URBAN TAPESTRIES sensing the city and other stories

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researching, developing and facilitating creative innovation

Urban Tapestries: sensing the city and other stories

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Urban Tapestries for me is like "Scent of a City". It's people 'leaving', 'smelling', 'hearing', and possibly even being led to 'tasting' a city.
...It's intuitive, unobtrusive (if you are using it publicly) and actually quite playful.
Posted by Priya at December 12, 2003 05:47 PM

Abstract

Drawing from my experience as a team member on Urban Tapestries and Michel de Certeau's Walking in the City (1988) this paper will explore how people narrate, annotate and explore the city from different perspectives provided by pervasive wireless application systems. It will look at how emerging technologies are enabling a reconfiguration of relationships to place, communities and activities and will briefly explore these complex shifts in social and cultural behaviours through the experimental trans-disciplinary research approaches of Urban Tapestries.

I have titled this paper *Urban Tapestries: sensing the City and other stories* as it became apparent when analysing the posts from the weblog of the Urban Tapestries Public Trial in December 2003 that participants were increasingly articulating their experience of the project using a multiplicity of sensory language. I intend to examine how users engaged, through a wireless location based application system in a discourse with the city and other users and how they imagined multi-sensory annotations of the urban landscape.

Introduction

New forms of information communication technology are increasingly mediating our experiences of public and private space. From traditional information provided by A-Z maps, street signs and traffic lights we now use a plethora of new technologies such as mobile phones, satellite navigation systems, GPRS equipped PDAs, digital cameras, Bluetooth, WiFi, RFID, the internet and weblogs to engage with others and the fabric of the city itself.

They affect our sensory experience of the city by augmenting how we look, listen, talk and connect, search and find objects, places, people and information. In turn our language is being adapted to our device's reactions to ubiquitous computing environments as they sniff, see and read things we ourselves cannot.

Such forms of information communication technology are a 'mirror' and a 'house of mirrors', to borrow from Susan Leigh Star's analysis of the computer (1995:6-7). She says;

'We are in a transition regime with respect to information technologies: will it make our lives easier or harder? More or less intimate, peaceful, productive, global? We don't know yet, and in some larger sense, may never know, exactly what it is we have gained and lost in the wholesale adoption of information technology and integrated media. Because computers are at once intimate and personal, tied up in work, education and entertainment, they may be so woven into the fabric of our lives that standing back' is completely an illusion. They are, as I have written elsewhere, not trojan horses but trojan doors – unfolding out into worlds embedded in each other without end. (1995:8)











Just as Star contemplates the effects of the computer, we don't know what the long-term effects of ubiquitous computing and location based wireless networks will have on society. What we do know is that rapidly emerging adoption has created a field for inquiry not only about what they are, how they are created, but what they are intended for versus what how they used and what reactions they catalyse.

I was thinking about this paper whilst travelling to Cornwall. I was on a train, shoulders hunched over the laptop, fingers typing, headphones plugged in to Apple music software playing mp3's downloaded from CD, my mobile sits on the table in front of me with my digital camera ready to catch occasional clear country views from the window. I think about Du Gay writings about the walkman;

> It is virtually an extension of the skin. It is fitted, moulded, like so much else in modern consumer culture, to the body itself... It is designed for movement - for mobility, for people who are always out and about, for travelling light. It is part of the required equipment of the modern 'nomad'... (1997: 23-4)

This paper aims to briefly explore how people's experience of urban environments is affected by location based application systems, what behavioural shift is experienced by users and how projects like Urban Tapestries manage the trans-disciplinary process from concept to prototype development.

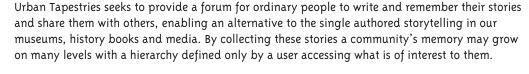


Description of Urban Tapestries

Urban Tapestries is an interactive location-based wireless application system, which simply means information can be embedded in locations. Like the web, it intends to provide a platform for shared knowledge that lives beyond its creator, however being location based this means that rather than consuming or creating information anytime and anywhere, stories are embedded in a specific place.

Using hand held devices such as mobile phones or PDAs people can narrate their own multimedia content using text, drawings, images, film or sound. They can add new locations, content and the 'threads', which link them together or simply read other people's content in any order they choose.

The context Urban Tapestries aims for is one in which a community organically records layers of histories, experiences and events that are linked to familiar locations and accessible to everyone. As the name suggests, it aims to knit together many layers of narrative and discourse over the topography of the city.





The trans-disciplinary Urban Tapestries team featured an artist, information architect, interface and interaction designers, technical experts as well as social scientists. I worked predominantly as a researcher and system content manager. It was trans-disciplinary rather than multidisciplinary as we all needed to learn a little about each others disciplines in order to produce the experimental project rather than simply work as a jigsaw, each contributing an individual unit to construct a whole. We were also geographically dispersed from Texas to Scotland to London, so meetings were regular technological experiments in themselves, with regular wiki updates, video conferencing and instant messaging.

Methodology

The information for this paper was gathered from direct experience of working as a team member of Urban Tapestries from September 2002 to December 2003 and from the feedback posted on the weblog by participants of the Urban Tapestries Public Trial held 6-14th December 2003. I will look at the non-textual methodologies used to encourage the varied and layered responses and engagement by prospective users to the concept as a whole. They include bodystorms, short experimental films, websites, wikis and weblogs. All were in place in the build up to the Public Trial and all except the wiki were available to participants during the nine-day event. I will briefly run through their design and application.



Bodystorming Experiences

Bodystorming is a physical brainstorm and a playful acting out of ideas. It was designed to open up the project to the widest possible audience and focus on the imagined potential of the application rather than the physical device interface. As a result there is minimal electronic technology involved, instead it consists of a large floor map of an urban area, which in this case is Bloomsbury, laminated printed pages of several screens of an iPAQ, various coloured post-it notes, pens, stickers and the participants imagination.



During a two hour period, people follow established 'threads' of stories via markers on the map and read the located content on the coloured coded laminated iPAQ pages. Then using coloured post-it-notes, stickers and pens, they then author their own content and stick them on the map. By the end of the session the map is covered in coloured pockets of content, each of which is walked through by each author to share and discuss with other participants. Throughout 2003 Urban Tapestries hosted various Bodystorming Experiences with academics, designers, artists, industry people, senior citizens and the Marchmont Community Centre intergenerational group.



At one event with the intergeneration and arts and crafts group we specially designed a table top map with larger writing and had to push to combat their 'oh I don't know anything about technology' protests. Looking over the map, one 80-year-old English lady pointed to the location of Camden Town Hall and told a story of her wedding there over 50 years ago. A young Bangladeshi girl, who had not spoken until then, responded to this story by saying her sister had only recently been married in the same place. Suddenly a location on the map became a catalyst for conversation between the two women. The project serendipitously excavated a shared experience, a common thread in their very different lives.

John Urry (1995) talks about how a location can 'ignite' the past.

The voyeuristic and distracted nature of the encounter with the urban means that memories of the past can be ignited by some current event. It is only with distracted perception that this kind of chance linking of the past and present can take place and undermine the oppressive weight of past traditions. (1995:25)



Short Experimental Films

We first began experimenting in films to gather together thoughts and ideas for issues such as imagined user scenarios and the process of interdisciplinary collaborative teamwork. These films created a narrative flow to link disparate visuals and text and quickly became useful research tools to spark discussion within the group and explain our processes in wider audience events. They are also an interesting documentation tool for investigating the research in hindsight as they enable an alternative development trajectory. They brought together not only a mix of ideas but also a collaboration in skills with maps, illustration, film, sound recordings and photos.





Public Trial

The trial was held in Bloomsbury over a nine day period in December last year. 100 participants trialled the prototype in individual two hour sessions during which each participant was trained to use the HP iPAQ 5459 running the Urban Tapestries client software, provided with a map and encouraged to drift through an area installed with an 802.11b mesh network. Most people booked their sessions online whilst there were limited availabilities for people who wandered past. The temporary office was equipped with a bodystorming table, various informational posters and postcards, laptops launched with the weblog and iPAQs loaded with the Urban Tapestries client.

Weblog

A weblog was designed to build awareness of the project leading up to the public trial and during the trial participants were encouraged to blog a response to the session. In this way the weblog became an evaluative tool for participant experiences and being an open platform application others who could not attend or who wanted to add more later could do so.

My focus for the following analysis is on the user experience and imagined usage by participants at the Public Trial and documented through the weblog comments. Location based application systems like Urban Tapestries are currently too advanced for true technological capacity and as a result most users' responses are tinged with frustration of the slowness of the system yet it effectively makes the argument that, as a participant in the trial suggests 'ideas should lead technological innovation, not technology'.

I will briefly run through four areas of findings from the weblog commentary;

- ı. Sensory awareness
- 2. New perceptions of the landscape
- 3. Conversations with the city
- 4. Physical connectivity

Discussion of Findings:

1. Sensory awareness

For many participants Urban Tapestries provides a catalyst to re-experience the city and connect with other users. They describe their heightened sensory awareness of the city and rather than just a visual experience, Urban Tapestries stimulated them to sense other elements of city life. During the trial the prototype devices were restricted to text-based content only but it is intended that users should be able to record sound, draw pictures, take photos as well as narrate text in subsequent prototypes. Many participants remembered this when imagining future scenarios of use. Jennifer expresses her delight in being part of a collective experience through the knowledge of other people's stories.

> I love the idea of creating or reading individual stories or information about a city. It is like a bunch of short stories threaded together in a common area. It is almost like walking around in a book of short stories, except you can feel, hear, smell, and see the same things that the other authors of the pockets and threads did.

I created threads about sensory experiences in the city...the smell of the flower shop, or the warmth of the cafe. These are probably the most basic of thoughts, but these aspects were the first to catch my attention while walking around. I enjoyed reading other peoples threads. I often wonder what other people are thinking about, if they observe the same things as I do when I am walking around.

There is a very personal aspect of reading other peoples threads and that makes the experience really great.

Posted by Jennifer at December 11, 2003 07:47 PM

MIchel de Certeau considers the urban collective experience when he writes about footprints on the streets.

'Their swarming mass is an innumerable collection of singularities. Their intertwined paths give their shape to spaces. They weave places together'. (1998:97)

He argues that whilst tracing a path on a map might show personal routes and paths, they are historic references only. Their routes have already been walked and actually miss the act of passing. For him the act of passing is spatialised. The Urban Tapestries map became not only a record of traditional traces of human experience but of places where events occurred, where people paused, created, recorded and documented moments. Urban Tapestries pockets became traces of spatial record, of individual capsules of captured time and space.

Gomes talks of his wanderings in this new conceptual space:

...the conceptual experience of walking in a content rich environment was interesting – as it was possible to speculate further about where this will go. ... I feel like I wanted more detail and more personal experiences, rather than information I wanted a sense of presence from a previous passer by.

Posted by gomes at December II, 2003 03:38 PM

This idea gives rise to the visual notion of Urban Tapestries' location-based pockets of information rather than linear traces on a map. The metaphor of Urban Tapestries describes the act of co-creating a tapestry of individual threads, knots, stitches and pockets of information embedded in a physical place, each one, building upon the next; growing organically and gaining new shape with each new addition.

During the trial participants were able to author their own content and upload it to the shared system. Within days certain areas on the map began to look like messy knotted threads, overlapping and joining together to the point of obscuring the map below whilst other areas remained relatively clear. These intense pockets contributed to a slowing of the system and often participants experienced crashes in these areas, a curious reiteration of physically traversing similarly busy streets and sidewalks in the city.

There was also a growing sense of being responsible for authoring content. Some participants became acutely aware of the presence of other users of the system and felt a sense of social obligation or accountability for their content. David and Rebecca describe their experience:

Knowing that there was content around me made me think and behave differently in otherwise familiar streets and squares. I looked around more, and thought more about information I could usefully offer to others.

Posted by david at December 13, 2003 04:09 PM

It changed my experience of my environment – without consciously trying, I became much more aware of things around me. I enjoyed being able to share my experiences – normally, such passing thoughts would be forgotten or would seem insignificant by the time I had someone to share them with, but they make sense within the context of the environment. My content was affected by an awareness of people reading them in the future – it was different to if it was just a personal device. As well as the official accountabilities of not writing anything offensive, there were much more subtle accountabilities to future readers – writing something that is sufficiently



interesting and relevant. Posted by Rebecca at December 13, 2003 01:33 PM



2. Changed perception of the landscape

When de Certeau stood on top of the World Trade Centre in New York he occupied a privileged position of "seeing the whole". (1998: 92). He became a voyeur on the collective patterns created by the urban dwellers he called 'wandersmänner whose bodies' he says, 'follow the thicks and thins of the urban "text" they write without being able to read it.' (1998:93).

New wireless technologies are equipping the wandersmänner to see their patterns and others in the city. They have the effect of transporting the user from place to place, enabling them to both distance themselves from one space whilst embedding themselves in another. They can simultaneously see the macro and the micro. Mobile phone users connect with people far away, mobloggers and webloggers capture the granularity of their everyday lives and patchwork them together on the internet, satellite navigation device users read the city from thousands of miles away despite being embedded within it. Application systems like Urban Tapestries enable users to see and add to a tapestry of collective experience.

Many participants' blogs described how UT changed their perception of the area. Even locals familiar with the streets experienced certain changes to their regular immersions;

> I am a local and so I was intrigued to see how people were approaching spaces I am familiar with. I found the narrative aspect fascinating and compelling Posted by luci at December 16, 2003 06:58 PM

I became particularly aware that I normally treat this area as a thoroughfare and therefore miss the fascinating architecture. Also, it is a part of the city that deserves more interest. Perhaps the point also that modern life does not encourage us to be present to the environment one travels through, whereas using the ipak encourages one to absorb more from the surroundings and appreciate details that you can then inform others about or share in their delights and discoveries.

Posted by Stewart Lane at December 6, 2003 05:19 PM

For some participants the project offers a sense of collectively documenting urban change, what one person cannot see, a community might be able to piece together. Some blog posts refer to a desire to see lost histories of landmarks, hidden interiors of buildings or activities of inhabitants.

> Enjoyed reading content created by other people. Made me think about what's happened throughout history... and behind the various walls. Would like to have read about discourse between people that had passed through the same spaces, and experienced similar things.

Posted by Noam at December 14, 2003 07:54 PM

de Certeau also agrees that the fabric of everyday life is difficult to read on the surface and requires a deeper investigation to reveal interior workings. He says;

> Escaping the imaginary totalizations produced by the eye, the everyday has a certain strangeness that does not surface, or whose surface is only its upper limit, outlining itself against the visible (1988: 93).

He proceeds to explore this through three aspects; specific activities, a 'poetic and mythic experience of space' and the concept of a city constantly on the move. He thinks of the city in terms of layers, which is useful for thinking about Urban Tapestries, whereby a 'metaphorical' city exists over a 'planned and readable' city (1998: 93) He goes on to visually express this idea through the concept of a rich fog of personally appropriated meaning floating over the urban landscape;

> A strange toponymy that is detached from actual places and flies high over the city like a foggy geography of "meanings" held in suspension, directing the physical deambulations below. (1998:104)

Technology encourages people to narrate and navigate their experience of a city and annotate them verbally, visually or textually which means collectively the city is amass of stories. According to Mike Crang in Cultural Geography (1998) spaces become places when they become 'time thickened'. He says;

> They have a past and a future that binds people together around them. It enables people to define themselves and to share experiences with others and form themselves into communities. (1998:103)

In a similar way Urban Tapestries can be seen as effectively gathering and supporting a myriad of personal, historical, social and political layers in rich, hyperlinked multi-media forms. It excavates and projects a city above and below the familiar social and cultural world. Just as de Certeau references Renaissance painters who experimented with perspective that no one had seen before, Urban Tapestries hints at a sense of place previously unseen and offers a potential way of entering, contributing and sharing it. (1988:92)

Some participants gained an insight into this virtual geography and the significance it might have when collectively shared.

> it will be fascinating to see what virtual geographies might emerge, overlaid on our cities, and whether, like the geographies we have in our heads and trace in our journeys, they gradually eclipse the physical ones from which they spring. Posted by Ant at December 13, 2003 06:18 PM



3. Conversations with the city

De Certeau draws comparisons between walking and language. He calls it the 'rhetoric of walking' and describes the similarities between the constructs of language and a walker's negotiation through the city. (1998:100).

The art of "turning" phrases finds an equivalent in an art of composing a path. Like ordinary language, this art implies and combines styles and uses. (1998: 100)

Just as no two people's use of language is the same, no two paths through the city and no urban experience could be the same. Despite the definitions of the trial area, every participant imagined a unique use or application of Urban Tapestries. However many found the task daunting at first, initially unsure about what they would author on the system until they opened themselves to the city. They engaged in a conversation with the city, rather than just passing through it. Then they were surprised by the stimulation of urban spaces, faces both familiar and strange to them and the architecture of the city and its moods; a catalyst for creative thinking.

Once I was out on the street I had lots of ideas about the trails I wanted to leave - landmarks around, my mood, my engagement with the environment stimulated lots of thoughts. But I wanted to capture these with image and sound as well - a picture of now.

Posted by anne at December 8, 2003 05:43 PM

There was a sense of immediacy created by the technology, of capturing the transient and the now, like an exciting conversation, rambling and overlapping, where sentences remain unfinished and words interconnect with gesticulations and body language. Many participants talked about random or serendipitous narrative that had to be captured at that specific moment or else it was lost. Lawrence's moment was lost when he experienced technical difficulties.

> My mind started drifting and I was eager to start writing a fictional story about the people entering the cafe, to be picked up as a thread by someone else on another day, a rambly fictional story of a real place. But I couldn't post a thread and the creative moment was lost. Shame.

Posted by Lawrence at December 11, 2003 07:40 PM

Other participants were stimulated by the environment and aware that it would affect them in different ways depending on their own moods.

> I'd like to go out on different days in different moods and sometimes write biographical stuff, sometimes complete fantasy.

Posted by Jemima at December 14, 2003 07:39 PM



4. Physical connectivity

There is much written about the potential isolating effects of technology use in public spaces. Does using a mobile phone negate intimate physical space as it connects to another personal space? Does using a mobile phone or pda in the street reduce the potential for real social contact? Interestingly for some participants the UT trial some people brought them closer to other users of the system.

> Other people's pockets intrigued me. Fun, zany or informative, or even downright lies. My favourites were places that revealed little moments in other people's lives. It made you look at the people around you and feel like you were only one or two links away.... Following a single thread means often following a single personality. Posted by Pascal at December 14, 2003 06:13 PM

For others, it provided a privileged intimacy with an appropriate distance. One participant referred to it as a process of 'eavesdropping'.



Janet expressed her interest in the collaborative closeness of co-creating content with others and the place itself. She talks of the act of recording travel memories that cements the event for future reference that goes beyond photos in an album.

> I did the trial with a friend, we found it was a very absorbing social experience - a collaborative effort not at all isolating.....I can see that it would give new dimensions for experiencing locations. In the past I have travelled a lot on my own, it would have been good to be able to connect to human experiences of some of the places - a beyond the guide book sort of thing. It would also be a way of reinforcing my own memories of little things from places I have been to - when these experiences are not with others there isn't such an easy way of revisiting them - you have no one you can say 'do you remember when ..' to.

Posted by Janet McDonnell at December 13, 2003 01:51 PM

There are many projects like Urban Tapestries currently exploring the social and cultural frameworks for pervasive computing just as there are many questions which remain about whether they will succeed in offering a collective space for shared urban experience, a library for community experience and history and a shared open source space for walkers to gain a new perspective on their everyday narratives?



This is just the beginning of analysis into this area of the Urban Tapestries project as it nears the second public trial period. Only time will tell whether it develops into what de Certeau might passively describe as a 'chorus of idle footsteps' or a more vigorous description by a participant on the last day as 'information jamming in real-time'. (1998:97)

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Weblog quotes:

All weblog comments quoted from the Urban Tapestries weblog set up for the Public Trial during 6-14th December 2003:

http://urbantapestries/weblog/

Credits:

This paper is based on collaborative research and evaluation conducted by Proboscis in partnership with the London School of Economics Media & Communications Dept during 2003 and 2004. The other team members whose work has contributed to this paper were: Giles Lane (Proboscis Principal Investigator & Project Director), Professor Roger Silverstone (LSE Principal Investigator), Alice Angus, Danny Angus, John Paul Bichard, Rachel Murphy, Victoria Peckett, Zoe Sujon and Nick West.

Images:

All images taken by the author except Fig 4 and Fig 6 taken by Alice Angus/Giles Lane (Proboscis).

Katrina Jungnickel is a researcher and an associate of Proboscis. She is a member of the Urban Tapestries project team.

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