EVOLVING SPACES ALONG NETWORK TECHNOLOGIES

Sandrine von Klot, Ebru Kurbak, Isabella Hinterleitner & Mathias Mitteregger

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The research project Public Space 2.0 – Evolving Spaces Along Network Technologies, focuses on the mutual relationship of physical urban spaces and virtual communities established by social networks. Our main interest is directed towards experience-based, lived-through knowledge, gained as today's citizen/users continuously take action in multiple public domains, both physical and electronic. As an interdisciplinary research group, we proceed from theoretical models that depict (public) spaces as a multiplicity of social spheres to overcome well-worn dichotomies: e.g. public versus private. In what follows, we will argue why we are using a methodology deriving from arts based research. We will exemplify our stance towards the field of research, by introducing a project driven methodology to augment design research in the realm of public spaces. We will start of by presenting and then critically reflecting theories of public spaces. Then we will summarize methodological commitments we admitted to and give reasons for each. Finally, we will talk about a series of workshops the group has conducted and will conduct to foster and elaborate our arguments and methodology.

Considering Space

Three well-known models of public space form the basis for many premises of the present work. The models considered share a similar diagram, that is, public spaces as a webbed interlocked multiplicity of possible spaces, a diagram, however, that has been deciphered essentially different by three different authors. We start off with these models, the models by Foucault, Deleuze and Habermas, because All appear to share the dilemma concerning the urge to unbundle the traditional concept of unified, bourgeois public space. Furthermore, their shared structure resembles what researchers claim the structure of the Internet is like.

(1)

The model of Heterotopia proposed by Michel Foucault suggests multiple spaces, as they constitute an endless unstructured puzzle of equal aims. "Bachelard's monumental work and the descriptions of phenomenologists have taught us that we do not live in a homogeneous and empty space, but on the contrary in a space thoroughly imbued with quantities and perhaps thoroughly fantasmatic as well."
[1] Foucault talks of anti-public spaces, appearing forbidden, privileged or holy; marking spaces of transition, crisis or deviation. Assuming, that the exterior is no more constituting for the inside, we have to understand Foucault's anti-Publics as folds of the exterior, while basic categories of inside and outside remain undefined. Foucault maintains that we can recognize the aim for the Public to emancipate itself from the universalism of the bourgeois public.

(2)

Another model promoted by Gilles Deleuze envisions subtly differentiated urban public spheres: the literary public sphere no longer differs from the partly political, subcultural, or artistic public sphere. He rejects a possible outside or center, but rather envisions a de-centered space system, naturalized, non-political, occupied with natural metaphors, almost like a substance rather than a spatial category.
"The State no longer has its disposal the political, institutional, or even financial means which would enable it to fend off the social repercussions of the machine; it is doubtful whether it can eternally rely on the old forms like the police, armies, bureaucracies, even trade union bureaucracies, collective installations, schools, families." [2]

(3)

Finally, the Habermasian model renders the public as some kind of super-brain, a space of rational, informal and normative deliberation. However, the plurality of partial public spheres is absorbed by a positive principle of communicative reason, as assumes that public affairs by nature lead to democratic processes and the increase of collective reflection. [3] Habermas therefore relates to one great Public in which citizens may exchange arguments autonomously about how things are run. But in his model, the public takes on a higher order of meta-public, as the dimension of the public does not include public phenomena such as mass media as non-reasoning public instance.

CRITICAL REMARKS

For the present project and paper, we find ourselves in need of appropriating, if not redefining, these contemporary models describing means of space production. The models we mentioned shall help us to specify an appropriate methodology to approach the kinds of spaces produced by virtual world overlapping physical ones. Jürgen Habermas, as he tends to unify public space by rationalizing its conflictuous potential, denies existing social antagonism as inherent paradigm of the public today. In the context of democratic systems, any dimension of public affairs would by definition reproduce democracy in its constituting structure of meaning, as non-democratic impulses would equally remain external to the list of criteria describing public domains. In this sense, he stays with a traditional, humanist notion of hegemonial space, denying crucial distinctions between society and its constitutive elements. Today, economic demands are presented at the same ontological level as for instance cultural demands. Class politics have to construct and articulate a common chain of equivalences with others in the field of politics. Ever since the introduction of digital networks, the concept of hegemonial space no longer seems congruent with current readings of complex space phenomena detached from antagonism and ideology.

Following the post-Deleuzian assumption, the Internet takes on characteristics of a social, public realm. Functioning as floating space system without centers, the main focus became directed at the negation of hierarchy and central organization. Hence, from political theory we have learned that no system ever exists without a center, but then there is none not aiming for centrality as every signifying system aims for symbolization. Total absence of centrality would eventually lead to a radically static status: "Therefore if the Internet was without center, we then had no dislocation which would imply no production of meaning, a frozen world of complete transparency in which every sign would be forced to stay with its natural reference." [4] Taking this as a convincing argument against any further space analogy, we once more turned turn back in history to the methodology of the Situationist movement, established in the late 1960s by the Situationists International. Often associated with the 19th Century mode of "flâneurie", which was introduced mainly in the texts of Charles Baudelaire and Walter Benjamin, the

act of moving in the city took on expanded meanings after 1960s through interventions that were carried out by the Situationist International. When the small group of Situationists teamed up to critique authoritarian strategies of urban planning, one of their interests was what urban planners chose as relevant for their considerations. Taking the subjective view into account, Situationists argued that the city is a collage of individual images stitched together, overlapping and intersecting.

CONSTITUTIVE ASSUMPTIONS

As portable, pervasive, location-sensitive, intercommunicating devices converge with social practices, technologies have become increasingly useful to groups as well as to individuals. [5] The power of smart mobs reaches back to practices surrounding trust and cooperation, as they are being mediated by new communication and computation technologies. [6]

Digital networks have introduced properties such as decentralized access and distributed outcomes, simultaneity, and interconnectivity. While in electronic financial networks distributive effects have led to higher levels of control and concentration in global capital market, in electronic activist networks properties contribute to distributive outcomes: greater participation of local organizations in global networks help constitute transboundary public spheres centered in multiple localized types of struggles. "These are politics which are partly embedded in non-digital environments that shape, give meaning to, and to some extend constitute the event. These forms of activism contribute to an incipient unbundling of the exclusive authority, including symbolic authority, over territory and people we have long associated with the national state." [7] The Sociologist Saskia Sassen refers to "layer ecologies", by which technological properties start to become mobilized. Former unitary bodies of knowledge belonging to specific categories were often housed in closed institutions, start to become disassembeld in small pieces across diverse institutional ordering systems, which then can feed into new conditions including the political, economic, technical, cultural and subjective. The placeless world of wireless communications starts to interact with the place-specific networked computer chips that are beginning to infiltrate buildings, furniture, and clothing. The emphasis lies less on the empowerment of people but rather around the significance of becoming actors.

Methodological Commitments

What the Situationist did and how they did it has a second very important implication crucial to the research project we are engaged in: leaving the save haven of theory, taking part in the field we observe, we also substitute objective view to subjective vista. The very possibility of objectivity in the sciences has been questioned by many postmodern thinkers, our methodology seeks no objectivity but intermingling of various points of view. Those points of view, we felt must not leave aside the view of the actor. The Situationists actively engaged in urban public spaces in bodily means through invented techniques such as the dérive and aimed at capturing subjective experiences through psychogeographic mapping. Influencing other conceptual art movements like Fluxus and Performance Art, the Situationists provided a relevant base for thinking about how individuals may reconfigure political meanings of public spaces. This practice and theory we found to be very helpful to communicate between the fields and points of view.

Based on interdisciplinary collaboration, we cannot be content with pure theoretical reasoning. We found it to be seminal to embed theory in practice and inform it with methodologies established in the

long line of art projects, staged in Western public space. We feel that it is insufficient to only observe and describe public spaces. We felt it is essential to engage and participate in the medium to gain more thorough insight.

Working in the much discussed and little settled filed of “arts-based research” we have to brave methodological discussions, discussions we find necessary to outline in that paper. Our primary premise is staging our arts-based research as a practice with a distinct focus, but with an open-ended process. We set as an experimental procedure in this context, as a journey that could be driven by a desire for discovery in a collaborative environment and shaped along the way through steps taken one after another. Our approach can be identified with what Donald Schön would call "reflection in action", that is to say, to be able to accumulate knowledge on what one works on, while working on it. Thus, we were required to set a process that might allow ‘potentiality’ to last forever, to define the theme and direction as clear as possible, but at the same time, to avoid forming predetermined estimates for the results.

Going there, engaging, working in those virtual and physical public spaces, is part of that process. As researchers we include discursive fields an increasing list of art projects have opened.

Exemplifying methods

The piece Free the Listening, Joo Youn Paek exemplifies what we seek to expose. She proposes new possibilities for temporary intimate sharing environments to appear. Paek fits a pair of headphones with an additional pair of earpieces that face out, so that total strangers would feel invited to lean over and share the experience of listening to music with the wearer. By making a minimal adjustment in an ordinary everyday technology, Paek ruptures the image of self-sufficient individuals that move in the city within self-enclosed bubbles of sound. The wearer becomes an active provider of a personal choice of resources, as well as capable of playfully influencing others.

Another project that modulates personal sound environments in urban contexts is the Sonic City by Ramia Mazé, Margot Jacobs and Lalya Gaye. The wearable interface of the Sonic City uses gestural movements of the wearer as well as environmental influences that are detected by a set of sensors for personal music creation. That is to say, not only the individual becomes the actual producer of the music through simply moving in the city, but also the personal sound bubble becomes highly context aware, unstable and mutable by external factors. Thus, this piece portrays another type of human agent that creates shared environments not necessarily by actively providing resources, but quite on the contrary, by becoming sensible and capable of mindful observation, absorption and inclusion.
Investigating in the spaces created virtual and physical we make us of projects and inform them with theory. Working as a group that includes engineers we appreciate the hands-on approach the field uses and used to gain their insides. As a critique, we think that especially in the race for theory, the will and courage get the hands dirty has suffered in the last years, or, to be exact fieldwork labeled non-scientific was seldom recognized by those producing the texts. This kind of scission was alien to the Situationists and so it is to our group.
A project we build and tested seeks possibilities to help, assist and foster researchers in public space, by providing a set of sensors and recording tools for fieldwork. These tools can be rearranged and adapted according to the needs of a certain task.

Mobile Sensor Data

We built a kit researches, especially in academically context, can wear to aid and augment their research in as well physical and virtual public spaces. We want to establish a tool that can help to record, track and detect phenomena in the spaces enquired upon, but not ignoring or limiting the interpretation skills and theory building of the researchers: we are not doing what is called hard sciences but building a prostheses for researchers to boost their fieldwork.

Design Research Augmentation Kit: The First Prototype

The first kit was tested in a workshop at PennDesign in Feburary 2011. We provided the students with a wearable device that allowed them to sense and store a variety of data while on the move in urban spaces. The students were encouraged to creatively employ the kit in tracing phenomena concerning their spaces of interest and visualizing their research. Conducting the workshop, our main concern was to engender 'agents' that can mindfully get closer to the phenomena of interest. Second, we aimed to observe how the awareness of being augmented by such technology could foster creativity in different ways. Throughout a weeklong workshop, students developed projects that spread from what sociology refers to as "breaching experiments", to performative pieces, to spy-like endeavors and 3d animations that made use of the registered data.

The wearable kit was composed of two devices that registered two types of data: (1) The environmental device collected data concerning the agent's immediate environment such as GPS position, surrounding WIFI networks, as well as temperature, lig sound ht and intensity. This device was composed of custom built environmental sensors connected to a small notebook that ran the recording and synchronizing software, all wrapped within a shoulder bag. (2) The personal device on the other hand, was a smartphone with a special recording software that kept track of personal communication activities of the agent, such as phone call and SMS logs, visited URLs, and taken photographs.

Reflection in Action

The workshop started with our introduction to the software and hardware of the wearable kit to students and progressed with setting up individual project proposals as well as developing research strategies for each project. Our interest was not only focused on the concrete results, but also on the ways students appropriated the kit in their field trips as well as their individual impressions and excitement about the experience. In personal meetings, we observed how students carried out a "reflection in action," spinning in their theories back and forth, building, testing and revising them along the process.

Techno-Artifact as Reflector

At this point it is important to state that the technology used in this first experiment is by no means meant to be permanent; it is fully open for debate and to be continuously improved. Our aim is to avoid treating the technology as an ultimate solution, but to understand it as an artifact open for evolution. Thus, we seek for possibilities for future students with little or no experience to be engaged in developing hardware and software and manipulating the wearable kit. We believe this approach will let us examine the kit as an artifact that has been informed by various public spaces at a later point in the project. Looking at the kit, we might get a chance to acknowledge a collection of subjective views on public

space and the phenomena that shape these views. We think of the kit as a precious artifact, as all the adjustments, fixtures and add-ons reflect researchers interest in public space – hence, like a broken image reflected in shards, reflect fragments of public space itself. In the same way technologies are shaped by social structures and politics this kit has been shaped and we seek to reverse-engineer what was going on.

FINDINGS AND PROSPECT

In closing we would like to summarize the varying layers of examination and propose a few critical aspects our observation might point to.
Working in the field of architecture, urban planning and building technology, we are still confronted with strong limits regarding the underlying political frameworks reflected in merely top-down planning procedures. Technical properties of electronic interactive domains may soon be included in the list of planning parameters to study and learn about extended forms of communication and social organization. We believe that academic researches leave many phenomena of public space unconsidered, due to constrains of what is regarded as being science. The relevance of the social and the subjective as non-technological variables as well as the particular cultures of use of different actors are relevant to both digital and social networks. As we increasingly learn about the logics and dynamics of electronic network technology, we are given the opportunity to integrate empirical findings of social logics embedded in diverse domains. In this context, open source can not only bring technical consequences, but also social ones. As Saskia Sassen keeps saying, new knowledge practices allow for informal knowledge (versus institutionalized) to get distributed and inform our use and appreciation on communal space. [7] In our research project we hope to contribute to how we may learn to include the subjective within an increasingly objectified world. As digital networks have shown, that distributive power does not necessarily lead to the reinforcement of democratic structures, we believe that designers next to other planning instances will have to start to accept additional political responsibilities.

References and Notes:

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