

Mobile Play: Blogging, Tagging, and Messaging

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PANELISTS

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You can discover more about a person in an hour of play than in a year of conversation. – Plato 427-347 BC

ABSTRACT

Ubiquitous computing, by its very definition, aspires to weave computing technologies across the fabric of our everyday lives. Many of the successes and failures encountered during the pursuit of ubiquitous computing will be dictated by the manifest integration of play. It is play that helps us cope with the past, understand the present, and prepare for the future. This panel of experts is passionately interested in engaging in a critical dialogue around the applicability, adoption, and consequences of such elements of play in ubiquitous computing research. As motivation, several tremendously popular ubiquitous computing themes with playful elements will be examined: blogging, tagging, and message play.

Keywords

Play, blogging, tagging, messaging, digital graffiti, SMS, IM, ambiguity, toys, GameBoy, mobile computing, context aware play.

INTRODUCTION

It is during play that we make use of learning devices, treat toys, people, and objects in novel ways, experiment with new skills, and adopt different social roles [1]. As children we clearly don't play to learn, but we certainly learn from play [2, 3]. Play helps us as children (and adults) to answer the questions: What can I do in this world? What am I good at? What might I become [4]? Many of us attribute our abilities, interests, and even our careers, to childhood toys, games, and play [5-7]. Play unquestionably resonates with the very essence of human behavior and our role in society and will play a vital role in the adoption of ubiquitous computing.

While gaming is a popular and important part of human play, this panel is focused more specifically on the fundamental activity of mobile, situated human play and its role in ubiquitous computing.

CAN UBICOMP COME OUT AND PLAY?

Current ubiquitous computing research has provided marked milestones of systems, tools, and techniques along the path of situated, focused problem solving. While crediting the achievements of this area, we explicitly draw emphasis to the portion of everyday life made up of non-goal directed activities and play.

We make two important observations about play: (1) humans seamlessly move in and out of the context of play (sometimes on a minute by minute basis) and (2) when at play, humans employ a separate mental cognition. The scope of their current activity is more ambiguous [8], and their expectations about people, artifacts, interfaces, tools, *etc* are increasingly relaxed. The mind is open up to wildly fanciful interpretations, connections, and metaphors. The rules of human engagement are completely altered. It is often during this unique "play time" that we serendipitously establish important intellectual connections, leap to improved views of our world and society at large, and resolve conflicting paradigms. In essence, it is often through play that we advance our own substantial, novel contributions in life.

This fundamentally important human phenomenon clearly deserves a forum as a legitimate theme within the context of ubiquitous computing. In fact as ubiquitous computing researchers, we must not only be aware of this human tendency to play, but perhaps more importantly use it to our advantage. When does play occur? How does it begin and end? When is it appropriate or inappropriate? What elements give rise to play? Quell play?

MOBILITY

Play by its very nature is an active event, promoting coordination, flexibility, and fine motor skills [9]. Often toys, the tools of play, respond to movement and hold our attention. From an early age toys encourage physical play: activity centers for babies, push-pull toys for toddlers, and blocks, balls and climbing frames for older children.

Throughout our lifetime, we draw upon these innate skills and experiences to provide a safe and comfortable means of interfacing with others and the world around us through play.

There is no doubt that the current commercial adoption of wireless, mobile ubiquitous computing devices is indirectly spawning novel practices of social, mobile play. The research buzzwords of context awareness, always on, body worn, multi-medial, community awareness, and social networks are in fluid use across diverse non-research communities. Today's personal mobile devices have already been repurposed by independent, passionate users and groups for various forms of mobile play. As ubiquitous computing researchers, we have a primary interest in understanding the methods of such adoption and, more importantly, the evolution of its re-appropriation.

While we are interested in exploring new trends in mobile play, there are numerous currently deployed systems that have been re-appropriated from the context of work to play. The documented evolution of these systems and their current usage models help drive many of the research questions for future mobile play. We use these systems as a starting point for debate of mobile play.

BLOGGING

A blog (derived from "*web-log*") is a web page made up of usually short, frequently updated posts that are arranged chronologically – similar to a "what's new" page or journal. There is no limit to the content or topic of available blogs: links and commentary about other web sites, political issues, news about companies/people/ideas, diaries, photos, poetry, mini-essays, project updates, fiction, journalism, and even personal messages by embedded reporters on today's modern battlefield [10]. Blogs are almost always personal, imbued with the temper of their writers. Perhaps more importantly, to invoke Marx, blogs seize the means of production, bypassing the ancient rituals of traditional publication houses. In some sense blog posts are instant messages to the web.

The technologies to support blogging have been in place since the dawn of the web, yet it has not been until recently that this technique has self organized itself into a playful social pursuit. With modern wireless mobile PDA's and phones, the urge to share and play with text, images, and sound in real time across vast distances and within a social network of friends (and enemies) is overwhelmingly compelling.

Several of the panelists have extensive experience playing in such worlds as well as building and evaluating tools that use and extend the blogging metaphor of social empowerment.

TAGGING

Tagging is often used within groups and communities to mark ownership or control over an object or territory. Tagging and graffiti are typically viewed as an anathema

by the community. However, graffiti is simply defined as an inscription or drawing made on some public surface. Graffiti is an extremely important medium through which we engage into dialog across and within our community. Not just "gang tags" but political stickers, city produced marks indicating gas lines, discarded receipts, cigarette butts, broken benches, covered parking meters, and scrawled messages are all examples of public place community message play.

How will ubiquitous computing contribute to play within the space of tagging? What motivates the human passion of marking objects? How do we communicate by, through and with objects and artifacts? Why and how do objects exhibit an aura [11]?

Not surprisingly, nearly every manufactured item already contains a unique "tag". Better recognized as a barcode, this form of tagging has been socially re-purposed by digital, wireless tools to generated independent dialogs about these objects, empowering communities. Similarly, where will radio frequency identification tags (RFID) situate themselves within this space of social community dialogue? How will we tag wireless 802.11 access points? Where will such technologies and techniques give rise to play?

MESSAGE PLAY

From childhood note passing to adult flirtations couched in amusing metaphors, we find humans engaged in message play. We elucidate this continuing motivation for message play by example: the wireless pager. The initial usage model for pagers was that a person would send their phone number to another individual's pager; the recipient would dial the received number on a phone and establish a voice connection. What evolved was an entirely different usage model. In fact a new cultural vocabulary of numerical messages arose. For example, users defined new encodings such as, "When I send '1-2-3', that means 'thinking of you', '4-5-6' means 'feed the dog'."

Similar playful re-appropriate occurs with our current personal messaging tools such as cell phones and SMS text messaging. One teen expressed, "I carry my mobile phone around all the time, even in the house...It's like my little baby, I couldn't live without my mobile, I bring it into the bathroom with me." Similarly, another couple on separate continents (and hence time zones) used SMS to send playful awareness messages to each other with no intention of engaging in dialogue. "When I get up in the morning I send her an SMS message that I'm 'Now making coffee' just to let her know what I'm doing...I guess I want her to be able to imagine me in the kitchen making coffee."

This urge to send playful messages is evident in almost every personal messaging tool in current use: instant messaging (IM), SMS text messaging, mobile phones, and wireless PDA's. For example, corporations created the service of "Caller ID", but its appropriation as an awareness messaging tool through "one ring calls" became

a preferred form of message play between users. Fundamentally, humans engage in play and will certainly continue to socially repurpose mobile technology to satisfy this necessary human urge.

This leaves numerous open questions for debate: How will other forms of ubiquitous mobile message play be created? Engaged? Deigned for? Encouraged? Diverted? How will mobile play affect human relationships in terms of trust, persuasion, and conflict? How will we map current messaging techniques onto and across such systems? What direct and side effects will result?

PANELISTS (Alphabetically)

The following is an alphabetical listing of each of the panelists that will participate in this panel along with their position statement on this topic and a brief biography.

Barry Brown

Biography

Barry Brown is a research fellow and ethnographer at Glasgow University where he explores social issues surrounding human leisure and technology. Recently his focus has been on various leisure enabling technologies such as music listening, museum visiting, and tourism. He has edited a highly respected book that deconstructs many aspects of mobile phone usage [12]. Barry has also investigated the parallels of video game interfaces and its relationship to ubiquitous computing [13].

Position Statement

Designing technologies for leisure presents a number of challenges for technology designers. It is not just that the goals in leisure are more diffuse, or that there are a more diverse set of requirements. In leisure the aim is enjoyment, rather than productivity. *How* something is done is often more important than the end result. For the tourists we have studied, using a guidebook was enjoyable *in itself* as well as contributing to their visit [14]. For music enthusiasts finding new music is not just a goal but enjoyable process *in itself* [15].

The importance of enjoyment as part of the experience of using a technology is something we, as ubiquitous computing researchers, can learn from gaming software. For example, gaming software often develops a user's skills in a particular technique, and when that technique is perfected *discards* that technique to encourage the development of new forms of competency. In this way games maintain an interest in learning new and more advanced skills.

Games are also very much social activities (both co-present and online), and much can be learned from how these social experiences are pleasurable and shared. In our current work we are studying groups at play – in situations such as go-kart racing. We are interested in observing how discussion and socializing around an event becomes a powerful component of the enjoyment of the event itself. By designing social support for reflection and follow-up

discussion directly into the interface of such systems, the overall experience of the technology can become a more enjoyable one.

Bill Gaver

Biography

Bill Gaver is a Senior Research Fellow at the Royal College of Art. He has pursued research on innovative technologies for over 15 years, working with and for companies such as Apple, Hewlett Packard, IBM and Xerox. Recent projects have included electronic furniture for public areas, information appliances that emphasize the emotions and spirituality, and the creation of compelling public experiences from urban pollution sensing and data from Antarctic lakes. He is a principle investigator on Equator IRC, in which his group is exploring digital devices that offer ludic opportunities for the home.

Position Statement: Designing Ubiquitous Play

Play is ubiquitous. Not only do we play when we're supposed to play – when we're gaming, or blogging, or flirting – but we play when we're doing other things as well. We play with ideas, with interpretations, with our own identities. We're curious, we explore, we fiddle, and doodle. From this point of view, play is not an activity so much as an attitude, one in which we're relatively free from external constraints and defined tasks.

In my research I am trying to understand how to support playful attitudes without defining systems as being 'for play.' For instance, in the ongoing Equator IRC, we are looking at technologies for the home that encourage people to reflect on their own activities, to try on new roles, to day-dream and speculate. None of the things we are designing could be considered 'for play,' yet they all depend on a playful frame of mind. They are intended to sit in a middle ground between work, consumption and entertainment, encouraging people to wander and wonder, rather than focus on clear tasks.

How do we design to allow play without dictating it? A couple of factors seem important. First, we need to embrace subjectivity – our own and others' – in our designs. Rather than seeking to create experiences based on our knowledge about typical desires and activities, it is often more compelling to design for the idiosyncratic and unusual. Second, ambiguity and openness are important factors in creating systems that people can appropriate into their own lives. Rather than dictating what a system is for, or even what it means, it is often more effective to design systems that are suggestive and open to interpretation. For it is in the act of making meaning from ambiguous situations that we are often at our most playful.

Marc Smith

Biography

Marc Smith is a research sociologist leading the Community Technologies Group at Microsoft Research.

The focus of the group is to explore and build tools to support association and collective action through networked media.

Position Statement

Play, in the form of exploration, direct manipulation, and collaborative interaction is a critical component of social life. Information technologies, despite their extensive uses in the forms of “games” often lack a playful quality and impose instrumental usage patterns. This often leads to significant underutilization of technical capacities as users avoid exploration for fear of stepping beyond the scope of their instrumental skills. The emerging capacities of ubiquitous computing suggest new opportunities for encouraging playful exploration of technical systems by supporting the primary sensory channels of feedback, direct manipulation, inscription, and mutual awareness. At question is how the playful uses of information technologies will be domesticated or will potentially rupture existing social institutions.

Nina Wakeford

Biography

Nina Wakeford is Director of the INCITE research centre at the University of Surrey, UK. Trained in anthropology and sociology she studied for her PhD at Oxford University where her thesis focused on the sociology of risk. For the past ten years she has been working on sociological approaches to new technology production and consumption, including studies of email discussion lists, web pages, mobile phone use, web logs and public internet access points, including wireless. One of her current projects uses the route of the number 73 bus in London as a way to sample usage of digital content in the city, including web pages, text messaging and blogging. She is also studying the way in which ethnographers work with interface designers, artists and engineers, and what they learn from each other.

Position Statement

A sociology of ubiquitous computing necessarily involves thinking about the linkages between space and social practice. One way of engaging with digital content in the city of London, for example, is to create mundane light content which might be characterized as playful in nature. Teasing, joking, shaming, and pranking are all routine activities of the set of young people in the UK who characterize themselves as heavy users of mobile phones.

Creating a sociology framework around the concept of mobile play involves thinking about the many wider social and structural processes in which these activities are embedded. For example to characterize an activity as 'playful' draws on wider cultural assumptions of risk, trust and blame. It may also involve notions of intimacy and power. The contemporary sociology of childhood can aid

here: young people are no longer seen as invisible and inconsequential subjects, but active actors with agency. This explains the kinds of digital play which we have observed amongst young people both on the 73 bus route study and which they have reported in in-depth interviews.

PANEL PLAYTIME

Clearly, the focus of this panel is to use the synergy of the panelists and audience participation to elucidate the grand research challenges in the area of mobile play. As expected, individual panelists will present positions and relevant work to support their arguments at the panel. The inevitable insuring discussions across panelists and audience will hopefully reveal the foremost research questions associate with mobile play.

However, we are also interested in consciously creating scenarios during the course of the panel that allow the audience to freely enter into a playful state of mind. Not literal game play, but play as a vital part of brainstorming, self-discovery, identity, and creativity.

Come out and play!

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