

SOCIALLY FASHIONED NETWORKS

By KATHERINE MORIWAKI - <http://www.kakirine.com>

Printed in 'a mínima' 7, ISSN 1697-7777

Editor ::

Espacio Publicaciones

Ignacio Alvarez Castelao, 3 (5)

33001 Oviedo :: Asturias – Tel. 984 083 666

espacio@telecable.es

INTRODUCTION

In my work I am interested in the process of socially fashioning networks, or how social infrastructure and network infrastructure can be tightly coupled together to create situated bodily experience. For example, social protocol facilitates communication and movement within public space, in the same way network protocols enable information exchange in a communications infrastructure. Through the examination of human behavior and our use of material objects, particularly accessories and clothes, I am investigating the process of socially fashioning as a way of developing network relationships between the self and others in the environment. Some of the themes I am working with include developing new perspectives of the phenomenal and the mundane and how technology can disrupt or destabilize existing relationships to draw attention to aspects of everyday life that we may not be aware of. In socially fashioning a network I engage the overlapping area between human behavior, networking, and wearable technologies. The following projects illustrate socially fashioned networks. Each project functions at a different degree of social and technological resolution, providing illustrative case studies of different communicative infrastructures.

RECOIL

RECOIL is a research project designed to disrupt the existing social infrastructure of high-density urban spaces, by creating unexpected, unwanted, and sometimes-inappropriate physical connections to other people and objects in the environment. The project is also a way to give voice to feelings of aggression attached to the increased proliferation of personal electronic devices and the encroaching density of both the tangible presence of people, and the less visible (electronic) markers of their presence.

The opening pages of *Crowds and Power* [1] discusses the fear of being touched. Using common examples of social situations (train and bus commutes, busy streets, restaurants) Canetti points out man's aversion to unwanted and accidental touching by strangers. He proposes that within the crowd people lose this inhibition; however, a necessary precursor is the relinquishment of control. In cities of high density, overcrowding and cramped conditions can work against the relaxation of such instincts. In the *Hidden Dimension*, [2] Hall discusses the American tendency to "hold oneself in" while on a subway commute, and the aversion of eye contact as a form of maintaining psychological distance when physical space is scarce. In contemporary interaction design, elements of the "invisible" spectrum of electromagnetic frequencies are seen as space-taking. The "Hertzian Space" [3] identified by Anthony Dunne is populated with the emissions of electronic devices, edging out humans through neuroses and irrational fear. Lack of space, either physical or psychological produces aggression and pathology. The resulting state is a type of social paralysis, cutting oneself off from full bodily awareness and serendipitous interaction.

In RECOIL garments small, yet powerful magnets are embedded into everyday clothing. When developing the project I conducted early feedback trials of small prototypes, eventually culminating in a fashion show/performance at the Break 2.2 festival in Ljubljana, Slovenia. The results were tragicomic, as the disruption of normal bodily movement and the garments' ability to "act" on their own, literally and metaphorically connected the wearers with other people and the environment. The result was a hyper-awareness of the individual's limbs and body-orientation, with a fear of "getting too close" to electronic devices, or accidentally "connecting" in a socially inappropriate way. In testing early prototypes, people

exhibited anxiety and hyper-awareness of their surroundings, as the pop-cultural fear of digital data damage through magnetic force, reinforced the fear of being touched and of touching others. Both spatial and psychological relationships between the environment and one's physical body were challenged and disrupted through the clothing, creating a renewed sense of situated bodily presence.

The current RECOIL garments provide an environment in which movement is constrained by the "behavior" of the clothes, forcing wearers to develop alternative movement vocabularies as an unintended and compensatory side effect from wearing the garments. Wearers of RECOIL are not only asked to interrogate their social and electronic relations to others, but are also forced to question the very fundamentals of their bodily experience, socially fashioning familiar actions and experience into something different and strange.

INSIDE/OUTSIDE

Inside/Outside is a personally invested environmental monitoring tool, which uses the handbag as a metaphor for digital information storage and retrieval. The modern handbag has undergone radical transformation from the small money pouches hidden under men's robes in medieval times to status symbols and carriers of both psychological and material necessities [4]. The appearance of a bag, and what one chooses to carry and collect within it, is highly telling. Because of this central and multivariate functionality, which ties everyday objects like the handbag into matrices of social belief, function, and assertion of identity, I chose to work with this accessory as the starting point for developing a socially fashioned network.

The current designs are comprised of two handbags, one which monitors air quality, and one which monitors ambient noise levels. Data is simultaneously visualized as an ambient display on the surface of the bag and collected into a digital data diary for review at a later date. The presentation of data both in real-time, and in aggregate provides opportunities for both spontaneous and planned reflection of one's environmental exposure, acting as both "mirror" and "journal" of one's urban experience. Information about the environment becomes an "object" that the individual collects and reflects upon to initiate action, possibly taking different city routes or otherwise altering their behavior in public space.

The Inside/Outside bags work as both independent objects, and as part of network of similar objects. When multiple Inside/Outside bags are within radio communication range they formed a mobile distributed sensor network, allowing for asynchronous readings of environmental data to be collected by various individuals. The wearer of an Inside/Outside object sees a "necessarily incomplete" map of environmental data for the city, one that expands or contracts based on personal mobility. Information collected can be shared in an ad-hoc manner through co-located presence.

In the essay Machine Politics, [5] Lubar describes the machine as an agent which mediates between different political interests. Machines reflect culture, and are seen as a product of context, of values and social processes. In the case of Inside/Outside locally sensitive and contextually relevant data can be used by the inhabitants of a community to police and monitor their own neighborhoods and public spaces. By introducing an augmented everyday object into the social infrastructure of people's everyday lives, personal expression, function, and wireless communications form a socially fashioned network, utilizing "local knowledge" and connection with the environment. Inside/Outside provides alternative views of the city and urban life, illustrating social networks that can emerge from daily activities.

UMBRELLA.NET

Umbrella.net consists of a wireless ad-hoc network which is deployed when multiple people individually open their umbrellas in the rain. As people open and close their umbrellas reach of the network grows and shrinks proportionally. The network is socially fashioned from everyday or common collective activity in public space.

In *Writings on Cities* [6], Lefebvre describes a polyrhythmic society, one which incorporates varied flows of activity. He describes this polyrhythm as an “open totality”, adding that “all gatherings bodies” are polyrhythmic, suggesting a state of synchronicity similar to the coupling of oscillators mentioned by Steven Strogatz [7]. Umbrella.net is an artistic response to networking communications technology to create sudden, striking, and unexpected connections between people in public and urban space. The transitory and specific nature of the network highlights the poetic relationship between individuals, providing a “point of intersection” where multiple rhythms can meet.

The Umbrella.net system works with a hardware and software component that is integrated into the design of a typical umbrella. The prototype includes handheld computers that interface to the umbrella and only communicate with each other when specific conditions exist, i.e. when rain is present and other network nodes exist in close proximity. I am working on Umbrella.net in collaboration with Jonah Brucker-Cohen.

SPECIAL THANKS

I would like to thank Linda Doyle, Jonah Brucker-Cohen, Ken Greene, Mario Riedel, Fionnuala Conway, Ruth-Anne Shields, Leah Hilliard, and the Networks and Telecommunications Research Group (NTRG) at Trinity College Dublin.

REFERENCES

1. Canetti, E., *Crowds and Power*. Trans. Carol Stewart. Harmondsworth: Penguin, 1973.
2. Hall, Edward T. *The Hidden Dimension: Man's Use of Space in Public and Private*. London: Bodley Head, 1969.
3. Dunne, A., *Hertzian tales: Electronic Products, Aesthetic Experience and Critical Design*. London: RCA CRD Research Publications, 1999.
4. Steele, V., Borrelli, L., *Handbags: A Lexicon of Style*. Rizzoli: 2000.
5. Lubar, S., “Machine Politics”, *History from Things: Essays on Material Culture*. Smithsonian Institution Press, 1995. Eds, Kingery, D., Lubar, S.
6. Lefebvre, H., *Writings on Cities*. Trans. Eleonore Kofman and Elizabeth Lebas. Oxford: Blackwell Publishers, 1996.
7. Strogatz, S., *Sync: Rhythms of Nature, Rhythms of Ourselves*. London: Allen Lane, 2003.