

**ITCH**Individual Technology/  
Community Hacking**Jihyun Kim** (kr)Independent Artist  
KIM.JIHYUN@gmail.com**Andres Colubri** (ar)Jeju National University  
Assistant Professor  
andres.colubri@gmail.com**ITCH is****“an unpleasant sensation that causes the desire or reflex to scratch”**

This project is a broad artistic exploration of new phenomena originated by mobile communication/computing technologies. It consists of a series of experimental works, research activities, and workshops to investigate the media devices most closely connected to human bodies and its surroundings, and ultimately find new forms of individual expression with them. In contemporary urban life, people continue to grow increasingly consumer-oriented, forcing our bodies to deal with media screens that provide commer-



**Fig. 1: Smartphones have the potential to create new instances for social interaction, but also for deeper isolation.** Photo: Andres Colubri

cially and politically stimulated contents while individual subjects disappear along with personal style. Individuality is critical in recreating everyday life within the otherwise closed world of continuously recycled and redundant mass-media imagery. Smartphones, for instance, took the already omnipresent TV/computer screens [Bourriaud, Nicolas, 1998] into the individual place.

From Virilio's pessimistic takes on the effects of technology in our society [Virilio, Paul, 2006] to the utopian techno-fascination [Maes, Pattie and Mis-

try, Pranav, 2009], passing through humorous and/or scientific observations about the “social sacrifices and opportunities to interact with one another lost due to our own self-involvements” with always-available media/communication, we must find the spaces for transgressive uses of these technologies. It is within technology’s greater risks for control and isolation where the greater potential for transgression and liberation exists [Galloway, Alexander, 2004].

The goal of ITCH is to provide users (individuals) of mobile devices with tools that would allow them to by-pass the commercially-approved functions of their phones in order to manifest and perform their subjectivity in everyday life. The desire in ITCH is to turn (hack) the mobile screen from a surface for passive consumption of media into an interface for new social interactions.

The following three questions are the guidelines in ITCH.

- 1) What novel usage paradigms would be possible by taking into account the unique properties of mobile computing devices?
- 2) Can these new paradigms lead to transgressive uses of mobile devices that expand personal expressive potentials of individuals?
- 3) Given a community of users who are engaged in such personal appropriations of mobile technologies, can these personal expressions and uses lead to the manifestation of unseen public desires?

Within the framework of these questions, ITCH carries out different projects and some of which are briefly described below.

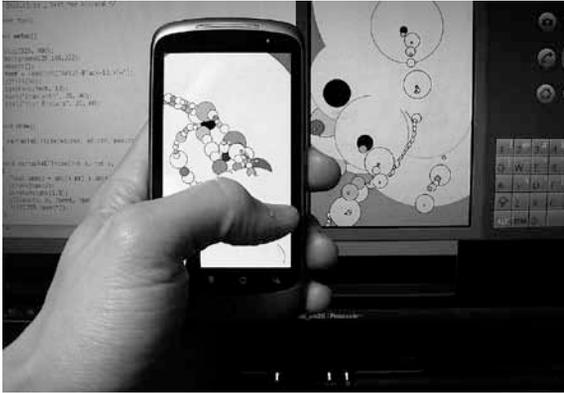


**Fig. 2: Examples of smartphones used/hacked for unintended purposes.**

Photo: Left: Hacking iphone’s accelerometer (<http://www.engadget.com/2007/08/28/iphones-tilt-sensor-hacked/>). Right: “A-Life” cell phone performance (<http://www.textually.org/textually/archives/2006/12/014390.htm>).

### **Project 1: Visualizing hidden desires**

Social researchers are starting to use cellphones and smartphones to study human behavior [Raento, Mika et. al., 2009]. Numerous tools are being created for mobile data acquisition, geo-annotation and sensing, and knowledge mapping [Urban tapestries, <http://urbantapestries.net/>]. Mobile devices have become an indispensable medium for interpersonal communication. Most people generate an immense amount of data with the daily use of mobile phones, and this data can be processed and visualized in various ways to visualize social patterns of interaction. Can we reveal usually unseen behavioral structures that reflect how deeply mobile technologies are ingrained in our personal lives?



**Fig. 3: First prototype of Android-based live drawing performance piece, being developed by the authors as part of the ITCH project. Photo: Andres Colubri**

Within this specific context, we are working in the acquisition of mobile phone usage data to visualize unseen public desires of interpersonal interactions, contextualized by time and location. The following themes are of particular interest to us: personal closeness (or lack thereof) as mediated by mobile devices, alienation (from our physical surroundings) by virtue of constant communication, and the interactions that occur at unusual moments or locations (since mobile phones are with us at all times and places). Three different data visualizations are being investigated in order to provide a multidimensional exploration of the social effects of mobile technologies.

### **Project 2: Hacking smartphones into performance devices**

We are currently developing a live drawing performance project that uses touchscreen-based Android smartphones as distributed input devices to generate a drawing collage in real-time. It aims to convert an individual technology into a platform for communal hacking and participative experience in public spaces. The participants will use the touchscreen of their phones to input hand-drawn gestures. The phones will run a client application to communicate with a central server software which will combine in real-time the gestures drawn by each participant into a large scale canvas. The resulting live collage will be projected onto a suitable surface in the space where the performance takes place. Although there are numerous applications on both the iTunes store and the Android market that implement touch-based sketching, there is none yet that turns drawing on a mobile device into a participatory live experience.

### **References**

- Bourriaud, Nicolas (1998): *Relational Aesthetics*, Les Presse Du Réel.
- Virilio, Paul (2006): *The Information Bomb*. Verso.
- Maes, Pattie and Mistry, Pranav (2009): *Sixth Sense project*.
- Galloway, Alexander (2004). *Protocol: how control exists after decentralization*. MIT press.
- Raento, Mika et. al. (2009). *Smartphones: An Emerging Tool for Social Scientists*. *Sociological Methods & Research*, Vol. 37. 12. Urban tapestries. Retrieved from: <http://urbantapestries.net/>