Viability of Urban Social Technologies

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ABSTRACT

From the perspective of viability, we critically examine the attractiveness of urban social technologies. We discuss two inherent difficulties in design of this type of technology, namely intentional design of social activity and the need for social innovation a long side a technical innovation. Finally, we touch upon the relevance of ethnographic inspired methods in the design of urban social technologies.

Keywords

urban technologies, ubiquitous computing, social innovation, design

1. INTRODUCTION - TEST

In recent years, we have seen a steadily growing interest in urban social technologies (UST)[1] especially in academic and research communities with a host of different and interesting projects (e.g. [1, 2, 8, 10, 11]). We are intrigued and fascinated by this new domain of applications, but at the same time we are uncertain about the viability of the concept in general. In this position paper we will examine why urban social technologies seem attractive – maybe even seductive – and look into what we see as two inherent difficulties in realizing this vision. This is meant as a way of prompting critical yet constructive reflection about urban social technologies and their viability[2]

2. THE ATTRACTIVENESS OF UST

On a general level, the strength of UST can be said to arise from the convergence of ubiquitous and social computing in themselves two strong trends (see e.g. [3, 9]) More concretely, however, several specific and heterogeneous forces seem to have rendered this new field attractive.

First and probably most banal, UST is a new phenomenon that holds the vision of bringing computing into the urban environment. It's a novel concept and therefore benefits from intellectual freshness as well as from the rhetoric of the new.

Second, the interest in spatial issues across the social sciences has recently increased (see for example [6]). In direct relation to UST we see a growing interest in philosophers and cultural theorist that pay attention to locational and spatial issues like Lefebvre, de Certeau, Foucault and Bourdieu; urban planners and theorist like Whyte, Jacobs and Gehl. Hence, it is possible to talk about a *spatial turn* in the social sciences and it is likely that this trend has increased the interest in UST and vice versa.

Third, in today's increasingly networked societies information technology is used to maintain and develop social networks (see e.g. [13]) by management of relations, by communication, and by arrangement of activities. With the form factor and interactional modes of ubiquitous technologies [12] it is tempting bring that development out into the city where people already engage in social activities of a similar kind.

Finally, UST makes it possible to reinterpret existing physical and social spaces. In particular, increased social awareness (see e.g. Familiar Stranger [8]), new ways of social communication (see e.g. Urban Tapestries [11], TagandScan [10]) and direct support of a specific activity like gaming and dating (see e.g. Botfighters [1] and Dogdeball [2]). These promising effects of implementing UST make it attractive.

The factors above (and possibly several others) have arguably contributed to the interest in social urban technologies and several concepts and applications are now developed and deployed. The critical question is whether this attractiveness also *translates into an uptake by everyday users?* Looking at the above list it seems like the idea of UST has allied itself with formidable powers: Backed by the rhetoric of the new, strengthened by the armory of the French philosophical brass, surfing the tide of societal change, promising new applications, and to a large extent supported by the largest players in industry as well the future of UST should

[1]We understand social urban technologies as information technologies applied in urban seetings and with a social purpose. We primarily think of technologies that go beyond simple communication between two persons such as mobile talk and sms.

[2]We do not intend to say that the goal of all UST is viability, but we critically examine the conditions for such an ambition.

be bright.

However, UST is not a ready-made technology but technology in-the-making to paraphrase Bruno Latour [5], hence it is not yet possible to conclusively settle the future of UST. We doubt that the various arguments for UST as presented above – despite their attractiveness – are sufficient to secure widespread adoption of this type of technology. We will now discuss two inherent difficulties relating to UST that illustrates this point, namely the problem of *intentional* design of social activity and that *technological* innovation in this field partly depends on *social* innovation as well.

3. INTENTIONAL DESIGN OF SOCIAL ACTIVITY

Presumably, a lot of research and experimental activities aim at designing UST in order to create good urban environments much like traditional urban planning. Therefore it is interesting to look at experiences from urban planning where the ambition is the same: to intentionally form the life of the city.

In Europe, before the renaissance, the villages, towns and cities were by and large self-grown. It was during the renaissance that a class of planners took over the design of towns with certain aesthetic ideals and with certain purposes – often military (e.g. boulevards for parades and fast transportation) [4]. This professionalisation of urban planning, which focuses on a physical dimension (public health and hygiene), culminated in the functionalistic period from about 1930's to 1970's and seen from a social point of view with relatively devastating results [4]. In relation to design of urban social technology it is important to pay attention to this lesson – because it underscores the difficulties in designing social activities intentionally. We might end up with all kinds of unintended consequences like the functionalistic architects and urban planners did. It is in other words difficult to deliberately turn a space into a socially meaningful place. This does not of course exclude all attempts of planning urban space – as several successful projects also have shown (see e.g. [4, 14]) – but it should warn us about the possible risks such a strategy entails.

This difficulty seems to transpire in the related field of computer supported cooperative work (CSCW) where attempts to design socially meaningful places in the domain of work through technology has been pivotal. First, in CSCW a major effort has been made to understand work through thorough ethnographic studies (see e.g. [7]) as a basis of design of cooperative and interactional technologies. And even then it is questionable how many widely used collaborative applications that originates from the CSCW community. And second, urban life is arguably more difficult to grasp than work: it's less delimited; there is not necessarily a clear set of activities to support in a confined location, or any clear collaborative goals or partners. From this perspective, it could be argued that design of urban social technologies faces an even starker challenge than CSCW does.

4. SOCIAL INNOVATION

As argued above the *object* of innovation in urban social technologies is somewhat social, though the means used primarily are technical. The strategy of social innovation through technology is to a certain extent shaky. As Latour [5] points out technologies do seldom move and propagate by themselves. Technologies are so to speak carried through society and the innovator's job is to secure that the innovation has enough allies to get out of the place.

It is questionable whether UST's allies are strong enough to carry the technology beyond its benevolent creators. If we look at many concepts for urban social technology they are not just technological innovations: they also presuppose a new social practice around the technology – a social innovation. Tagging and scanning text messages and pictures on certain locations in the city is about developing a new graffiti culture; Familiar Stranger [8] is based on a new perception and appreciation of strangers; Dogdeball [2] is dependent on a changed dating culture and maybe even new sexual practices and identities and so on and so forth. We don't claim that these and related concepts cannot succeed – but we are pointing out that their viability go along with cultural and social changes. In a sense UST is more radical than other technical inventions, which more readily "fit" into existing social practices by solving obvious problems and satisfying clear user needs.

Various ethnographic inspired methods and techniques are often part of the development of urban social technology and new and exciting approaches are employed like bodystorming [11]. Despite the *vitality* of those methods it's debatable to what extent they enhance the *viability* of UST. There is an inherent conflict between "radical" technologies and the use of ethnographies because a radical technology presupposes a new user or new use practice that doesn't exist yet. What might happen during design is that technology and user is simultaneously co-constructed. Unfortunately, that leaves us with a unique user – a user only representing herself.

5. CONCLUSION

We see no simple way out of this predicament. Our attractive allies described above seem to be the last ones to come to rescue - they are too abstract, idealistic, and academic to do the hard practical work that is needed to attract everyday users. We will have to consider how to forge a chain of hands in practice that help integrate social urban technologies in everyday life.

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