions I cannot answer. I think they are issues, which can only be raised but not resolved. For this reason it is of particular importance to me to include them here. An artistic project, like Urban Alphabets, can also raise questions without providing answers. This was also one objective in the workshops: There has never been an aim to answer all questions about the project. Rather the artistic strategy of Urban Alphabets is to raise new questions for further thought and personal exploration.

VI.3 Outcome summary

This chapter reflected all research questions regarding the Urban Alphabets project. It showed that public space changes in all its aspects when using the mobile app:

Perceived space is altered by looking at details usually unnoticed, spending more time than usual in a place, perceiving things as letters, and increasing the attention to letters and advertising in public space.

Acted space changes by constantly shifting attention between the smartphone screen and the physical surroundings, looking closely at details, spending time in unusual locations, making an active effort for the best possible photographs, pointing at letters using one’s hand, speeding up the walking when an interesting letter was discovered, and gathering to see the current alphabet on the smartphone. The user increasingly personalizes public space, space transforms into place.

Conceived space is modified by actively taking part in representing

gions, countries or demographics to access, use or knowledge of information and communication technologies (e.g., Murelli 2003, 2–3).
space, acknowledging the difference between city representations and attributing letters a nationality. However, it should be noted that changes in the different aspects influence each other and have been separated in this work for the purpose of analysis.

Furthermore the chapter explored the role of bystanders in situations, who frequently gazed at the participants and occasionally short conversations evolved. Additionally, the writing investigated how Urban Alphabets can be misused as an involvement shield, and highlighted that most users’ perception of letters alters not just when using the application but the change continues up to four weeks. I suggested describing the site-specificity of letters as a continuum between worldwide and place-specific.

The potential user-types for this mobile application can be differentiated by motivation: The first category of users wants to capture their own letters in the urban environment, whereas the second intends to reuse the letters captured by the first group. In regards to the interests of the users and their future use expectation of Urban Alphabets two clear interrelationships could be found: Fisher’s Exact Test showed a correlation between Advertising, and Smartphone Apps and the announced interest to use Urban Alphabets in future. No such correlations could be found in the areas of graphic design, writing systems, cities, modes of transportation, and shopping. However, the analysis of the variance of interests shows distinct differences between these aspects.

Additionally this chapter introduced use-scenarios and ideas for the future development of Urban Alphabets on which I will further reflect in the next chapter 1. The analysis showed users have a very different

See chapter VII.2.1
understanding of what the Urban Alphabets project is. The replies range from a description as a tool for personal exploration, and communication to a means for education and tourism.

Lastly the chapter introduced two aspects the project raises, which are not included in the initial research questions: Three types of letters in public spaces have been discovered: letters as letters, things as letters and handmade letters. Finally the Urban Alphabets project raises questions of who is allowed to speak and be visible in public space; a question raised but unanswered.

This chapter utilized the case of Urban Alphabets in order to answer the research questions. A more general account on how this relates to digital mobile media in general will be given in the next chapter. \(^1\)

\(^1\) See especially chapter VII.1.2
Chapter VII: Conclusion

This chapter concludes the work completed as part of this research. It is therefore divided into two main parts: First I recall the research process, identify the most important steps and learning experiences, and try to transfer the case study results to digital mobile media in general. Secondly, I glimpse at the future of the Urban Alphabets project but also the field of research concerned with spatiality of public spaces influenced by New Media in general and digital mobile media in particular.

VII.1 Looking back: How did it go?

VII.1.1 Lessons learned and important steps

The implementation of the research for this Master's thesis lasted more than two years. Thus, many small steps were taken in order to advance the Urban Alphabets project. Personally I have gained much experience and developed numerous skills. Many steps could be mentioned here but to keep it simple only three are selected:

The first and most important step to start the research process was the development of the first version (v1) of the Urban Alphabets application in December 2012. The prototype was not just my first experience with programming for a mobile platform (Open Frameworks for iOS), but it gave rise to the personal realization that a simple mobile application can change the users' relationship to public space for the better.

The second important step was the acceptance into the open call “Participatory City 2014” by the CCN. The network enabled me to conduct workshops in six unique and diverse settings, which certainly enriched the research process and outcomes of this work.

As a third important step, I want to mention a funding: AVEK's Digidemo financing enabled me to concentrate full-time onto the Urban Alphabets project and the accompanying research during 2014.
Without this funding the amount of workshops, the development of the Android application and the constant integration of user-feedback after the workshops would not have been possible.

The Urban Alphabets project allowed me to combine many of my interests and advance my knowledge in multiple areas. The project was my first interaction point with programming for mobile applications: I learned to code in two creative coding frameworks for iOS, OpenFrameworks and C4, and finally gained knowledge of objective-C. I advanced my skills in front-end web programming and learned basic PHP for the database integration from the ground up.

Apart from these technical skills I practiced new methodologies: Surveys, interviews and participant observation - these skills are definitely useful in my future design and research practice. Using reflective methods I tried to refine my execution of the techniques after every workshop in order to achieve the best possible results. Apart from these, rather concrete results, the travels and conduction of workshops in various cultural contexts have given rise to many more learning experiences, some of which I am not able to fully express yet. One of the profoundest experiences of this yearlong work is the feeling of having accomplished a project of unforeseen size and impact.

VII.1.2 Transferability of the study and its results

This work focused on the impacts of one specific mobile application onto user’s experience and behavior in public space. Now I will look at the generalizability of this case study. For that I first consider the framework of digital mobile media:

Digital mobile media is a broad concept including media used on all digital mobile technologies. Digital mobile technologies range from the first digital punch cards developed in the 18th century to control textile looms and traditional portable cellphones to CD-ROMs, external hard drives and USBs. More recently mobile technologies have become equaled with smartphones, but Farman has argued that the terms mobile media and mobile technologies are far older than commonly thought (2012, 1): The chisel can be understood the first mobile tool to produce media. Another fundamental change took place when writing on papyrus was discovered: Media became transportable.

Since mobile digital media is such a broad concept I will concentrate on smartphone applications for my investigation of the transferability of the outcomes of this study.

The generalizability of the results of my case study is facilitated by the methodology, which I described in detail in Chapter II. Since the methods for achieving my results are documented, they can be applied to other smartphone applications or even other activities in public spaces.
The focus of this work was on the influences a digital mobile application has onto public space. The outcomes of the research show that there are numerous ways in which the Urban Alphabets app influences different aspects of public space: For example, by raising users’ awareness for details usually remaining unnoticed the smartphone app alters users’ perceived space and frequently also their acted space. When a designer wants to achieve a similar goal to that of the Urban Alphabets application she can therefore think about the aspects of public space applied in this thesis: perceived, conceived, and acted space. By altering an individual of these facets, public space changes for the user. However, after conducting this case study I conclude modifying several aspects simultaneously strengthens the effect. Thus, users’ are more likely to actively realize the change.

Richard Sennett has shown that the body has already become passive as part of a larger development and new city ideal during the 18th century. The Urban Alphabets workshops have shown that the application holds the potential to re-connect city dwellers and their physical environments. The alienating practices of the *derivé* and *la fête* described by Lefebvre and other authors (Highmore 2002) could offer another approach to this. Additionally I formulated recommendations for developing smartphone applications with the users’ physical surroundings in mind, which are presented below. These recommendations should not be understood as how-to-guidelines but rather as an attempt to generalize the results of this case study. The recommendations concentrate on considerations for the starting phase of such a process, rather than the production stage.

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**Figure 84:**
The first digital mobile medium: Digital punch card
Recommendations for developing smartphone applications with the users’ physical surroundings in mind

Digital mobile applications aiming to change public space for the user positively...

... should provide a pleasurable, enjoyable experience.

To encourage long-term participation but also initial curiosity the activity encouraged should be enjoyable for the user.

... should be easily accessible.

The mobile application should be accessible in the respective stores. Ideally the app would function on all major mobile digital platforms, but this is certainly not always possible.

... should be easy to engage in.

The actions required by the application should be easy enough to be incorporated into everyday life. For example, writing a long text on a smartphone takes a lot of effort and therefore usually raises the barrier for participation unproportionally.

... should aim at a concrete outcome.

In order to encourage a longer-term use of the mobile application, users often need to feel personal value in using the application. In the case of Urban Alphabets the outcome is visible and sharable, which encourages a sense of usefulness for the user.

... should distribute users’ attention between screen time and time with awareness for the physical surroundings.

Instead of 100% attention on the screen, the users’ attention should be divided between screen time and time with awareness for the physical surroundings. The exact distribution of involvement depends on the project and individual users.

... could focus on the uniqueness of a place but stay general enough to be used in different places.

The Urban Alphabets project focuses on a very particular element, letters, which can be found in places worldwide. In contrast, another app could also focus on a single place if aimed at a very small audience. In this case it is important to consider the expense of the development of such an application compared to the range in which it is being employed.

... could encourage new behaviors in public space / change acted space (e.g., encourage to collect trash, help strangers, listen to the environment).

These behaviors should be within the range of the socially accepted, since otherwise the participant’s/user’s experience might turn into a negative sense.

... could focus on details often unnoticed / change perceived space (e.g., sounds, colors, shapes, patterns, materials).

The research on the Urban Alphabets project has shown letters are a good example because they are common knowledge in most
parts of the world, combine different aspects (shapes, colors, materials) and can be employed for something subjectively useful for the user (writing words).

In the development phase of a project aiming to reconnect users with their physical surroundings good practices from the general field of smartphone application development should be utilized. Special attention has to be paid to user testing in early phases of the project. This is to verify the intended effect the smartphone app has onto users. Contrary to Kjeldskof, Skov, Als and Høegh (2004), who argued that user testing of context-aware mobile systems in the field has little added value, I think that an application aiming to sensitize the user for her physical surroundings has to be tested in the field. The results that Kjeldskof, Skov, Als and Høegh present in their paper relate to usability issues, which could be found in both realistic lab settings and the field. However, in case of mobile applications aiming to reconnect users with public spaces identifying usability issues is not the main goal of the user testing. Instead, it aims to validate the effects the application has onto user’s public space perception and behavior.

Lastly, it should be noted that this thesis has to be understood as the first in a series of case studies to examine the influence smartphone applications potentially have onto public spaces. Therefore the recommendations for developing similar applications are preliminary. They can be employed in and will be modified after the next case study. Similarly their applicability to other fields of New Media, such as installations or urban screens, has to be tested in future case studies.

VII.2 Looking forward: What’s next?

VII.2.1 The future of Urban Alphabets

During the last two years the Urban Alphabets project has developed far beyond the initial expectations. When I presented the idea for this thesis in Medialab’s thesis seminar in January 2013 the intention was to use the current prototype at the time (v1) to explore the impact of the application. But even though my personal expectations have been exceeded, the project is continuing and a few paths for the future development should be mentioned here:

Urban Alphabets will be presented in two new cities: Between May and September 2015 an exhibition setup, a workshop and an outdoor projection are planned at the Museum of Moscow, Russia. Secondly, in June 2015 Urban Alphabets will be shown as part of the Musara Mix neighborhood festival in Jerusalem, Israel.

Apart from these confirmed shows and workshops I consider the future...
monetization of the project. Two options have been revealed during the last year:

Educational institutions have been particularly interested in using Urban Alphabets for teaching literacy to young children. In April 2015 I will be discussing this in more detail and investigate if the educational sector is willing to act as a client for the future development of Urban Alphabets. Several Finnish schools have shown their interest to participate in such a process and highlighted that the training of teachers to use Urban Alphabets as an educational tool needs to be part of the collaboration.

Secondly, in-app purchases could be integrated into the next version (v3) of the Urban Alphabets application. The user feedback for v2 has highlighted additional useful features in two categories: features for the smartphone apps, and features for the website. The overall idea is that the elements already present in the current prototype remain free of charge but additional features can be used for a small payment.

**Intended new features of the next prototype (v3)**

The applications itself will be gamified: The user scores points for uploading letters. These points can then be used to download other people's letters and reuse them to write own postcards. These points can also be purchased for money and possibly by watching short, targeted advertisings.

The application should include the following new features:

- Scoring points for uploading letters
- Download of other people's letters (for points or paid)
- Map for uploads (similar to website)
- Newsfeed of close-by uploads, including liking and commenting
- Tagging letters with particular words (to encourage tagging users receive points for labeling uploads)
- Generating alphabets based on tags or locations (for points or paid)
- Optional help texts for the phase of initial unfamiliarity
- Improved cross-integration with social networks
- Uploading letters later if Internet connection is not available during capturing process
- Extended user profiles
- Changed default alphabet language: English

The website will have the following extended features:

- Pertaining user names and profiles from mobile app
- Individualized page for users' own letters, alphabets and postcards
- Download of own letters (for points or paid)
- Interactive alphabets in development (for city alphabets but also users' own alphabets)

Another way to look at the future of Urban Alphabets is to refer to
the commercialization of photographic letter art projects introduced in Chapter III. One promising option is the further development and promotion of Urban Alphabets magnets \(^1\). Currently the magnet boxes consist of 42 magnets of a particular city. The images used for the magnets are taken from the Urban Alphabets database. There has been demand during the exhibition in Liverpool and also several project supporters have received magnet boxes as presents or on demand. Currently the magnets still need to be cut by hand, while the boxes are lasercut in Aalto University’s Fablab. If I can find a way to individually produce these magnets faster than by hand, personal magnet boxes based on a user’s uploads could definitely be a way to promote Urban Alphabets in future.

Several users have asked me to expand the supported mobile operating systems. However, the paper-based survey results show that 95% of the workshop attendees use Android or iOS smartphones \(^2\). Similarly the International Data Corporation and also the information technology research company Gartner Inc. report that the Android and iOS platforms account for 96% of the smartphone sales in the third quarter 2014 (International Data Corporation 2015; Gartner, Inc. 2015). These numbers clearly show that expanding to Windows Phone or BlackBerry OS is not required for a niche project like Urban Alphabets.

VII.2.2 Personal future in an emerging field of research

As it has been stated multiple times, this thesis is to be understood as a the first in a series of case studies to explore the potential influence mobile media can have onto users’ connection to public space. The underlying principle of this work is a positive approach to new technologies and New Media hypothesizing that new practices need to be developed in order to exploit the opportunities of smartphone applications. The example of Urban Alphabets has shown that such an approach can be fruitful and preliminary recommendations for a corresponding

\[\text{Figure 85:} \quad \text{Urban Alphabets magnets box (front: inside, back: outside)}\]
future practice have been developed in this work. However, additional case studies should be conducted in order to explore the field of spatiality of public space altered by the use of mobile digital technologies in more detail.

Geocaching might offer a fruitful practice here. Geocaching is a modern form of a treasure hunt, where the seeker searches for a typically waterproof container with a logbook based on the geolocation coordinates provided by the hider. Geocaching is a popular existing practice\^{28}, which encourages users to explore their physical surroundings in a different way. Geocaches are often well hidden and, for example, puzzles need to be solved in order to find the cache. I consider geocaching worth a closer investigation because, similarly to the goals I have stated for this work, it alienates users from their everyday surroundings and lets them re-experience public spaces. As an existing practice, investigating geocaching as a research subject will not enable to test the recommendations for developing an own application produced as part of this work. However, it could provide deeper insights into the changes taking place in the different aspects of public space and therefore the recommendations could be refined as a new working hypothesis.

Furthermore, to test my recommendations for developing smartphone apps aiming to re-link users’ with public spaces one could directly apply them in a project.

I want to highlight again that the idea of reconnecting people with their physical surroundings inherently shows a distinct view of society. My view of urban life is close to what Martijn de Waal calls the republican city ideal: The city “provides the freedom to choose between divergent ways of life, but at the same time city dwellers share responsibility for the city as a whole.” (2014, 10) Thus, city dwellers are obliged to take part in urban society. I believe in order to maintain urban areas as the places we want to live in, we should encourage the ideals of city life: Cities are the places where we meet strangers, and gather for political, or other occasions. They are the places were society faces itself and insofar it is important that every city dweller takes part in public space making. This is the context in which my effort for a connection between city inhabitants and their physical cities should be understood.

Personally, I want to continue debating this approach, because I remain thinking that there is potential to be realized concerning digital urban media and their role in the making of public spaces. I believe practices for alienating users from their everyday experiences are a good starting point and therefore a deeper investigation of the writings of sociologists like Lefebvre but also the Surrealists will be helpful.

\^{28} There are more than 2.5 million registered geocaches around the world. (Groundspeak, Inc. 2015)
This thesis aimed to investigate how smartphone applications alter public space from the user’s perspective. It hypothesized that digital mobile media can enrich user’s experiences of public space if designed carefully for that purpose.

Theoretically the writing emphasized that the importance of public space is established only through the presence of people. Thus, the users of the smartphone application became the focus of this work and three major aspects of the analysis were established: perceived, acted and conceived space. Though the concepts are not always easily separated, the categorization proved useful for the purpose of this thesis.

A prototype of the smartphone application Urban Alphabets was developed as part of this thesis in order to examine the field of spatiality of public spaces altered by digital mobile media. The prototype was employed in 17 workshops, where participant observation, group interviews and surveys were utilized to gather the material for this research. The analysis of the data has shown that Urban Alphabets clearly influences public space in all its facets: It causes users to pay attention to details (perceived space) and make unexpected efforts to capture the best possible photos (acted space). Even if unknowingly, the users take part in creating a cultural map. Since mapping is an act traditionally limited to professionals, many users take part in it for their first time (conceived space). Several other aspects the Urban Alphabets project implies for the users have been discussed: For example, it has been argued that Urban Alphabets provides an incentive to withdraw from the boring aspects of everyday life. Thus, the application can be understood as a strategy to defamiliarize the everyday. Additionally ideas for the future development of the Urban Alphabets project have been collected as part of the workshops.

In the last chapter I transferred the outcomes of the case study onto smartphone applications in general and developed recommendations for designers of apps aiming to re-connect users with their physical surroundings. I argued that the importance of such an approach lies in city life itself: Public space is the place where society faces itself and employing the republican idea of the city, every city dweller is obliged to take part in its making. Thus, re-connecting users with physical public spaces is one step to realizing this ideal scenario. This work has explored the role smartphone applications can play in this process. Its main contribution is therefore a well-researched case study proofing the potential of digital mobile media for this practice. The recommendations developed in this work should be understood as a new working hypothesis to facilitate the process of developing smartphone apps for re-connecting users with physical public spaces with the users’ context in mind. Such applications can, in the words of a workshop participant, “open your
eyes to the details around us that often go unnoticed” or, as another participant states, these apps enable us “to see and feel the city with another time, a time to think.”
Literature and web references


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Figures

Figure 1 own illustration
Figure 2 own illustration
Figure 3 own illustration
Figure 4 own illustration
Figure 5 own illustration
Figure 6 http://rhettdashwood.com/Google-Maps-Typography (Accessed: February 19, 2015)
Figure 7 http://lisarienermann.tumblr.com/post/74051720684/index-php-project-type-the-sky (Accessed: February 19, 2015)
Figure 10 http://instagram.com/p/ujcwotJyOI/ by newyorknumbers (Accessed: February 19, 2015)
Figure 11 own photograph
Figure 12 own illustration
Figure 13 own illustration, Mar 2011
Figure 14 “Traffic Sign Finland” by Ralf_H., Mar 2008; licensed under Creative Commons Attribution 2.0 (no changes made) https://www.flickr.com/photos/ralf_herrmann/2302551552 (Accessed: March 16, 2015)
Figure 15 own photograph, Mar 2015
Figure 16 own photograph, Aug 2010
Figure 17 screenshot, Mar 2015
Figure 18 Urban Alphabets website; uploaded by: Prixie; 2014-11-04 01:42:59 (GMT); ID: 5945
Figure 19 own illustration
Figure 20 own photograph, Sept 2014
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Figure 35 own illustration
Figure 36 Urban Alphabets website; uploaded by: Montejana; 2014-02-19 18:21:39 (GMT); ID: 1561
Figure 37 own illustration
Figure 38 own illustration
Figure 39 own illustration
Figure 40 own photograph, Sept 2013
Figure 41 own photograph, Jun 2014
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Figure 47 own photograph, Jun 2014
Figure 48 own photograph, May 2013
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Figure 51 own photograph, Feb 2014
Figure 52 own photograph, Nov 2014
Figure 53 own photograph, Nov 2014
Figure 54 own photograph, Nov 2014
Figure 55  own photograph, Nov 2014
Figure 56  Urban Alphabets website; uploaded by: user; 2013-06-16 13:53:37 (GMT); ID: 505
Figure 57  Urban Alphabets website; uploaded by: suse; 2013-08-21 10:35:59 (GMT); ID: 1201
Figure 58  Urban Alphabets website; uploaded by: Rasmus; 2014-02-15 08:37:12 (GMT); ID: 1345
Figure 59  Urban Alphabets website; uploaded by: Minttu; 2014-08-18 08:58:38 (GMT); ID: 3646
Figure 60  Urban Alphabets website; uploaded by: Krisu; 2014-08-18 09:06:59 (GMT); ID: 3690
Figure 61  Urban Alphabets website; uploaded by: Montejana; 2014-02-19 19:02:30 (GMT); ID: 1605
Figure 62  own photograph, Nov 2014
Figure 63  Urban Alphabets website; uploaded by: Zmoyden; 2014-11-14 11:12:48 (GMT); ID: 6373
Figure 64  Urban Alphabets website; uploaded by: Njones; 2014-11-14 11:20:51 (GMT); ID: 6389
Figure 65  Urban Alphabets website; uploaded by: Adam; 2014-11-14 15:12:51 (GMT); ID: 6495
Figure 66  Urban Alphabets website; uploaded by: Fact; 2014-11-29 13:04:11 (GMT); ID: 6788
Figure 67  Urban Alphabets website; uploaded by: Krisu; 2014-08-18 09:02:02 (GMT); ID: 3662
Figure 68  Urban Alphabets website; uploaded by: Zmoyden; 2014-11-14 11:18:36 (GMT); ID: 6383
Figure 69  Urban Alphabets website; uploaded by: Jay; 2014-11-05 21:39:53 (GMT); ID: 6065
Figure 70  own illustration
Figure 71  own illustration
Figure 72  own illustration
Figure 73  own illustration
Figure 74  own illustration
Figure 75  own illustration
Figure 76  own illustration
Figure 77  Urban Alphabets website; uploaded by: Montejana; 2014-02-19 17:26:37 (GMT); ID: 1453
Figure 78  own photograph, May 2013
Figure 79  Urban Alphabets website; uploaded by: Montejana; 2014-02-19 18:55:42 (GMT); ID: 1597
Figure 80  Urban Alphabets website; uploaded by: workshop berlin; 2014-09-11 14:25:51 (GMT); ID: 5047
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Web links

The web links can also be accessed using the following web link:

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Appendix

Attached appendices (overview)

Appendix 1: Collection of questions for the interviews
This collection of questions has been used to guide through the interviews. The interviews took place in a responsive nature, so that not all questions where asked in all interviews.

Appendix 2: Example of a paper-based survey
The paper-based survey was distributed in the end of every workshop. The example stems from the workshop in Sao Paulo. All paper-based surveys can be found in digital appendix 2.

Appendix 3: Example of a follow-up survey logic
The follow-up surveys were sent to the workshop participants who had consented two to four weeks after the workshops. The example stems from the follow-up survey after the workshop in Riga. All other surveys followed the same logic. They sometimes used slightly different wording.

Appendix 4: Example of an analyzed interview transcript
The example stems from the workshop in Madrid. All analyzed interview transcripts can be found in digital appendix 5.

Appendix 5: Correlation analysis of future use expectancy of UA and graphic design (cross-tabulation, chi-square test)
This is one of the examples of the cross-tabulation. All correlation analyses can be found in digital appendix 8.

Appendix 6: Visualizations of correlation analysis
The visualizations of the cross-tabulation is based on the answers from the paper-based surveys, which can be found in digital appendix 3.
6-1: Future use expectancy – Graphic design
6-2: Future use expectancy – Writing systems
6-3: Future use expectancy – Shopping
6-4: Future use expectancy – Cities
6-5: Future use expectancy – Modes of Transportation
6-6: Future use expectancy – Advertising
6-7: Future use expectancy – Smartphone apps
Appendix 1: Collection of questions for the interviews

These questions were used as guidelines during the participant interviews. The interviews were conducted in a flexible manner. Thus, not all questions were raised to each participant or participant group.

Introduction question:
How did you experience the walk?

Interview questions:
What do you think about the Urban Alphabets project?

What would make it more likely that you use the App in future? (e.g., better design, better usability, friends using the app, a surrounding social network,...)

Do you think you paid more attention to letters while using the App than you do in everyday life? If yes, why?

Did using the app affect your behavior? (Did you e.g., not pay attention to a bike passing by and got almost hit? Did you talk to other people more or less than usually?)

Usability questions:
How did you feel about using the app?
Were there any difficulties in using the app?
Did you like the overall look and feel?
Were the interactions logical?

Closing questions
How could you see yourself using the app?/What other ideas do you have how this app could be used?
Appendix 2: Example of a paper-based survey

The paper-based survey was distributed in the end of every workshop. The example stems from the workshop in Sao Paulo. All paper-based surveys can be found in digital appendix 2.

Survey for Urban Alphabets WORKSHOP
in Sao Paulo - November 2014

Where are you from? (country of origin) __________________________
What is your gender? __________________________
How old are you?
- O Under 20 years
- O 21 - 30 years
- O 31 - 40 years
- O 41- 50 years
- O 51- 60 years
- O over 60 years
What is your primary profession/occupation? __________________________
Which version of the App did you use during the workshop?
- O iOS
- O Android
How would you describe yourself in using technology? (please rate)

| Scared something goes wrong | O | O | O | O | O | very comfortable |

Do you own a smartphone yourself?
- O Yes
- O No
If yes, which brand/operating system is it? __________________________
How would you rate your interest in the following topics?

| Topic                                      | no interest | O | O | O | O | very interested |
|--------------------------------------------|-------------|--------------------------------|
| Graphic design/fonts                       |             | O | O | O | O | very interested |
| Writing systems (Latin, Cyrillic, Chinese letters) | no interest | O | O | O | O | very interested |
| Shopping                                   | no interest | O | O | O | O | very interested |
| Cities                                     | no interest | O | O | O | O | very interested |
| Modes of Transportation                    | no interest | O | O | O | O | very interested |
| Advertising                                | no interest | O | O | O | O | very interested |
| Smartphone Apps                            | no interest | O | O | O | O | very interested |

Urban Alphabets is a tool to (please continue the sentence)

You have used the Urban Alphabets prototype today, how likely is it that you would use the app in future? (if you had a smartphone you could download it on)

| I will never use it | O | O | O | O | I will definitely download it |

Is there anything that would make it more likely for you to use the App in future?

After this workshop, do you think that you will look at letters differently during the next weeks?

| Not at all | O | O | O | O | yes, definitely |

I want to participate in the follow-up survey. My email adress is:

Thanks for your participation in the workshop and in this survey!
Appendix 3: Example of a follow-up survey logic

The follow-up surveys were sent to the workshop participants who had consented two to four weeks after the workshops. The example stems from the follow-up survey after the workshop in Riga. All other surveys followed the same logic. They sometimes used slightly different wording.

Did you enjoy the Urban Alphabets Workshop? (semantic differential scale)

Did you download the Urban Alphabets App onto your smartphone?
- Yes.
- No, but I have an iOS or Android phone.
- No, I do not have an smartphone.

How many days did you use the App after the workshop? (number)

After the workshop, do you notice yourself looking at LETTERS differently?
- Yes.
- No.

How did your perception of LETTERS change after the workshop? (text)

After the workshop, do you notice yourself looking at ADVERTISING IN PUBLIC SPACE differently?
- Yes.
- No.

How did your perception of ADVERTISING IN PUBLIC SPACE change after the workshop? (text)

Statistical questions
- Where are you from? (text)
- What is your gender? (text)
- How old are you? (multiple choice)

Text box for feedback on workshop, application, or project.
Appendix 4: Example of an analyzed interview transcript

The example stems from the workshop in Madrid. All analyzed interview transcripts can be found in digital appendix 5.

Discussion after Urban Alphabets Safari through Madrid
(open discussion with 23 participants)

Type: group interview
Place: Medialab Prado, Calle Alameda 15, 28014 Madrid, Spain
Time: 6:30-7:30pm
Length: 56:25 min

Interviewer: Suse Miessner
Interviewees: 21 students from "Arte 10" in Madrid, 2 of their teachers, Myriam Cea from Grafica Libre at Medialab Prado

Abbreviations:
G: one person in whole group (except Suse)
G1-G6: subgroup of people who did the 2h walk together
P1-P11: one participant in the whole group, not referring to the subgroups’ alphabet

Suse: So, thanks for being here! Thanks for being back and still staying! Ahm, This is just the project website. I wanted to now talk about a bit more about the project, because I didn’t want to talk it in the so much because I wanted you to explore using the app and see what it does to your perception. And how you look at letters and if it does anything that I’m actually going to ask you very soon, Ahm, but yeah this is the project website. Ahm. So basically all the geo-tagged letters that are uploaded immediately go here … ahm, … actually the app is only online since Friday. So these are the contributions since Friday. Lets go to what we have in Madrid.

Suse: So it seems everybody stayed quite close…

Suse: But we have a little variation. So here we already have to decide on where we’re actually going....

Suse: There are very popular streets here. I like that.

Suse: So what this other group who was going somewhere further down?

Suse: Ok, that was the quick overview about what we’ve been doing for the past 2 hours. I would actually like every group to maybe talk for a second about … ok… many groups actually…. Ahm… about how you’ve been like working as a group, how you decided to go where, and what kind of letters you take…. And also maybe like tell me if you enjoyed what you were doing.

Suse: Ahm… Lets start with the one that’s uploaded last! So which group was that? Would you like … where were you? What did you do? How did you go about it?

Suse: Ok. Some Spanish, group mumbling

Suse: "T" got that. How many devices did you have as a group? Did you have only one?

Suse: One device for 3 people?
G1: No
Suse: More people, all of you, 6 people? OK. So did everybody actually have the device at some point?
G1: Yes.
Suse: And did you also have to go like you have to take that letter? [Pointing]
Group laughing
G1: Yes.
Suse: How did the group work? Or how did it feel?
Group laughing
Suse: Come on! Don’t be afraid of speaking!
G1: The one who spotted the letter was the one who took the photo.
Suse: Ok.
G1: someone else to speak! [Other group member] I have been taking notes of the letters we have.
Suse: Ok. So you already knew ... [which ones are missing] ok. So you had an iPod or an iPhone, right? So... How could you see with six people on this little screen what’s going on?
Group mumbling
Suse: Ok. I will go to the next group since you don’t want to talk to me.
Group mumbling
Suse: Who is next?
Group mumbling
Suse: Which group is that one?
G1 (other group member): We were thinking about it would be more interesting to... not more but... it would be interesting to take those pictures another way, looking in another way to the landscape.
Suse: Yeah, it is a very different approach from seeing letters that are made as letters and that are obviously supposed to tell us something to letters that are just letters that happen to be there.
G2: when you are out to see them.
Suse: Yeah, exactly
Group laughing – Spanish
Myriam translates: Everything is wrong. The device has no power...
Suse: ok.
Group mumbling – Spanish
Suse: We’re not in any competition, don’t worry.
[going to next alphabet]
Suse: Who is that?
Group mumbling
Suse: Which group is that one?
G2: We... I don’t know... ahh...
Suse: Yeah, it is a very different approach from seeing letters that are made as letters and that are obviously supposed to tell us something to letters that are just letters that happen to be there.
G2: when you are out to see them.
Suse: Yeah, exactly
Group laughing – Spanish
Suse: Even though I'm not sure I agree on your V...
G2: V?
Suse: V. The heart thing... I mean you can see it as a V. It is very hard to see it as a V.
G2: But I noticed an ... ah... version I think...
Suse: Yeah there were many versions of it.
G2: But it is easier when you see the word, the message, not just letter by letter.
Suse: Yeah. This is pretty much the same version. Maybe something changed
[looking through the versions]
Suse: these you want to see?
G2: Well let’s go to the next group anyways. Or this is your group still? The same device, isn’t it?
G: no it's different.
Suse: Ah it's different. I just thought I know the name already. So while this is loading... So
you made two alphabets
G3: No, every time we saved it, it’s there….
Suse: So it is the same as the first one we saw.
G3: We lost our first letter…
Suse: Ok
G3: And then we were saving a lot of times
Suse: It’s kind of nice… here you can kind of see how they actually developed the alphabet. If you go from….

Spanish
Suse: Exactly… but I like it. It’s nice to see which letters came when. And then… well quite often you kind of realize that in the end it’s really hard to fill up these last letters. And it takes much more time to find like the missing “?” and “4” and “7”

Spanish mumbling
Suse: So those are the alphabets that are actually online. Now I have a couple of, well 2 devices here that didn’t send and one that I still need to get here. So this is an alphabet by one other group, that’s you, right?
G4: Well, 6 people with 2 devices. Ok. But this is the take of the… and … then later we… follow… of the route… going to take our own letters.
Suse: So you have a lot of extra-photos, actually on their own devices. Ok. That is good too. Do you also have photos of each other taking photos of each other, taking photos of letters?
G4: Yes, with mobile phone. Taking photos.
Suse: So what is the most interesting letter for you in this one?
G4: “O”
Suse: The O, what is that?
G4: the sun, yeah, I like that.
Suse: It’s kind of nice that you also can really see a couple of… the D for example everyone recognizes as the D, the Disney D.
Hm. Then we have one more device here, where we actually had to replace the 3, I’m sorry for that…

Spanish– internal discussion about device transfer
Suse: Which group was that again? [An alphabet that was uploaded via wlan and discussed already]
Suse: You, yeah?
Suse: So… just a moment, we have one more alphabet here.
[Time to transfer last alphabet]
Suse: So, this is the last alphabet… Hello group. Where were you? Where did you go?
G5: says something that’s not understandable on recording
Suse: How many people where in your group?
G5: 4
Suse: 4, with one device?
G5: Yes
Suse: So, did everybody use the app at some point?
G5: Ahm. No… only one.
Ok. What did the other 3 people do? If only one used the app…
Something that’s not understandable on recording
Another group: Ours is missing…
Suse: Did you upload an alphabet? Or only the letters?
[Spanish in first row, while I talk to some group in the back.]
Suse: Could you do it now, go to “save” in the alphabet menu

Suse: So, what is your favorite letter?
G6: “8”
Suse: What is the “8”? What is it actually?
G6: The number.
Suse: Yeah I see that but what is the context of that letter?
G6: It’s her ring.
Suse: I like the “Ñ”, what I call Spanish N. And is the M Marimekko? What is the “M”?
Silence
Suse: It totally looks like the Finnish Marimekko “M”. Ok, you don’t know Marimekko. It’s fine. (Laughing)
Group mumbling
Suse: Is this first one…
G3: This is my alphabet.
Suse: This is, this is actually yours that we were just looking for. It takes like a little time actually.
G3: The first?
Suse: The first one? That’s yours. So: what’s yours favorite letter?
Suse: “T”… coming there.
G3: You found the Plus still [I was with that group, he was missing only that in the end].
Suse: Is this first one…
Suse: We’re just wait for a second for your alphabet. It’s probably going to show up very soon.
But meanwhile we could through and think of if there is anything that all these alphabets have in common or is there any… do you think there is something like “all Madrid alphabets look the same”? anyone?
Silence
Suse: It goes to here… All these are Madrid alphabets. This is something else probably. Do you think, colors for example that are… very much Madrid colors. Can you think anything like that?
G: A lot of blue, lot of red.
Suse: Lot of blue?
G: Yes. No? Maybe?
Suse: Yes? No? Maybe?
Silence, group laughing
Suse: So one more thing we can also look at. I don’t know if anyone wrote anything? Yes.
Laughing, Spanish…
Suse: So yeah it’s basically the first like… Can some translate for me, please?
G: The first one is like … I need to pee.
Suse: Great. What exactly?
Suse: What? Scroll down?
Suse: I wanted to show the other stuff later… but basically these two are alphabets made in Las Vegas this summer. It is a very different world and then these two are German. They are from my hometown and ah, it’s also very specific because it’s a town that has a lot of preserved buildings and urban structure is preserved also so actually it is only allowed to have certain colors in the façade and in the advertising and in everything. So everything is very calmed down it is a very … ahm… it is a different… I can also show you the alphabet that goes with those.
So this is the Las Vegas one, which might also take a while to load. No it doesn’t. So Las Vegas is very, very crazy.
And I realized a lot of these letters have gold or yellow. It’s very like a status symbol. It has to be gold and glamour and ….

Group mumbling in Spanish
Suse: And this is my hometown ….
Group mumbling in Spanish
Suse: But there are also… I think Germans might recognize some of these letters also. The “T” is the “Deutsche Telecom”, T-Mobile, “T” that at least in Germany everybody knows that… Also in the US everybody knows that “T”. But in that case it is not the usual pink because they are not allowed to do it in usual pink, so it is actually some gold-color and then it’s like reflecting that is why it looks so dark.
But anyways before I talk more about results that I have already been doing before… ahm… I wanted to ask you whether the think while you were using the app or while you were walking now, did you think that you acted differently from what you would do in everyday life? Or was it what you would do more often? All the time? When you are with a group? When you are alone? [While talking there was a lot of nodding in the audience]
Suse: Just some response…
No, no you [pointing at someone in second row], because you are doing a lot of this [nodding, shaking the head].
Group laughing
P1: Normally I wouldn’t do it as I did today because you focus on the letters and you are searching… searching for types… it’s another way of seeing the city.
Suse: But you have experienced that before right? Because you have been the letter safari…
Myriam from side: No.
P2: One person can also experience that… at the same we do… sense for all those letters in the city, I think.…
Suse: So actually most people would agree that it changes your perception of space… or of your surroundings? [Nodding]
And… do you think it’s only because you have been in a group of like… well most people were like groups of 3-4 people using the app. Or would it also happen the same way with one person just walking around? Or anybody had their own app?
P2: Ok?
P3: Can you also done this project that you cannot see… you are alone. If someone then help you with…. It’s better in a group.
P4: I think it happened more variety more … different from … because sometimes you like some kind of theme but then your partner has a different view… both something you normally like but then if another… I mean it makes it more dynamic.
Suse: Yes it makes it more social for sure. Ahm. But I’m thinking is like… well… from my perspective, it’s an App. So it’s more or less made for one person to use it. And the question is would you do it in everyday life? I mean not taking 42 letters in a row but every day on the way to work… maybe when you find this one letter that you like and like… make up your own alphabet over time so it’s not like you have to do 42 images at a time, cause it is crazy…
P5: I think I would use it if I want to send a postcard with a specific alphabet or word and want to send it …. I may use the special letters I have seen.
Puse: Yeah.
P5: but not in everyday life like doing alphabets.
Puse: yeah. Ok
P5: I will use the link to the postcard thing to share one…

Appendix
Suse: Yeah, one certain word or... and ahm how about this doing it in a city you know versus thinking about being a tourist in a city? And walking around with the app while you are a tourist? Would that be like a good idea or bad?

P6: Good.

P7: What was the question?

Suse: The question was basically if you are at home in a city, so now you have been doing it in Madrid and you all know Madrid but versus you would travel to London... next week. Would you like to use the app in London? Or would it distract you from actually seeing London?

P7: It's a good tool to...

Suse: But it shows you the city in a certain way also... you don't probably pay as much attention to the tourist attractions of London. And ahm...

P7: Hm.

Suse: But you pay the attention to the letters.

P8: something I cannot understand....

Group mumbling, Spanish

P8: I think I can translate, that it is good, the app, to discover a part of the city that is kind of beautiful and... yeah, it's another point of view.

Suse: Ok, thanks! Thanks for answers. From now on I just want to tell a little more about the project and what's the important part for me. Because the important part for me is not so much ahm... well it is an important part that we capture alphabets and we capture letters and we capture the visual identity of a city in some way, but in a very certain way because it is focused on letters on the personal perspective of which letters do you capture and which letters you don't. So I think that that is a very... we can also have a quick comparison of letters that have been uploaded... [Here I'm scrolling through all uploaded letters at that time, sorted alphabetically] And how one letter can actually look different.

Group mumbling

Suse: So if you feel like there is something you want to point out... just tell me to stop!

Pause, group mumbling, Spanish

Suse: I like the “E” by the way, that's awesome!

Pause, Spanish

Suse: And I think here's quite interesting also to see how that Las Vegas “I” up there in the center could well be J or the other way around. So with those letters it's very depending on the context that they are in.

Pause, group laughing, Spanish

Suse: And here actually someone, I can show you the full alphabet of those. Someone decided to take those things and the first letter of this thing that is on the image is actually making up the alphabet. I can show you the alphabet that they made. If you don't know, you have no idea what's going on here. And actually you have to speak the language. So this one is made in German. And maybe you also have to know the people... So I can understand but many people I think cannot.

Pause

Suse: So yeah, that's why this onion is last there. In German its “Zwiebel”. That's why is “Z”. So let me show you the alphabet that they made. It's crazy... So this is... yeah, it's very dependent on German language and that you know the people because so the “B” up there is “Blume” in German, then we have Couch, I'm not sure what “C” is actually, maybe it's like “Espresso maker” or something. Then “F” is the name of the guy, Frank. So it is very based on that... And then they were sending... It's a family friend of my parents and they were sending this message to my parents last Saturday and then my parents were totally confused. Like what is going on here?

Group laughing

Suse: They had no idea 'cause if you read this it just doesn't make any sense. But still it's nice. Once you understand the idea of their alphabet you can read... in German... if you...

Suse: So anyways I was starting to tell about what the project is for me. I can meanwhile show this [the project video] without sound. So that is actually a video of the first prototype of the app. The current one is the second. Ahm, the pictures come from Helsinki.
Yeah, I moved to Helsinki in 2010 and I started to see how these different areas look different and how the city center in Helsinki looks very different from the area where I lived and then I started to walk around with my big, big camera like this [DSLR], and I started to take photos of letters. And then at home I did like all the photo shopping and cutting out everything and… I got to 2 alphabets and then I was just like… no this is too much work. Ahm, so then I did this App in a course in Helsinki that well you know the process and this is the first prototype so it looks crappier than that second. But what I realized when I was doing it that it changed very much of how I looked at the spaces and how I looked at Helsinki because I was going around and I was searching for nice letters I could put in my alphabets. And I wasn’t looking so much any more… I wasn’t looking down any more… I wasn’t looking at my smartphone only down and … that was one thing I realized. I was more open to communication with other people while I was using the app and maybe it also happened to you today that people around were asking like “What the hell are you doing here?”, “What is this?”, “What are you taking photos of letters?” And… So actually for me the project is mostly how using this app changes your perception of space. That’s why I was trying to ask you a little in that direction. Ahm, and then I step by step I realized how I also create this archive of letters and how… nice it is to actually kind of see how it’s different in different cities and with these different language version it’s also nice to see that we’re actually all using the same alphabet. And that we are … yeah that all these supposedly European, Latin alphabets are different. Ahm, I just learned that actually the Spanish alphabet has the ü also, which Wikipedia doesn’t know, that’s why it doesn’t have it in the app.

END OF TRANSCRIPTION
Talk about the past workshops in St. Petersburg, Russia and Munich, Germany.
Invite for Friday evening event.

TRANSCRIPTION BEGIN

P9: We have some doubts about usability.
Suse: Ok, tell me!
P10: We lost at some point, we have some letters. Maybe we forgot some letter like we have take another photograph of the same letter but we see have the letter… so…
Suse: What do you do is the question, right?
P10: Yeah.
Suse: Well, basically at the moment you have to replace the letter there is no other way. If you are connected it should at least show up that letter you are replacing in here… So it will be there, it’s not lost forever. Ahm, but yeah I know that this … or that some people would like to have different versions of the same letter. It’s technically hard, that’s why it’s not in there.
But yeah, if there are other things that you think don’t work that well, I’d be very keen to hear. This is work in progress so… I think like on the iPads there were some issues with the layout in the beginning…
P11: It would be great if you could go to the alphabet to see what do you need.
Suse: You kind of have to develop the habit that only when you see a letter that you find interesting that then you press the photo button. But I know it’s also one thing that could be changed. Just to get it done for this week it’s like that now, but I know how it can be different, so that when you’ve already opened the camera that you can go back to the alphabet. So that that would be a start. That was also a technical issue for a long time that was just solved last week.

END OF TRANSCRIPTION
Myriam gives explanation about why the app is only on iOS and not on Android at the moment.
usability
other important
changes in space: perception, action,...
user types
urban postcards
other important
specificity of a city?

Notes:
- Hard to get Spanish people talking in English in front of a group
- Put in a lot of effort getting beautiful photos of the letters

Learnings for the next interviews:
- Group interviews can be hard:
  Group discussion after workshop can be short and do more individual interviewing.
  (already learned after last interview!!!)
- Get more info about the group
- Get a translator wherever possible
acted space: pointing

different focus other way of seeing the city

changes perception of space: yes

group vs individual experience: -both can experience it -group preferred (more variety, more dynamic)

change in perception: seeing letters that are not meant as letters

different way to see the city

versions of that alphabet: timeline (App or Web?)

diff versions of same letter

alphabet as RootViewController

touristy use: yes

words instead of alphabets...

use it for specific task/goal > writing postcard

motivation for postcard: write + send

specificity of a city: maybe not, depends on how u capture the letters, which ones are not captured?

app as tool

interesting to think about taking letters away from context > transformation?
Appendix 5: Correlation analysis of future use expectancy of UA and graphic design (cross-tabulation, chi-square test)

All cross-tabulations and chi-square tests can be found in digital appendix 8.

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Chi-Square Tests

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a. 21 cells (84.0%) have expected count less than 5. The minimum expected count is 1.
Appendix 6: Visualizations of the correlation analyses

6-1 Future use expectancy of UA - Graphic design

Variance of Interests (A) - (B)

higher interest in graphic design
higher interest in future use of Urban Alphabets
6.2 Future use expectancy of UA - Writing systems

Variance of Interests (A) - (B)
6-3 Future use expectancy of UA - Shopping

Future use expectancy of UA (A)

Future use expectancy of UA (B)

Variance of Interests (A) - (B)

6% 3% 9% 16% 24% 20% 16% 6%

-4 -3 -2 -1 0 +1 +2 +3 +4

higher interest in shopping
higher interest in future use of Urban Alphabets
### 6-4 Future use expectancy of UA - Cities

#### Variance of Interests (A) - (B)

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#### Diagram:

- **Cities (B)**
  - (no interest) 1
  - Very interested 5
- **Future use expectancy of UA (A)**
  - (no interest) 1
  - Very interested 5

The diagram illustrates the variance of interests between Urban Alphabets (UA) and Cities. The count and percentage for each variance are provided above.
6-5 Future use expectancy of UA - Modes of transportation

Variance of Interests (A) - (B)

-4 -3 -2 -1 0 +1 +2 +3 +4

higher interest in
modes of transportation
higher interest in
future use of Urban Alphabets
Future use expectancy of UA - Advertising

Variance of Interests (A) - (B)

(very interested) -5
(higher interest in future use of Urban Alphabets)

(no interest) -5
(higher interest in advertising)

19% 22% 33% 16% 6% 11% 23% 15% 13% 2% 1% 3%
6-7 Future use expectancy of UA - Smartphone apps

Variance of Interests (A) - (B)

higher interest in
future use of Urban Alphabets

higher interest in
smartphone apps
Overview of the digital appendices

The digital appendices are a crucial part of this work. The material the digital appendices include can either be accessed via the attached USB or using the following web link: http://www.ualphabets.com/thesis/digitalAppendix[NUMBER].php

Digital appendix 1: Video of the urban screen in Helsinki
This video does not contain a full loop through the urban screen in Helsinki but it gives a good understanding what all urban screens looked like.

Digital appendix 2: Paper-based surveys
This digital appendix includes copies of all paper-based surveys. An example can also be found in appendix 2 of this printed work.
2-1: Munich 2-2: Madrid 2-3: Riga
2-4: Berlin 2-5: Sao Paulo 2-6: Liverpool

Digital appendix 3: Results from the paper-based surveys
This digital appendix shows all paper-based survey results of the individual workshops as well as of all cities.
3-1: Madrid 3-2: Riga 3-3: Sao Paulo
3-4: Liverpool 3-5: All cities

Digital appendix 4: Results from the follow-up survey
This digital appendix shows the results of the follow-up surveys.
4-1: Madrid 4-2: All cities

Digital appendix 5: Analyzed interview transcripts
This digital appendix includes the analyzed transcripts of all interviews. An example can also be found in Appendix 4 of this printed work.
5-1: Munich 5-2: Madrid 5-3: Riga
5-4: Sao Paulo 2 5-5: Sao Paulo 3 5-6: Liverpool 1
5-7: Liverpool 2 5-8: Liverpool 3
Digital appendix 6: Participant observation video

The participant observation scenes of each city are composed into a single video. In the following table the number (e.g., 0:04) shows the time when the scene begins in the respective video. The table also gives an overview of contents of the individual scenes.

6-1: Munich
scene 01 0:04 Looking down
scene 02 0:30 Wandering around, looking closely, outsider’s reaction
scene 03 1:32 Looking down, stopping

6-2: Madrid
scene 01 0:04 Effort for best photos, pointing
scene 02 0:41 Pointing, effort for best photo, outsider’s reaction
scene 03 0:59 Taking photos close to each other
scene 04 1:15 Gathering to see current alphabet
scene 05 1:25 Handmade letters
scene 06 1:46 Talking to shop keeper, outsider’s reaction
scene 07 2:33 Outsider’s reaction

6-3: Riga
scene 01 0:04 Looking over each other’s shoulder, initial unfamiliarity
scene 02 0:23 Looking over each other’s shoulder, taking time
scene 03 1:13 Taking time, helping each other
scene 04 1:30 Looking at device together

6-4: Helsinki
scene 01 0:04 Helping each other, pointing
scene 02 0:36 Working together, looking at one screen together
scene 03 0:46 Pointing, speeding up
scene 04 1:10 Insisting on specific letter
scene 05 1:32 Effort for best possible photo (shoulder)
scene 06 2:07 Walking off usual walkway
scene 07 2:20 Pointing, looking around
scene 08 2:41 Running, pointing (multiple times)
scene 09 3:28 Taking photo together

6-5: Berlin
scene 01 0:04 Spending time in unusual locations
scene 02 0:37 Looking at details, looking down
scene 03 0:59 Spending time in unusual locations, looking at details
scene 04 1:39 Outsider’s reaction / talking to outsider
6-6: Sao Paulo
scene 01  0:04  Attention to details, crowd movement
scene 02  0:18  Discussion about the alphabet
scene 03  0:29  Outsider’s reaction
scene 04  1:03  Things as letters
scene 05  1:15  Time wondering around, pointing

6-7: Liverpool
scene 01  0:04  Details usually unnoticed
scene 02  0:29  Looking at smartphone together
scene 03  0:48  Pointing, Discussion among group, things as letters
scene 04  1:06  Handmade letters, looking at device together, switching attention
scene 05  1:52  Pointing, looking at screen together
scene 06  2:18  Details often unnoticed
scene 07  2:31  Approaching car only being noticed by video recorder
scene 08  2:42  Unusual locations
scene 09  2:58  Handmade letter on condensed glass
scene 10  3:48  Pointing

Digital appendix 7: Analysis of the individual workshops
This digital appendix includes the written analyses of individual workshops written as a memory aid and basis for analysis of changes in public space in this work.
1- Munich  2- Madrid  3- Riga  4- Helsinki

Digital appendix 8: Correlation analysis of the cross-tabulation
Cross-tabulations and chi-square tests
8-1: Future use expectancy – Graphic design
8-2: Future use expectancy – Writing Systems
8-3: Future use expectancy – Shopping
8-4: Future use expectancy – Cities
8-5: Future use expectancy – Modes of Transportation
8-6: Future use expectancy – Advertising
8-7: Future use expectancy – Smartphone apps

Digital appendix 9: Use-scenarios (Feb 2013)
9-1: Lisa - the first-time user
9-2: Tapio - the super-user