Immersion into the Social
Ilpo Koskinen, The Hong Kong Polytechnic University, ilpo.koskinen@polyu.edu.hk
Jung-Joo Lee, National University of Singapore, jjlee@nus.edu.sg
Simone Taffe, Swinburne University of Technology, staffe@swin.edu.au
Tuuli Mattelmaki, Aalto University, tuuli.mattelmaki@aalto.fi

Abstract
This paper looks at how design researchers have used immersive methods for understanding role-identities in their work. Designers have been using immersion as a research technique for decades. Recently, design researchers have more-widely adopted immersion, extending the basic techniques for new types of social situations. This paper describes immersive methods that have been used to understand individual experiences related to role-identities; role-identities in social interaction; and role-identities in institutions. In the conclusion, the paper discusses benefits of the immersive methods for design researchers’ understanding of complexity in society for current design challenges.

Introduction
From time to time, designers face situations in which they cannot rely on their own experience in understanding people, and even their user research knowledge seems fallible. Since most people have only a limited vocabulary to describe feelings about products and their interactions with them, it is particularly risky to rely solely on visualizations and words when designers aim to gain an understanding of how a design feels and functions in embodied action. This is when designers try products and prototypes, live in design situations, conduct role-plays and even participate in theatre to gain insight from within.

“Immersion,” as we call these processes, is a lay term with many usages. What is common to most of these is that they refer to a process in which someone leaves his own context of experience and to be completely involved in another context. When immersed, researchers get into someone else’s skin to observe and reflect their new experience in order to design for it.

Immersion in this sense is a generic process that happens in many design processes. For example, in car design, new design concepts are often tested in 3D immersive environments...
designed to give an experience of controlling the car on the move. In Design for All, for example, many designers use ‘empathy tools’ to better understand people who cannot use regular products due to physical and mental handicaps (see Herwig 2008; Buxton 2007; Langdon et al. 2010). Empathy tools range from gloves and goggles that simulate arthritis and various eye illnesses respectively to ‘old-age suits’, which give young designers an idea of just how difficult elderly mobility is (see Moore and Conn 1985; IDEO method card “empathy tools”; Fulton Suri et al. 2005; Herwig 2008). Similarly, the idea behind experience prototypes is to give designers first-hand experience of how a product concept might feel (Buchenau and Fulton Suri 2002). Similar practices have been used in participatory design and interaction design (see Sato and Salvador 1999; Iacucci et al. 2000).

Most of this literature focuses on individual experience rather than social situations that have become increasingly important for design over the last decade with service design and community-centered design (see esp. Secomandi and Snelders 2011; Kimbell 2011; Meroni 2007). Our aim in this paper is to provide a framework and vocabulary with which various immersive methods for social action can be better understood, practiced and developed. Specifically, we are looking for ways in which immersive exercises help us to understand other people in their social roles and circumstances. Most of the methods we discuss in this paper have roots outside of design. For instance, psychodrama and sociodrama have been established at least since J. L. Moreno’s work in the 1930s, and action research since Kurt Lewin’s early American writings, but they typically aim at healing people and communities, not at improving products and services (Moreno 1953; Lewin 1958).

**Immersive methods in design**

In design literature, reasons for immersion are fairly straightforward. The aim is to either to evaluate existing designs or to gain a deeper insight into the people for whom something is designed. Immersive methods enrich studio-based imagination, and they aim to gain a first-hand insight into people better than conventional user-centred methods (see for example Brandt & Grunnet 2000; Urnes et al. 2002; Buchenau and Fulton Suri 2000; Säde 2001; Binder et al. 2011). For example, understanding occupational skills may be necessary for a competent design job. In one of the classic design texts, Henry Dreyfuss’ *Designing for People*, there is an image depicting an industrial designer taking a Singer sewing course (Dreyfuss [1955] 1974: 107).

The key factor in immersion is to put designers in a situation where they cannot rely on their normal habits. Kouprie and Sleeswijk Visser (2009) include immersion as part of a process of empathy in design practice. After discovering the users’ world and before connecting and detaching themselves from the users, they suggest, designers should wander in the users’ world without judging by immersing themselves into it.

Literature on immersion tends to focus on understanding roles. The most elaborate example is that of Patricia Moore, who spent 18 months in various places in the United States and
Canada dressed as an 80-year-old woman wearing several prosthetic devices that limited her senses and mobility to that of an average 80-year-old woman. Her intention was to study prevailing design-as-usual to see how it works for senior citizens. Moore used many types of negative prosthetics (the term ‘negative prosthetics’ is from Buxton 2007: 265-266). For example, she put baby oil into her eyes to blur her vision; wax plugs in her ears to impede her hearing; and attached wooden splints behind her knees to restrict her walking. She built three characters with varying degrees of wealth and physical ability. After 18 months, her experience of the difficulties faced by senior citizens in North America was encyclopedic. Ultimately, her insights tell us about what it means to live as an old woman in a society built for much younger people (Moore and Conn 1985).

This is only one possible form of immersion into the social, though. Moore learnt as much about design as she did about how society’s treatment of old women constitutes their relationships to products and services, but her method foregrounded an individual role-identity rather than more complex forms of social organization.

Social situations and institutions

The immersion methods described above have their restrictions: they do not put enough emphasis on how role-identities function in social situations. There are occasions in which designers need to understand social situations in which people use products. A familiar example is the mobile phone; it is a device for doing business and for personal contact. It is also, however, a device used in buses, grocery-store queues, metro-station queues, airplanes, meetings, and even in the middle of (interrupting) face-to-face conversations. Depending on how someone uses his phone, others take action accordingly.

The problem is one of perspective. In social situations, people typically have simultaneous commitments and involvements, and each participant sees the ongoing situation from a partial perspective. For this reason, immersion from a single person’s perspective has limited power to understand the existence of multiple viewpoints. The way to handle this problem is by approaching the situation from multiple viewpoints and get an insiders’ look from several angles.

One example comes from education. Industrial design students in an Aalto University (Finland) prototyping class used these methods to gain first-hand insight into user experience (IP08 2009). IP08 focused on driver-children interaction in cars. The class began with a user study, which built heavily on immersion. Drivers described a situation to the students, who were then instructed to play out these situations with other people in the drivers’ cars with their children. Also, they had to rehearse these situations from the viewpoint of the driver, the child, and the passenger. These rehearsals had to cover both physical interactions, conversations, and also emotions. After the user study, students had to find ways to recreate the situations in the studio in a real car that was bought for the class. They had to create prosthetics that helped them to understand the drivers, the children, and the passengers alike.
This insider look was meant to enrich their evolving design work, which led to several interactive devices and games that were prototyped in the car bought for the class.

Figure 1: IP08. Top: Kaj Eckoldt and Benjamin Schultz immersing themselves in the experience of interacting with children while driving. Below from left: studying concepts; studying concepts in a car.

A method like this is limited to social interaction, however, and it cannot capture the organizational foundations of action. When designers have wanted to look at these foundations, they have usually borrowed methods from organizational development (French and Bell 1973; Nissley et al. 2004) to recreate conditions that generate social situations.

Perhaps the best case in design literature comes from Denmark. Researchers at SPIRE centre have recently used participatory theatre to examine how design works in organizations (see Buur and Larsen 2010). In an effort to gain better insight into their position, designers have participated in plays, simulating various events and scenarios that designers working in organizations typically face. Led by professional actors, these plays are based on scripts designed to simulate possible scenarios, such as having a new CEO with new management ideas. In the play, there could be anywhere from 20 to 40 participants.

In the case of Coins, Inc., SPIRE researchers constructed an imaginary company that manufactured coin-based payment systems. The company had faced some difficulties and grown weary over the years. To rejuvenate the company, a new CEO wanted to introduce a participatory management style. One component of this plan was a half-year pre-study for developing a new digital payment system for unregulated institutions, such as flea markets. The tax authorities had to be involved, too.
The play had five scenes. The first scene explored how various departments react to the CEO when he introduced the new policy. In the second scene, the workshop participants ran a stakeholder workshop to explore social worlds within the company to get an insight into the intentions and goals of functions like design, marketing and engineering. The third scene focused on a project start-up within a smaller task force, consisting of engineering, design and sales. It explored tensions underlying these functions and developed a participatory design process that tried to mitigate these tensions. The fourth scene became a participatory flea market role play designed to get an insight into the dynamics of working with small change, and the final scene was a semi-scripted handover meeting in which an external company partner came back to present a series of design concepts.

Like in organizational games, this process provided a method for looking at organizational and management processes. It made observable and debatable issues and conflicts in product development. By immersing themselves in a play such as “Coins, Inc.”, participants gained an insight into organizational processes that generate situations faced by designers.

Discussion

This paper has explored how immersive methods can help designers to understand role-identities in many types of social situations. It shows how designers can gain an insight into social situations and organizations rather than just roles. The two examples of IP08 and Coins, Inc. show how some designers have enriched immersive methods coming from designers like Henry Dreyfuss and Patricia Moore, as well as methods building on what Bill Buxton called “negative prosthetics” (Buxton 2007: 265-266).

The aim of this paper was to explain immersion by mapping it on different types of social situations. By doing so, we aimed to provide a better understanding of how immersive techniques could widen the scope of design methods. Our attempt in this paper is to draw the field’s attention to how immersive methods can facilitate designers’ understanding of social situations and institutional arenas. These insights are particularly relevant in the new design landscapes of design for service and communities.

References


