Computer Science: Faculty Publications

Computer Science

2008

Automated Journeys

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Recommended Citation

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ABSTRACT

Computing technology now pervades those moments of our day when we move through our cities. Mobile phones, music players, vending machines, contact-less payment systems and RFID-enabled turnstiles are *de rigueur* on our daily journeys. This workshop aims to examine these augmented journeys, to reflect on the public, semi-public and private technologies available to us in them, and to speculate on what innovations might be to come. Taking as our starting point cities such as Seoul, we aim to take seriously the developments in mobile technology as well as the advancements in autonomous machinery and how these mesh with our urban journeys. The workshop's empirical focus will be directed at producing 4 envisagements that either speculate and/or critically reflect on technological futures.

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION

Weiser's vision of computation moving off the desktop and into the everyday world is now a reality in many ways. However, while there has been much study on how this has affected the household, the workplace and, to some degree, what Oldenburg calls "third places" [4], we are only beginning to understand how it is changing the way we experience the cities we live in. The authors have previously explored, through a series of workshops, how this has affected specific urban contexts [1,3] and, through an ethnographic study, how we might begin to talk about the urban experience in terms of the journeys we take [2]. With this workshop, then, we will bring these topics together and directly address how the public, semi-public and private technologies that we encounter and bring with us into the city shape our urban journeys. Here, the focus will be on the ways in which our interactions with the city become increasingly automated and how an awareness of the technological impacts on our daily journeys might inspire future designs.

THEMES

During the workshop we will address five interrelated themes concerning technology's role in transforming our urban journeys. By examining how these themes are borne out specifically in the city of Seoul, we will attempt to understand what broader implications they might have as well.

Automation and public interactions. In our cities, automation is becoming more and more prevalent. Fast food is becoming even faster – now one can buy a hamburger in Seoul at McDonalds without having to hand over any cash or even a credit card; contact-less mobile phone payments are now a reality. Additionally, humans are disappearing even more from building security with robots in Korean schools replacing more traditional guards. We can ask, then, with the increasing uptake of automated machines, have urban journeys in Seoul become more individualistic? Does automating technology decrease the level of social interaction or instead give rise to new forms?

Efficiency vs aesthetics. All sorts of activities are being technologized, often under the guise of efficiency. Stopping off at the toilet while on your way to work once was a straight-forward affair, but now toilet users in Seoul are confronted by toilets with control panels offering heated seats, jets of water, and the sounds of chirping birds. Even cleaning one's mobile phone has become a public service; kiosks that allow you to subject your phone to a sanitizing blast while on the go are popping up all over Seoul. But are all of the technologies found in our cities making our journeys more efficient, or is it just the opposite? Must one choose between a pleasant experience or a fast one, or do urban technologies represent a new form of aesthetic?

Automated identities. Seoul's T-Money system allows for contact-less payments in city shops as well as on the subway. With a range of options from RFID cards to mobile phone upgrades to tiny plush characters (that can have their credit recharged using USB), there are myriad ways to take advantage of the system. However, such innovations also raise issues around how we are identified in and through our movements. Do e-money technologies such as T-Money make us more or less anonymous now that we can be uniquely identified by our RFID train passes, our mobile phones, our credit cards, and so on? And, more fundamentally, does the presence of this automation in our everyday urban lives offer new ways to present our selves? Are we becoming, in the words of Vertesi, technomorphized [5]?

Layers of mediation and interaction. We can no longer

conceive only of human-computer interactions as defined by a single person using a technology. A person can interact with a public technology (e.g. a ticket machine) *through* a more personal one (e.g. a mobile phone). Likewise several people can use the same public technology simultaneously, or a person can interact with others through the technologies around them. Even technologies themselves are beginning to interact on their own. In Seoul it is now possible to have robots park your car or to ride in trains that have no human conductor. How then, we might ask, are these various and complex layers of mediation and interaction manifest as we move through our cities? Moreover, with these layerings, what are the ways in we might come to change our relations with technology and ultimately each other?

The hybrid of technology and tradition. With talk of technology transforming our lives it is easy to overlook the cultural traditions in daily life. But in a city like Seoul technology and tradition exist side by side. In the streets old-style food vendors proliferate, and puffed rice isn't something you make at home with a high-tech cooking device, rather it is something you go out on to the street to purchase from an "old fashioned" *no-jeom sang* (street seller). At the same time, however, *sticker sa-jin* (photo sticker) machines are ubiquitous in those same public spaces, allowing people to go out and purchase something made on the fly in a considerably more hi-tech fashion. This begs the question, then, how are, or how could, the technologies we encounter in our everyday journeys intertwine with older low-tech traditions. Is one replacing the other? Is technology introducing new traditions or ones simply re-shaping old ones?

ORGNIZATION
The authors all possess ample experience in workshop organization. Drawing on previous successes, we plan to promote this workshop through the www.inbetweeness.org website, as well as through related mailing lists. The call will be targeted towards a range of participants from fields including computer science, interaction design, architecture, social science and the arts. Position papers of 2-4 pages will be invited about the design, implementation or study of technologies for automated journeys, and from these submissions we will select approximately 16. Accepted submissions will be published on the website prior to the workshop and a mailing list will be created to foster a dialogue of ideas amongst the participants. The workshop itself will take place over the course of a single day and include guided fieldwork, group discussion and design brainstorming. After brief introductions, the participants will be divided into 4 groups. Each group will join a local guide who will take them on a typical daily journey through Seoul. The guides will draw group members' attention to the automated systems and help them, where possible, to use the systems first-hand. After their morning excursions, the groups will return to the conference center and create short presentations about the automating technologies and types of interactions which they observed. They will then be asked to create a design envisagement that speculates

and/or critically reflects on the future of urban technology. These designs will be presented and discussed, with discussions encouraged around the relevance of their ideas to UbiComp as a whole. All of the fieldwork material, design envisagements, and discussion themes will be collected and published on the inbetweeness website in an archival format for the entire community to access. Furthermore, as we have conducted several workshops exploring technology in urban settings, we will gauge the interest in a journal special issue at the conclusion of the workshop.

ABOUT THE ORGANIZERS
Arianna Bassoli is a PhD student in the Information Systems and Innovation Group at the London School of Economics. Her interests lie in interaction design research, urban computing and how it can be informed by a situated understanding of people's everyday life. She has experience in the design of proximity-based and mobile applications that allow people to exchange digital resources in various everyday occasions.

Johanna Brewer is a PhD student in the Informatics department at the University of California, Irvine working with Paul Dourish. Her thesis is focused on urban computing, particularly in the design of social technologies. Her research centers around how an examination of mobility in urban spaces, specifically the London Underground and the Orange County bus, might help to inform these designs.

Alex Taylor is a member of the Socio-Digital Systems Group at Microsoft Research, Cambridge. He has undertaken investigations into a range of routine aspects of everyday life. For instance, he's had an unhealthy preoccupation with hoarding, dirt, clutter and similar seemingly banal subject matter. Most recently he has begun obsessing over robots and other curious 'thinking' machines.

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