

Text for the thesis presentation on September 25th, 2012
(original presentation was held in German)

Interacting in Public Space

How New Media influence our behavior in Public Space

This work might not be what one expects from a master thesis in architecture. However, architecture is not just about building houses, not just about the physical settings of our environment. We need to rethink architecture as something that involves the spaces between buildings and that recognizes that inhabitants enter the spaces we design.

I do not want to turn into theory of the profession of architects here but I want to present my master thesis:

Interacting in Public Space – How New Media influence our behavior in Public Space aims to examine how New Media change users' behavior in public space and therefore transform those spaces. In the course of this presentation I will define my understanding of New Media and of public space in more detail but before I want to read two quotes of Manuel Castells, who is the most influential theorist in the emerging field of changes in public space caused by new technologies or New Media, and whose thoughts influenced this work to a large extent:

"I content that around the end of the second millennium of the common era a number of major social, technological, economic, and cultural transformations came together to give rise to a new form of society." (Castells 2010, p.XVII)

"Space is the expression of society. Since our societies are undergoing structural transformation, it is a reasonable hypothesis to suggest that new spatial forms and processes are currently emerging." (Castells 2010, pp.440–441)

These two statements show briefly the field of research within which this thesis is located: technology, media, society and space. I want to point out that this thesis has to be understood as a first attempt. There is not much research on the emerging practices in public spaces caused by New Media done yet. I found a number of articles concerned with particular forms of New Media and their specific influences on specific public spaces but in my work I aim to give an overview about this new field of research.

Therefore my thesis is divided into two main sections: The first part aims to establish a theoretical framework of the relationship of the four areas of my interest. The second part aims to analyze different categories of New Media to examine how they influence public spaces.

Part I

Manuel Castells believes that

“all major trends of change constituting our new, confusing world are related, and that we can make sense of their interrelationship.” (Castells 2010, p.4)

Due to the time limit I can only scratch the surface of these interrelationships. I will only shortly hint towards changes that show the interrelationship of the different categories:

Technology

The most influential change in technology already took place in the 18th century when analog data was transformed into digital code. However, this was the basis for the ongoing shift that started with the development of the personal computer by Apple in 1976, and more recent mobile digital technologies. These new tools obviously influence the nature of media that are created, distributed and consumed essentially.

Often media and technology are equated. I follow Rückriem, Ang-Stein and Erdmann in their concept so that when I refer to technology I refer to the tool and its material quality but when I refer to media I highlight the epistemic quality of the objects and their cultural influence.

Media

Within this work I aim to describe the cultural, subtle influences New Media have on public spaces. Lev Manovitch has argued that when the computer is used for creation, distribution, consumption and storage of media it changes the inherent nature of media itself. This is what I call New Media. In my concept of New Media I follow Lev Manovitch's definition, which highlights the algorithmic nature and the cultural impact of these New Media. Manovitch introduces 5 features that define New Media:

Digitization enables the *numerical representation* of New Media as digital code. A New Media object consists of a discrete set of small-scale samples (e.g., pixels). These two principles “allow for the automation of many operations involved in media creation, manipulation and access.” (Manovitch 2001, p.32) The creative process is now at least partly free from human intentionality. This also allows a New Media object to exist in many different versions without changing the essential nature of the New Media object. The last and most important feature of New Media is called *cultural*

transcoding. It refers to the fact that the computerization of media introduces the computer paradigm of structural organization of data: Whereas humans make sense through an object on an image, for the computer an image consists of a discrete set of pixels with a concrete color value. This has a huge impact on the way we create, distribute, consume and store digital data and therefore influences our everyday culture to a large extent. In summary, the concept of New Media focuses on the cultural and on computing.

Society

In my work I next focused on very few structural changes connected to new technologies onto society. Nowadays society is based on information as the productive force. Thus the new technologies also introduced new inequality in our society: Either a citizen can access the new network or not. Thus new forms of power, freedom and oppression evolve.

This shows that there are direct relations between 3 areas of my interest: technology, media and society. However, there is also a direct relation to space: Especially mobile media and mobile technologies change the way we interact and coordinate meeting up with others in public spaces. And since Castells states that

"Space is the expression of society." (Castells 2010, pp.440–441)

we see that others agree with this notion.

Public space

This statement, together with those two images, show that the relationship is at least four-sided. Public space is the second main concept of my work so that it is essential to examine my understanding of public space here. In the written work I started my attempt to define public space by introducing different space concepts before I continued to examine the essential nature of the public sphere. Within this presentation I only want to mention the six aspects that in my understanding broadly define public space:

Public space is the space where inhabitants encounter strangers, where they meet their friends. The second aspect of my public space definition is closely related to this: When different people from different background come together, it highlights that in public space *different aspects and influences* coexist. Public space is not made by one person at one moment in time, in contrast, it is a conglomeration of different people, different backgrounds and so on. However, in my general space concept I highlighted that the perception of space is inherently *individual*, that two people never experience the same space equally. This individual perception brings about a constant *change* of

public space: Even one person does never experience a public space in the exact same way two times but at the same time public space is the space where well-defined things “are preserved against the ruin of time.” (Arendt 2002, p.71; own translation) Since so many different aspects come together in public space, there is always the potential for something *unexpected* to happen. Only the unexpected can create something new and the space can vibrate out of itself. As a last aspect I include *urbanity* into my broad definition of public space. The urban is a style of behavior marked by tolerance, which is produced through the *heterogeneity*, *anonymity* and *creativity* of life in a city. For the purpose of my work it is important to understand that public space is at the same time the material condition of society and a practice that expresses society. In this sense the human body has a double existence in space creation: it is the medium of perception as well as part of the perceived environment (see Löw 2007, p.82). This is what makes every research on public space so complicated: it is impossible to stand outside of the process of space creation; one is always actively involved in the making of public space while perceiving it.

Castells’ theory of space in the Network Society

In the next chapter of my written work I introduce Manuel Castells theory of space in the Network society. He is the only theorist who from the mentioned changes consequently follows a change in theory of space. However, his theory remains at an abstract level, which is the reason why it cannot be used to analyze concrete public spaces.

This is what I aim at in the second part of my work.

Part II

Here I introduce four categories of New Media and aim to analyze how they transform people’s behavior in public spaces. Those categories are based on my personal experience as well as literature review. As already said, in the current research I could not find such a categorization yet, which is the main reason why I established it myself. When introducing the categories I start from *surveillance*, a topic that is discussed in research a lot already. I then continue with *media facades*, an issue that is nowadays common and acknowledged all over the world. In the end I introduce two more recent and maybe less obvious categories: *mobile media* and *interactive New Media art installations*.

Here I will now give an overview about the categories and afterwards I will explain the main changes that took place in different categories.

Surveillance

Surveillance is a known issue that has been discussed in research a lot. However, as long as the surveillance system does not analyze the video content, so-called computer controlled analysis and identification, surveillance cannot be called New Media. In my written work I shortly introduced the changes in public space that are brought about by surveillance systems but in the end I stated that those changes do not vary depending on the nature of the system because the inhabitant of the space has no chance to see what kind of surveillance system is in use.

Media facades

Media facades and urban screens are a common issue in urban centers all over the world. In my thesis I establish three subcategories of media facades:

The first is *non-interactive "traditional" media facades* that show traditional TV ads on huge screens. As I focus on interactive projects in my work, those are not in the area of my main interest.

Secondly I am interested in the concept of *personalized advertising* through media facades, meaning advertising targeted to the current audience in a particular space. Although this concept is still in its developmental stage, from its presentation in different papers I expect it to become a big buzz in future.

The last subcategory is *interactive artistic media facade projects*. Here again I could not find any research that would serve my interest, which is the reason why I decided to analyze one artistic media facade project myself.

The project I chose is "Stereoscope" by Project Blinkenlights, which took place at the City Hall of Toronto in October 2008. The project shown on a resolution of 960 pixels, that were the 960 windows of the building, displayed animations and live VJing. For the people who don't know VJing: it stands for Visual DJing, which is a realtime video performance practice. Everyone could contribute animations via an Internet platform. A special markup language was made up for this project. Its documentation could be found on the Internet so that more advanced coders could generate more complex animations. Using their mobile phones the audience could also play games on the huge display. Additionally there was a 3D iPhone application that allowed seeing a live feed of the façade and change the camera position.

Mobile media

The next category is mobile media. I define mobile media as digital media taking advantage of the transportability and variability of mobile devices. I believe that this is an emerging field of research as well: Mobile media do essentially change the way we act and interact with others in public spaces.

Within this category of mobile media for the purposes of my analysis I also established two subcategories. Whereas I did not have the time to deeply introduce different aspects of mobile gaming, I introduced location-aware applications in more detail. As location-aware applications I define applications used on portable devices, which make particular use of GPS or other technologies of location definition. Those could for instance be map applications that instantly detect our location.. In my written work I introduced another example: Foursquare is an application that consists of a mobile social network, enables meeting up with friends in real time and encourages to discover new locations all the time.

Interactive New Media art installations

New Media art installations are the category I was most curious about when I started this thesis. Although for me it is the category with most potential, it is the category that is really IGNORED in research up to now. This is the reason why here again I needed to analyze one project from its video documentation.

I decided for the Piano Stairs Project that took place in at the Odenplan subway station in Stockholm in 2009. For this project one of the stairs connecting Odenplan square with the subway tracks was transformed into a piano. One step represented one key of the piano. When treading onto a step, one sound of the piano is being played.

-pause to watch video sequence-

Now I have given you an overview about what those categories stand for. The next step is to examine my findings on the changes in public space caused by New Media.

The most important change in the course of this work is brought about by all New Media: It is a transformation in people's behavior or what I call *acted space*. The term acted space highlights people's active role in space creation. Public space is made through the practices of people.

I could examine this change within all of the suggested categories: *Surveillance* relocates crime to areas that are not under observation; the *Stereoscope installation* made people stand still and visit the square more often than usually; *mobile media* in general make every time in public space used, "wasted time" does not exist any more; *Foursquare* results in people focusing on the mobile network rather than physically present people; *mobile gaming* uses public space as its playground; and finally the *Piano Stairs installation* makes commuters break their daily routine.

The second important change is in how inhabitants experience a public space emotionally. This change in *emotional space* appears closely related to the transformation in acted space. In general one could say that New Media personalize public space: *mobile media* personalize public space most

obviously; but also the *interactive art projects* have the same effect on a different level: every viewer of an interactive installation, be it an installation in public space or a media facade, gets her own view of the project, thus people feel that they take part in the making of public space actively. At the same time the example of *surveillance* has shown that the effects New Media have on public spaces are not always positive: different studies have shown that surveillance does increase uncertainty, since the inhabitant of a space does not know if she is under surveillance and if there potential help in a situation of violence or not.

Altogether it has to be said also that there are transformations in other aspects of my public space conception:

For example the Piano Stairs installation has shown that *physical space* is transformed as the steps are overlaid with the wooden piano keys. But this change does not happen very often, at least in the projects that I analyzed.

The example of Foursquare has shown that what Lefebvre called “representations of space” or *conceived space* is transformed quite much. The creation of maps including user-generated content does not only enlarge the number participants taking part in representing space, but it also calls for new forms of maps and representations because the people taking part in this new form of representation are not from professions traditionally concerned with designing and representing public spaces, such as architects or urban planners. Therefore the new cultural maps need to be understood a much broader audience.

Conclusion

“Digital technology is not the enemy of public space but its partner.” (Rauterberg 2001, p.10; own translation)

This positive attitude towards new digital technologies as well as New Media is one of the very basic assumptions of my work. The basic hypothesis that I followed from this was that New Media can influence public space positively. Throughout my thesis I found different points to support this theory: The results I just presented confirm that New Media influence people’s behavior in public space and thereby transform those. Most of the transformation I presented in this thesis were positive which is because most of the material available is on successful case studies and I chose successful projects for my video analyses on purpose.

The results of my work also show that changes in the particular aspects of the space concept cannot be separated from each other but they do influence each other. However, in the end I cannot say how New Media in general or one particular form of New Media in particular changes people’s

behavior in public space; but this thesis has proofed that there is a direct connection between New Media and how people act and interact in public space. How exactly people's behavior changes cannot be generalized since the forms of New Media are too different.

As stated in the beginning, this work is a first attempt to give an overview of New Media's influences on public space. Saying this of course means, that there is a lot of research to be done in future:

On the theoretical side I mean a deeper examination especially on the interrelation between different aspects of my space conception.

Analytically, all the four categories I established should be analyzed in more detail. Currently, even in the written part I am only scratching the surface. I do myself believe that those categories will need to be adapted in future and this is not just because new practices, new technologies and new forms of New Media will evolve, but also because of new insights will be gained on the basis of current knowledge when researching in more detail.

However, the last aspect I mention is the one I like most and I want to take as the next step: I will develop an own interactive New Media installation in a public space and analyze its influences in detail.