

Children at the Urban Frontier

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The emerging spatial capacities of new wearable and mobile computing generate new possibilities of association and new spatialities within the city. Most of the current theorizing around these issues makes little or no mention of children and their current and future relationships to these technologies, even though they have the potential to be used to enhance children's independent access to outdoor, public, urban spaces. If this is so, then children and the communities they rely on must have a stake in the development of these new urban forms. Children should be acknowledged as participants in urban communities, and be enabled to design, place and use mediascapes in the outdoor space, as freely as adults.

Mobile Bristol has developed a toolkit of software that enables the user to annotate and augment the real, physical space with a digital media landscape. Projects have involved collaboration with a variety of individuals and groups: artists, educationalists, media producers, and schoolchildren. These collaborations not only produce interesting content for the end-user audience, but give grounded insight into potential future uses and attitudes to the technology, and valuable feedback in to the iterative development of the toolkit.

"A New Sense of Place?" (NSOP) is a Mobile Bristol project in partnership with researchers from the Community Information Systems Centre at the University of the West of England, and Ordnance Survey Research and Innovation. "A New Sense of Place?" refers to the potential of the technology to re-engage children with their local environment. It introduced different groups of children to the toolkit, giving them free choice in the sounds they chose to populate their virtual landscape. explore and map their local environment before introducing them to hands on experience of using the toolkit to develop their own digital landscape of soundscapes over an indoor or outdoor space [1,2,3]

All children who have participated in the NSOP workshops have been able to conceptualise and design their personal digital landscape, and have used their experience of using the tools to make suggestions for future applications that may be grouped into the following three dimensions:

Mobility and safety – relating to going outdoors, locating, marking and tracking, negotiating with parents/guardians and negotiating fear and risk

Social – relating to the above characteristics with the addition of meeting with peers and friendship groups, and sharing experiences such as play, shopping, and listening to music

Information – relating to school, transport, shopping and news

The children were struck by the potential of the technology to allow them to negotiate increased ranges of mobility with parents. In a similar way to their current use of mobile phones to keep in contact, they thought that a 'benign' surveillance tool would allow them increased freedom to roam as their location could be monitored remotely.¹ They were also keen on its use among friendship groups as a way of keeping track of each other.

As with the world wide web, there is potential for many types of applications and use. Some of these may generate new forms of commercialised child-play and child-supervision facilities. They may also be used in quite draconian surveillant ways, with some parents and guardians developing new forms of temporal and spatial controls. It is quite possible that both positive and negative applications of these technologies, in terms of childhood, will exist side by side as they do in relation to other childhood-technology interactions.

The positive aspect is the promise of these new technologies in their quintessentially spatial mobile outdoor-use capabilities. They may offer children a ways of (re)occupying certain spaces in the city by offering a means of negotiating risk and fear, and of permeating adult-ordered geographies of the city with alternative (virtual) children's geographies. The possibilities of the technology seem vast and unpredictable and will not offer a panacea for the problems of children's mobility, but will always need to be deployed in conjunction with other initiatives (such as traffic calming) to retrieve urban spaces for childhood.

Questions for ongoing research include:

How will new wearable and ubiquitous technologies interact with childhood?

Could their use as 'benign' surveillance tools enhance children's mobility?

How can such devices be steered towards enabling rather than constricting applications?

What fears will adults have around children's appropriation of the technology?

What content will be deemed suitable for children to access and create?

Can the technology allow the children to feedback their

¹ The age of the children was doubtless a factor in attitude, we worked with two groups of ages 9-10, and 11-12.

experience of the city, so that their knowledge can be used to develop the physical space alongside the virtual?

REFERENCES:

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PERSONAL BIOGRAPHY:

Dr Constance Fleuriot is a research associate from the Department of Computer Science, Bristol University and one of the principal investigators in lifestyle and experience design on the Mobile Bristol project. For the last two years this collaboration between the University of Bristol, HPlabs and the Appliance Studio Ltd. has been exploring the value of pervasive, mobile and situated media in Bristol, UK. Information about Mobile Bristol projects is available on www.mobilebristol.com. She is currently planning the third phase of 'Mobile Bristol: A New Sense of Place?' which will be working with various user groups to develop located community narratives and furthering the development of the Mobile Bristol software.