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Designing Participant-Generated Context into Guided Tours

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ABSTRACT

150 words or less. [Article copies are available for purchase from InfoSci-on-Demand.com]

Keywords: Built Environment; Guided Tour; Out-of-Context; Recontextualisation;

Seeding; Threading

INTRODUCTION

I am concerned to explore how mobile learning may evolve a set of processes that involve learners participating in and producing tours of the urban built environment that challenge notions of perceived authority and inaccessibility. In this, the learner is facilitated to construct new experiences, understandings and perceptions that reconfigure

the role of the guide in tours. I have originated and designed a number of 'learning through touring' projects based in London from 2005-2007 located in everyday Deptford in South East London and institutional buildings such as the Victoria and Albert Museum (V&A) and the British Library. Findings from these projects, Mudlarking in Deptford, Transitional Spaces at the V&A and Cracking Maps at the British

Library have contributed towards the production of key concepts of 'seeding' and 'threading' that aim to stretch ways in which participants may generate context in guided tours.

In this article, I describe and link a range of theoretical ideas that contribute to an interdisciplinary perspective on mobile learning in guided tours that has both informed and been informed by the practice-based projects. Here, the tour is conceived as learning activity in which participants make connections between past and present, one site and another supported by the guide who engages multiple perspectives and voices of a building in bringing about opportunities for weaving context. The article is organised into three main sections. The first, 'learning-enabled buildings' makes a case for understanding the built environment as active in the design of mobile learning activities in tours. This section also proposes definitions around 'site', 'situation' and 'context' that are relevant to developing the concept of learning-enabled buildings. The second section focuses on 'out-of-context' and 'recontextualisation' as creative processes in learning, drawing on the work of theorists and practitioners in art, architecture and archaeology to explore how mobile learning involves using attributes of 'noticing', 'stumbling upon' and 'connecting'. The third section concludes the article with a framework for mobilising learning through touring structured on key concepts of 'seeding' and 'threading' that enable participants in guided

tours to produce and weave context in location.

LEARNING-ENABLED BUILDINGS

In 2007, Mike Sharples suggested that the last ten years has witnessed a growth in mobile learning 'from a minor research interest to a set of significant projects in schools, workplaces, museums, cities and rural areas around the world. (Sharples, 2007a) A mobile learning community has evolved through these projects and it has been argued that this somewhat organic development, whilst important in allowing multiple perspectives on mobile learning to thrive, has also resulted in a form of pedagogy and practice that is difficult to define. (Winters, 2007, p.5) The term 'mobile learning' can be described as one still in the process of defining itself and is interpreted differently by the various individuals and organisations that have an interest in considering relations between mobile technologies and learning. Sharples describes three phases of development in mobile learning over the last ten years. He suggests that the first phase was characterised by a focus on handheld technology for formal education and training in which there was a concern with technology implementation and fixed locations such as classrooms. The second phase saw the development of 'learning across contexts' in which the emphasis was on 'how people learn across locations

and transitions'. Sharples suggests that there was a focus on learning outside the classroom during this phase and projects based on field trips and museum visits evidenced this shift in focus from technology to learner. He describes a third phase of mobile learning as 'learning in a mobile world'. The elements for this vision he suggests are:

'Learning spaces - new types of technology-enabled indoor and outdoor space for learning, communication and knowledge working

Pervasive technology – display screen on tram seat; interactive map of the city; activity trails; place notes

Participatory design-technology to enable people to be actively involved in the design of their physical and electronic, environment' (Sharples, 2007b)

These 'phases' provide a platform for critically engaging with the development of mobile learning with an awareness that they can used to pose questions and open up such discussion rather than present a seamless future scenario. Of particular relevance for this article is Sharples' emphasis on 'learning-enabled objects, buildings, cities' and that public spaces and buildings should be designed to support learning and creativity and how this might engage people in the participatory design of their environments. His idea of learning-enabled buildings can be understood through a concept of augmenting the built environment with digital information that can be activated by learners using ubiquitous

technologies. The concept of digitally augmented environments can be seen to work in different kinds of urban location-based games and activities in which participants respond to located data using mobile devices as they move around a location in which a key aim is to make the 'invisible, visible'. (Williamson, 2004) For example, Riot1831, a project produced by Mobile Bristol in April - May 2004 experimented with ways in which the movement and location of participants in Queen's Square, Bristol connected with fragments of an audio performance of the riot that took place there in 1831:

It's 1831. Bristol is a tinderbox and the spark is Sir Charles Wetherell, the city's visiting magistrate, widely loathed for portraying the city as anti-Reform. The people are rising up and thousands have filled Queen's square to vent their fury and demand the Vote. [...] In your backpack there is a receiver which 'knows' the location of the GPS satellites circling the globe. The receiver transmits your position to an iPAQ computer, triggering a sound file which plays through your headset. When you move on, you will receive another file.

(Information sheet for 1831 Riot! Available HTTP: www.mobilebristol. com and www.roaring-girl.com Accessed April 2004.)

Projects such as this have informed the development of active engagement with historical, social and cultural events by enabling the mobility

of participants using location-sensitive mobile devices. In such projects context awareness operates through the ways in which the application is designed to provide participants with a context that relates to their location so that they virtually 'experience' an event by triggering media files in response to their own movement. The method of using sound files in 1831 Riot! provided the writers and producers of this event with opportunities to experiment with how participants 'heard' the story. They designed a range of sound files that allowed participants to capture a sense of the 'ebb and flow, hilarious moments, even peaceful moments' of the riot by walking in and out of the audio segments virtually layered over Queen's Square. This enabled participants to determine to an extent which audio segments they heard, for how long and in what order and make personalised interpretations of the subject matter. As a participant in the event, I picked up threads of different storylines as I moved around the location and became familiar with individual voices playing parts in the story that helped to make connections between them. Talking with one of the Mobile Bristol team afterwards, it was clear that some participants found the lack of linearity confusing as they were expecting a 'straightforward' account of the riot rather than the sense of 'ebb and flow' the audio material presented.

I suggest that this project was innovative in experimenting with participation through movement and provides opportunities for exploring interaction

in such events. To consider the performance of 1831 Riot! as an opportunity for mobile learning, the discussion of interaction focuses around the nature of the relations between participants and their location in creating contexts for determining how learners may have opportunities for taking action. In this way, location can be understood in its capacity for interaction rather than as a passive 'background' to the activity. Sharples' description of the dual-dimension of 'learning-enabled buildings', that buildings may support learning and creativity and that people may be engaged in the design of buildings, allows us to reconsider the common definition of site concerned with the geographical location or the legal ground space of a building as one which instead emphasises its role as a situated learning environment. Here, both geographical location and site are dynamic in affecting relations between learners and between learners and buildings if, as Sharples suggests, context is woven through the mobility of the learner rather than predefined by others.

Architectural historian Thomas A. Markus focuses on the ways in which buildings shaped relations between people in the Industrial Revolution and the Enlightenment in England between 1750 and 1850. (Markus, 1993, p.xix.) I argue that his work is relevant to understanding how buildings may be considered as active in producing relations between people and their environments. Markus suggests a powerful 'property' in buildings 'containing

people in space', and that buildings are unique as 'containers which interface products with people'. (Markus, 1993, p.247.) He argues that there were different types of building, 'reformative' and 'recreational', which produced 'social character' during this period. Markus differentiates between different kinds of building that could be argued to 'form' social character through the different kinds of social relations manifested through the design, construction and technologies of those buildings. He defines 'formative' institutions as schools and training colleges, Sunday schools, industrial and agricultural schools amongst others and 'reformative' institutions such as hospitals, asylums, prisons, places where the aim was to change the character. (Markus, 1993, p.39.) Markus analyses how buildings during this period were designed to affect relations between people in terms of the 'creation' or 'recreation' of character. He identifies such buildings as coffee houses, clubs and hotels and suggests also that other buildings such as bath houses, swimming pools, exercise places can also be placed on 'the same reformation-recreation dimension'. (Markus, 1993, p.39.) Markus describes mills as a type of building used for 'production and exchange' that changed social relations through the kinds of technologies employed. He suggests that to analyse buildings of this period using tools such as this 'reformation-recreation dimension' is relevant in understanding how buildings are powerful as 'social objects'

which determine relations between people through use. In his analysis of mills Markus describes how mill technology 'brought buildings even closer to machines' citing significant ways in which this type of building was made 'dynamic'. (Markus, 1993, p.284.) For example, he notes how the lifts and hoists engineered to carry people and objects produced a 'dynamic system where a piece of moving space contained static people or objects' (Markus, 1993, p.284.) so that traditional means of movement (stairs and corridors) were reversed - that part of the building dynamic rather than the people within it. Markus argues that in mills we can see how these dynamic lifts were part of a whole set of technologies that 'changed both the social and material fabric of the nineteenth century town', by allowing mills to be designed as high buildings this had consequences for 'land values, urban density, morphology and social structure.' (Markus, 1993, p.284.) For me, Markus clearly illustrates how function is the 'social practice of use 'inscribed' into the building'. (Markus, 1993, p.9.) He highlights how this may be analysed from a contemporary, critical perspective, one concerned with understanding how buildings may be described as dynamic in affecting the nature of social relations. I also stress that he presents a challenge for those concerned with designing learning activities in the built environment by presenting a need to focus on subjective experience:

How would a stranger feel about, or see, our house, street or old school, the church where we were married, the office where we worked or the seaside hotel of our childhood holidays? Reconstruction will be hard work and will at best produce a passable likeness, at worst a caricature. That is to say the rich narrative about use, whether observed, remembered or recovered, is as moving and poetic as that of form, despite the dry sound of 'function'. (Markus, 1993, p.9.)

If relations between people are shaped by buildings, then the question this article asks is how can people learn about this in meaningful ways? Making connections between user accounts. drawing attention to specific things in the fabric of the building (for example an adjustable gutter bracket in a mill) layering historical information about the building in its contemporary setting are an example of ways in which the tour as a social, temporal and spatial operation is uniquely positioned to provide opportunities for learners to have 'conversations' with buildings in which these buildings are understood, as Markus suggests, as containers that are active as 'interface[s] between objects and people.' (Markus, 1993, p.247.) Many traditional walking tours (especially those attached to 'tourist' sites) operate by explaining, clearing perceived obscurity or difficulty for the visitor. As such, I argue that singular points of view describe intention that directly relates from the designer, bypassing the sociality of the visitor group, spatiality

and temporality of the building. Guided tours may instead provide opportunities for participants to find and negotiate 'unintended' narratives in a building. In this, the notion of time-lapse is part of a reciprocal relationship with spatial transition in which proximal associations are made by participants and their physical position in the building.

The notion of the institutional building as an active interface that informs relations between learners both through the way in which it appears to control their movements and the ways in which they use it provides a particular challenge for developing mobile learner attributes. Edensor suggests that 'the value of disruption - that which ordering processes attempt to expunge - lies in its potential to dramatise and reveal the complexities of co-existence, difference and friction that permeate the city'. (Edensor, 2000, p.136) I would argue that creating opportunities for accessing buildings that explore material transition can be developed through designing learning activities in tours that heighten a sense of awareness of the dynamic changing nature of the seemingly planned built environment and how buildings shape relations between people who use them.

SITUATION, SITE AND CONTEXT

It could be argued that the guided tour as a consumer product can be characterised by a centralised voice that

operates through a transmission model of teaching, informing through communicating essentials. Selection of content for transmission can be institutionalised as a process in which the host for the tour and/or touring service provider makes decisions about type, mode and delivery of information concerning the substantive nature of a 'site'. Described as such, this traditional conception of the tour may generate practice based on the 'next generation' of the same model, for example, 'point, click and listen' devices (Figure 1) that allow users to select pre-loaded content as they move around a gallery, museum or tourist attraction.

Mobile devices can be understood in their capacity to mobilise opportunities for learning in the built environment in which the physical mobility of the learner in location is brought into focus.

Figure 1. 'Point, click and listen' audio device, Fundació Joan Miró, Barcelona, 2004. Photograph: Juliet Sprake



In this, the term 'mobile' is redefined as the actual bodily movement of people rather than the portability of technological devices and the 'situatedness' of learners may be understood through relations between individual located positions. This approach necessarily positions geographical location as an integral element in the learning experience (as opposed to a distraction). The focus on mobile learning here is on the mobility of learners and technologies that mobilise learning in the built environment and how this may be developed as a feature of learning through touring activities.

Exploring differences between terms such as location, site, situation and context is important in furthering understanding about the nature of learning as everyday activity. Location is used in this article to describe the physical position of a participant or groups of participants. Location can thus be described using reference points on a geographical grid system (for example, using a grid references on an Ordnance Survey map) or through location-sensitive devices such as GPS-enabled mobile phones. Although participants may use such data to locate themselves in relation to physical landmarks in the built environment it is important to note that 'situatedness' is subjectively produced. Situatedness of the learner can be described through analysis and interpretation of location data together with their spatial ability to orientate in relation to other objects, people and places. Situated learning has been described as taking place within an 'authentic' context (Naismith et al, 2004, p.3) and I argue that who or what determines the authenticity of that context is a key element of critical practice. If learners are provided with opportunities to transform the given by producing the tour, they engage in activities that foreground those processes of production and define what makes an 'authentic' context.

One important aspect of development in mobile learning concerns the use of mobile devices used in locations identified as educational such as a classroom, gallery or museum to record information, vote on an issue or find out more about something from an expert. Here, learning can be described as located, and the context as authentic from the point of view of a museum curator or designer of an exhibition guide. Yet situated learning also involves influence of our everyday environment on us, how we respond to events that may be incidental, unintentional or accidental as subjective learning opportunities. I argue that situated learning involves effecting a shift in thinking from site as location to site as context for learning. In this way site is actively produced through interactions between learners rather than as a predetermined given. It is possible to connect this to the work of architectural theorist Jonathan Hill who argues that buildings are produced through use. (Hill, 2003) Hill makes the point that the architectural profession should acknowledge 'creativity of use' in developing its practice, here I argue that education professionals should do

likewise in designing learning activities about and in the built environment. The expectations and formulae embedded within the notion of context as only a physical location makes the learning situation dependent on the specifics of the traditional 'classroom' environment. We can understand the situatedness of the learner differently if we conceive of situation as an 'elastic environment'2 in which it is the social and spatial production of meaning that situates the learner. This challenge in itself offers an innovative platform for developing learning as a social and dialogic process that relates to ways of exploring the built environment in which both learners and technologies are mobile.

My understanding of site comes from the work of performance theorist Nick Kaye on 'site-specific art'. (Kaye, 2000) He introduces the term 'site-specific' by identifying a notion of 'exchange' between works of art and 'the places in which its meanings are defined.' (Kaye, 2000, p.1) He says 'If one accepts the proposition that the meanings of utterances, actions and events are affected by their 'local position', by the situation of which they are a party, then a work of art, too, will be defined in relation to its place and position. (Kaye, 2000, p.1) Kaye goes on to suggest that 'site-specificity, then, can be understood in terms of this process, while a 'site-specific work' might articulate and define itself through properties, qualities or meanings produced in specific relationships between an 'object' or 'event' and a position it occupies'. (Kaye, 2000, p.1) Site is thus defined by Kaye as a concept or idea rather than a particular kind of place and this can be applied to site-specific learning. Kaye's definition challenges a notion of site as a fixed and ordered location for learning to one in which the subject as participant in a tour makes unpredictable movements 'which, although subject to the place, can never wholly realise or be resolved into this underlying order'. (Kaye, 2000, p.6) In mobile learning, site is understood as a subjective experience that embraces the complexities of defining place. Buildings that have traditionally be described as locations for learning may be reconceived as sites in this paradigm; the built environment is conceived as productive, unpredictable and unplanned through movements of people. Consequently participants in a tour may learn through making movements to actively construct and co-construct new meanings.

In this article situatedness is defined as an elastic environment that is socially and spatially produced through participation in mobile learning activities that provide opportunities for collaborative learner interactions in relation to their location. As such, situation is a subjective experience. Situated learning may be described in terms of learners being able to orientate themselves in relation to each other and with their location. Here location is defined as the physical coordinates and topographical position of an object. If site, situation and social interaction are conceived as fluid entities in mobile learning, then

I argue that learning activities in tours can be designed around how individuals construct their personal and spatial contexts with others over time. The dislocation between spaces and times and the juxtaposition of familiar and unfamiliar, for example, can serve to 'jolt' learners into making new spatial contexts in creative ways. It could be argued that this dimension of mobile learning necessarily shifts the focus from the learner as a spectator of media to the learner as maker of media as s/he participates in negotiating his/her way within, through and between these different contextual interactions.3

Sharples has developed an understanding of what it means to be a mobile learner through an application of Gordon Pask's 'Conversation Theory' to explore how 'context' arises out of constructive interactions between people and technology. (Sharples, 2005, p.149) He asks what elements are necessary for a productive conversation either with another or with oneself and suggests that conversation is a necessary system for learning based on an application of Pask's notion of distributed cognition in action. (Pask, 1976) Sharples argues that context is created through the interaction between people, technology, objects and activities within a pervasive computational system that enables appropriate actions for learning. Sharples describes this view of context as one that is 'woven'. Context is here continually created by 'minds in motion' within a distributed, interactive computing system.4 He also describes a more

normative understanding of context as a 'shell' that 'surrounds', an interpretation that can be seen in educational settings in which learners are recipients of information. Sharples argues that an understanding of context as 'shell' is based on an illusion of stability and suggests that whilst entertainment contexts have developed from 'shell' to 'woven' contexts, educational contexts have largely remained as 'shells'.

In this thesis the tour is recognised as a context for learning since it is a type of educational activity in which there is an expectation to 'be informed'. Describing the tour in terms of context as a shell means that there is an expectation that participants will be informed by a guide. Alternatively, the tour described in its capacity for weaving context opens up opportunities for context to be produced through active participation in the event. Defining the tour as a learning context is further complicated if participants are supported in applying resources, skills and knowledge from one context to another.

Educationalists Edwards and Usher suggest there are two ways in which context may be conceived and I argue that, whilst not referencing one another, seem to echo Sharples' description of 'shell' and 'woven'. (Edwards and Usher, 2000 and 2008) They describe context as 'a bounded container within which learning takes place' and also as a 'networked and relational set of practices wherein a learning context is an effect of specific practices of contextualisation.' (Edwards and Usher, 2008, p.161) This

notion of a 'container' is expanded upon to describe context in spatial terms as a way of structuring or confining learning that produces a 'space of enclosure'. In contrast, the notion of context as a 'set of practices' distinguished by processes and outcomes is one in which 'pedagogical space emerges'. This concept is similar to Kaye's notion of site as performed in that context is produced through subject's relations with other learners and their position(s) in the built environment and is therefore always changing and cannot be conceived as fixed or static.

I argue that understanding context as 'woven' or as a set of practices opens up opportunities for reconfiguring the concept of 'points' on a conventional guided tour, pre-defined points of interest that are structured around a 'container' or 'shell' notion of context. Points of closure sequenced in such a way as to provide knowledge to inform learning characterise the structure of a conventional tour. These points may be numbered or mapped to define a route and specify knowledge as discreet entities. However, if context is understood as 'woven' and in terms of the practices which constitute it then I argue, it is difficult to pursue the concept of 'points' in designing tours as learning activities. I suggest that a term such as 'node' may be more appropriate in enabling opportunities for participants to make incidental connections between each other, the location they are moving through and other locations. Further Edwards and Usher suggest that:

If contexts are not inherently bounded, but are bounded through forms of interconnectedness that make certain relations and erase others, then the ways in which we understand learning between contexts is also opened up for exploration. (Edwards and Usher, 2008, p.162)

The notion of a 'woven' context can then be developed by considering the ways in which contexts may be subjectively conceived by being mobile in the built environment and through the kind of learning and touring processes that may facilitate the weaving of this. Edwards and Usher use the term 'polycontextualisation' to describe the potential for learning contexts to be 'mobilised in a range of domains and sites based on participation in multiple communities of practice.' (Edwards and Usher, 2008, p.162/163) These authors argue that learning and practices that are 'polycontextual' enable application of knowledge that is not solely cognitively-based but recognises that relations are made through 'artefacts, affinity groups, storylines, emotions.' In other words, 'polycontextualisation' relies on the creation of sites that may facilitate these relations rather than the cognitive ability to transfer knowledge, skills and understandings from one 'contained' context to another.

Out-of-Context and **Recontextualisation as Creative** Processes in Learning

Jane Rendell argues that there are art and architectural projects that create 'new insertions' in locations, using 'inappropriate materials or languages' to disrupt a perceived or given order of things. (Rendell, 2006, p.83) She highlights that understanding how 'out-ofcontext' might work creatively requires knowledge about 'original' context and it is this notion that I intend to explore further by drawing on the work of Michael Shanks and Tim Edensor. Rendell discusses the work of artists and architects whose work involves the viewer in making associations between 'fragments' in ways that draws on their knowledge about the original contexts of the fragments and how this may contribute to forming 'new relationships in a particular context at a specific moment in time.' (Rendell, 2006, p.82) Specifically, Rendell draws attention to opportunities for artists and architects to 'produce works that combine optical and tactile registers, visual and aural components, to be experienced emotionally and physically, as well as intellectually, over time and through space, prompting critical reflection alongside a more subjective engagement.' (Rendell, 2006, p.120) I would argue that in this statement Rendell encapsulates an alternative way of exploring what might be meant by 'out-of-context' in learning about places by making spatial and temporal associations. A notion of

'out of context' as a method of engaging people in 'noticing', 'stumbling upon' and 'connecting' may be developed further through Rendell's connection between the incomplete or fragmented nature of the work, the extent of a person's knowledge of those fragments in their 'original' form and opportunities for people to make associations between those fragments that are dependent on a 'specific moment in time.' (Rendell, 2006, p.82)

According to Shanks, archaeologists also work with fragments and 'material traces' as evidence in order to 'create something – a meaning, a narrative, an image – which stands for the past in the present.' He describes the temporality of archaeology as 'turbulent', in that past and present 'percolate' in 'the building of ways of life.' (Pearson and Shanks, 2001, p.10 and p.11) He suggests that we all practise archaeology in our everyday lives and that this is a process of 'recontextualisation' rather than 'reconstruction'. (Pearson and Shanks, 2001, p.11) Shanks goes on to name this process the 'archaeological imagination', emphasising that there is no single, right method to do archaeology but rather it is a process of subjective interpretation 'always informed by present interests and values'. (Pearson and Shanks, 2001, p.11) Shanks' notion of the 'archaeological imagination' resonates with that of learning as a social and dialogic process. I have previously suggested that 'site is actively produced through interactions between learners rather than a predetermined given'

and that learners operate in an 'elastic environment' which is 'charged' with social and spatial interactions in the production of meaning. The relevance of Shanks' approach to archaeology is in the emphasis he places on the idea that the processes of excavating need not necessarily involve making interpretations of finds based on an understanding of 'original context' as the 'essential truth', as this cannot be ever fully 'known'. Bringing the ideas of Rendell and Shanks to the notion of 'woven context' suggests that we might think about 'weaving' as an 'excavation' touring process in which finds may be associated with stories, emotions, artefacts in order to make 'connecting threads'.

Archaeological prospecting, I argue, offers an approach for 'detecting anomalies' that may suggest practical methods for learners to find and record transition in the built environment. especially in buildings and environments that appear to be authoritatively ordered. Archaeological prospecting has been described by archaeologist Anthony Clark as the basic process for revealing the location and depth of buried or concealed objects by detecting anomalies in disturbed ground. (Clark, 1990, chapter 1) He says, 'The electrical resistance of the ground is almost entirely dependent upon the amount and distribution of moisture within it. Buried remains affect this distribution, and can be detected with instruments'. (Clark, 1990, p.27) Whilst it is not within the scope of this article to describe the

devices and technology that perform this task, the geophysical principle of 'resistivity' to sense anomalies in archaeological excavations offers a way of thinking about penetrating the seeming imperviousness of buildings to create situations for noticing 'out-of-context'. In his analysis of geophysical prospecting methods in archaeology developed in Britain, Clark defines 'anomaly': 'In the geophysical context instrument readings contrasting with the general 'background' level. Positive anomalies are above, negative anomalies below, the general level.' (Clark, 1990, p.169.) Plotting resistivity on two-dimensional planes in archaeological prospecting in Britain has involved using a 'dot density' technique. Such representations can now be computer-generated using 'stippling' and 'dotting' methods that have been developed manually in resistivity surveys since the 1960s to make patterns that reflect anomalies below ground. I argue that learning about a place by 'detecting anomalies' is a method that can be applied above ground level by finding and recording the incongruous. Archiving these anomalies may provide opportunities for making personal and public connections with fragments of finds with other narratives of use over time and in different locations. This idea, I suggest, offers opportunities for exploring how learning activities may be designed in ways which develop Rendell's idea that the intentionally shocking nature of juxtaposition may be 'complicated' by a more contemplative approach which occurs over time and

which works by 'combining' rather than 'opposing' fragments. (Rendell, 2006, p.82 and 120.) As a method for making tours, this is described as threading.

Edensor draws on a notion of 'oddness' in his strange, accidental and found 'juxtapositions' of industrial ruins and relics. He invites people to construct subjective meanings as materials and objects become 'detached' from expected contexts and, as such, invite intrigue in their 'possibilities for imaginative circumspection and fantasy':

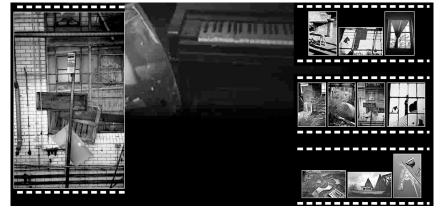
Inside ruins fragments fall out of their contexts to recombine like elements in dreams, a random re-ordering which is decided according to where things land, and how they tumble down from their assigned places to mingle. Masonry crumbles, ceilings fall down and wild arrangements of heterogeneous materials form. Mixtures of grease, plaster, reams of archaic work create accidental sculptural forms out of twisted detritus. Detached from their use, class and category, objects stand in odd assemblages or become isolated. Things thus stand in curious relationship with each other and we cannot be sure how they are related. By tilting at peculiar angles, by squashing into different places and frames, things come to possess an indefinable emotional charge. They violate the usual perspectives of verticality and horizontality, the conventions of perspective and placing.

(Online. Available HTTP: http:// www.sci-eng.mmu.ac.uk/british industrial ruins/juxtapositions.asp Accessed October 2007.)

The screenshot in Figure 2 shows one way in which Edensor has organised his photographs of ruins and relics for public viewing on the internet. The images on the right-hand side are thumbnails that can be clicked on and opened to view an enlarged version that appears on the left. By clicking on the images, there are many ways in which the user can interact to construct the stories that Edensor invites us to make. The photographs are organised into strata, separated by dotted lines, encouraging movement along each strata as well as vertically, up and down. There are no dates or information concerning location as this kind of information would detract from Edensor's idea that juxtapositioning might work by noticing 'odd assemblages'. In this way, untagged photographs enable us to focus on what is visually present in the image and to make relations with other images visually rather than in terms of archaeological data. I argue that Edensor's website represents a way in which finds may be publicly shared and personal interpretations made. It would be interesting to find out what would happen if such a web-based platform were used in location. The idea that an archive may be both a personal collection and one for archiving finds shared with others over time and in different locations, provides a way of considering how mobile devices can be utilised as archaeological tools. (Sprake and Thomas, 2007)

The concept of out-of-context enables opportunities for recontextualisation in learning through buildings and that this may be more effective if considered over time and in different locations. It is now important to consider how this may be achieved through the design of learning activities in tours.

Figure 2. 'Juxtapositions', Edensor. Online. Available HTTP: http://www.sci-eng. mmu.ac.uk/british industrial ruins/juxtapositions.asp Accessed October 2007



A FRAMEWORK FOR MOBILISING LEARNING THROUGH TOURING: SEEDING AND THREADING

Key concepts of 'seeding' and 'threading' may be applied in practices that are concerned to develop a shift in subjectivity from guide to participant. 'Seeding' is a conceptual process for designing and locating fragments of content or subject matter in tours and 'threading' is about creating opportunities for learning by connecting and evolving that content during the tour. Both concepts work on the central notion that the tour is produced through participation.

Seeding is a way of describing how subject matter or content may be reconceived as located fragments in tours. In tours, subject matter is located along a route around a place or journey from place to place in which the path taken may be conceived as an active space for making 'on the spot' finds. Learning may involve participants in annotating a path, as duration of space and time, with finds made along the way. These finds may involve interaction with past accounts, stories and issues with what is seen, heard or felt by being in location. Subject matter for a tour-guide may be described as 'seeded' if participants are involved in learning by seeding and growing content for the tour.

Seeded content may be designed as interactive cues, cues that can be picked up upon and followed, prompting participants to pause, find an object, peer

through something, isolate a sound from background noise or change direction. Interplay between actual sights, smells, textures and sounds of the urban environment and auditory and visual cues produced by the guide may provide opportunities for slowing down the erosion of our perceptual sphere by focusing on making connections between different kinds of sensory cues. Touring technologies can be understood in their capacity communicate cues that prompt connections between subject matter and physical environment and in their capacity to share these with other people across space and over time. Methods for making a tour that involve physical contact or tactile engagement with material surfaces allows for pausing, interrupting or changing direction to the movement in response to cues. In this, technologies can act as antennae, extensions to the body to enhance sensing through movement, to 'feel' or 'sense' transition in the built environment by moving from place to place.

The notion of an itinerary, produced and evolved by seeding content may be developed further through considering the tour as an 'elastic environment' that is 'charged with social and spatial interactions'. This notion expands the concept of seeding to focus on the importance of the 'here and now' in making exchanges in which the environment of the tour may be stretched depending on the kinds of social interaction that take place. The capacity for the duration of a tour to offer multiple spatial perspectives and social interactions on a single

journey means that seeded content may be spatially, temporally and/or socially defined.

The tour as a method for gleaning 'finds' across spaces and times and detecting anomalies against a perceived order of things contributes to the concept of 'seeding'. Fragmentary finds that evidence transition inscribed into the fabric of the built environment and also narratives of use may be described as seeded content in tours; fragments of subject matter are pieced together by the participant. The tour-guide can operate as a go-between in providing messages, signs and interpretations that participants may use to 'hear' fragmented 'voices' of a building or location as they move through its spaces. In this way seeded content may reflect the transitional nature of the built environment. The idea that the built environment is in constant transition has implications for designing content for a tour. If 'subject matter' is understood as complete in a specified curriculum or programme for a tour, the continually changing nature of the built environment and how this is subjectively conceived could be argued to be irrelevant. Seeded content can alternatively be conceived as continually evolving through time, space and people involvement.

In practice, seeded content and seeding activity may be differentiated. An initial seeder group finds and creates the content for nodes or hotspots on a tour and locates this for others through recording or attaching navigational information that enables the node or

hotspot to grow in multiple directions. Future participants in the tour interact with the seeded content by making comparative associations and connections between the content and the location as they find it. In this way 'seeding' in practice may be developed as a method for reinvigorating the design of content for tours and also as a method for enabling participation through 'growing' the content. Seeding content for a tour can be described as a process for learning if participants are involved in creating content that can be 'grown' or evolved by others. Learning how to create content that is location-specific and requires participant interaction with that location to make it work should be a key element of a project or brief for designing learning activities in tours.

Learning through making new lines of enquiry from a series of interactions with objects, people and places describes the process of threading in touring. Threading involves making connections between small scale movements and larger scale overviews using guides and touring technologies to facilitate creative evolvement of those connections. Making new lines of enquiry may involve participants in using 'out of context' and juxtaposition to make associations between fragmentary finds. The notion of distance travelled, physically and cognitively, between making such associations can be explored in developing how 'context' and 'out of context' may be reconfigured in learning through being mobile. Consideration of proximities and distances

between people, objects and places are integrated into designing opportunities for learning about the built environment in which position of participants may be stage-crafted to maximise opportunities for making meaning through association between a story and the streets or buildings they are walking through. Threading involves interacting with past accounts, stories and issues that may be woven through different contexts over time in developing a sense of place.

Threading can be described as learning from making collections whilst 'on the move'. In this way, threading involves making and sharing archives of finds that evidence change and transition in the built environment. This idea is developed from a notion of topographical surveying that is based on participants moving from place to place whilst being guided to 'things of the day' to thread a theme. The guide can be a chronicle of development in the built environment that provides a way for addressing and perhaps, conversing, with civic authorities on transitional change. A guide may facilitate opportunities for participants to engage with civic developments by providing opportunities for them to make autonomous and personal threads of enquiry. I would argue that threading supports development of an evolving conceptual framework that relates to wider civic and urban issues across a location or locations in which performative qualities of the guide enhance the learning experience.

Threading is a process unique to the tour in that touring involves making a

circuitous journey from place to place, as a one-off event or as a series of events. The structure of the tour, as a series of connected 'pauses' made in location offers opportunities for learning through threading seeded content; pauses can be described in temporal terms as opportunities for learning through revisiting earlier issues or ideas raised by a 'pause' later on in a different place and making connections. The idea that physically exploring the real environment is motile activity that provides opportunities for gaining and sharing new perspectives of the built environment through moving between located 'pauses' is one that is generated by a sense of curiosity and perhaps best embodies what it means to be a mobilised learner; participation in a one-off activity or through a succession of visits to places that develops a long-lasting investment in learning about the built environment.

The idea that tours can be structured as time-based entities for developing processes of 'threading' opens up discussion about learning outcomes that are tied into the tour as a one-off event or are developed through several events. In standardised tours, learning outcomes may be defined at the start but valuing the repertoire of interpretative strategies that people already have that can be developed through touring a location means that previous knowledge and experiences are valued and shared. In practice 'threading' may be developed a method for making new lines of enquiry that also provides a structure for locating seeded content on a tour. Threading can thus be used by an initial seeder group who make threads by connecting located seeded content and also by future participants to evolve particular issues, stories or themes of the threads. A guide may facilitate opportunities for participants to engage with civic developments in the built environment by providing opportunities for participants to contribute to developing threads of enquiry.

'Seeding' and 'threading' work in combination as both conceptual ideas and practical methods that have been developed to provide a springboard for further investigation and experimentation in a wide range of creative activities which support learning about the built environment. My practice continues to develop using these concepts to design learning through touring activities, particularly as an architectural educator working with young people and other 'hard to reach groups' on issues of urban and architectural design, planning and regeneration in the built environment.

IN CONCLUSION: LOCATION-SENSITIVE TOURS

I would suggest that a notion of location-sensitivity in mobile learning may focus less on technologies that assist in marking positions of participants on a tour, and more on consideration of the ways in which they shape subjective associations with buildings. Making connections between user accounts, drawing attention to specific things

in the fabric of the building, layering historical information about the building in its contemporary setting are examples of ways in which the tour as a social, temporal and spatial operation can be argued to be uniquely positioned to inform opportunities for mobile learners to have 'conversations' with buildings in which buildings are understood, as Markus suggests, as an 'interface between objects and people.' (Markus, 1993)

This notion suggests that mobile learning embodies the technological means to change the expert/lay relationship in tours. If relations between participants, artefacts and their environment are dynamic (rather than an unwanted 'distraction' to learning), 'stumbling upon', 'noticing' and 'connecting' may become key attributes of the mobilised learner. Personal appropriation and shared transference of meaning offers those concerned with learning through buildings the scope to disrupt one-way delivery models of educational tours. The speed at which walking happens, accelerations and decelerations, different perspectives (from top-down viewpoints to immersive jostling) affect the way in which people move through space, and what they notice and where they go next. The experiential physicality of motion, momentum and position throws up productive opportunities for exploring technologies that enable tours to be initiated and evolved through active participation in creative processes of subjective recontextualisation.

REFERENCES

Bakhtin, M. M. (1981). The Dialogic Imagination. Minneapolis: University of Texas Press.

Clark, A. (1990). Seeing Beneath the Soil. London: B.T. Batsford Ltd. (Page references refer to 2001 edition, London: Routledge)

Edensor, T. (2000). 'Moving Through the City'. In D. Bell & A. Haddour (Eds.), City Visions, London: Pearson Education

Edensor, T. (2007). British Industrial Ruins. Online. Available HTTP: http://www. sci-eng.mmu.ac.uk/british industrial ruins/juxtapositions.asp Accessed October 2007.

Edwards, R., & Usher, R. (2000). Globalisation and Pedagogy. London/New York: Routledge. (Page references refer to 2008 edition)

Hill, J. (2003). Actions of Architecture. London/New York: Routledge.

Kaye, N. (2000). Site-Specific Art. London/ New York: Routledge.

Markus, T.A. (1993). Buildings and Power: Freedom and Control in the Origin of Modern Building Types. London: Routledge

Pask, A. G. S. (1976). Conversation Theory: Applications in Education and Epistemology. Amsterdam /New York: Elsevier.

Pearson, M., & Shanks, M. (2001). Theatre/Archaeology. London/New York: Routledge.

Rendell, J. (2006). Art and Architecture: A Place Between. London: I.B. Taurus.

Sharples, M. (2005). Learning As Conversation: Transforming Education in the Mobile Age. Proceedings of Conference on Seeing, Understanding, Learning in the Mobile Age. Budapest, Hungary, (pp.147-152).

Sharples, M. (Ed.), (2007a). Big Issues in Mobile Learning: Report of a Workshop by the Kaleidoscope Network of Excellence Mobile learning Initiative. Nottingham: Learning Sciences Research Institute, University of Nottingham

Sharples, M. (2007b). Beyond Mobile Learning: Designs for Mixed-Reality, Contextual and Ambient Learning. Online. Available HTTP: www.urbanlearningspace. com/files/presentations/BML GLAS-GOW.ppt (Accessed November 2007).

Sprake, J., & Thomas, H. (2007). Transitional Spaces: Mapping Physical Change. International Journal of Art & Design Education, 26(2), 167-176.

Williamson, B. (2005). Handheld Computers and Learning in Public Spaces. April 2004, web article. Online. Available HTTP: http://www.futurelab.org.uk/resources/ publications-reports-articles/web-articles/ Web-Article 567 Accessed May 2005.

Winters, N. (2007). What is Mobile Learning? In M. Sharples (Ed.), Big Issues in Mobile Learning: Report of a Workshop by the Kaleidoscope Network of Excellence Mobile learning Initiative. Nottingham: Learning Sciences Research Institute, University of Nottingham.

ENDNOTES

Online. Available HTTP: www.bbc.co.uk/print/bristol/ madeinbristol/2004/04/riot/riot stroy.shtml Accessed April 2004.

- The term 'elastic environment' is taken from Mikhail Bakhtin's notion of a 'dialogised atmosphere' in which spoken words take shape when uttered. In this he describes the dialogic nature of language as socially and historically determined. Bakhtin, 1981, p.276.
- A key feature of the activities on creating media narratives at the 'Be-

- yond Mobile Learning Workshop', Villers, Switzerland, January 2007 organised by Kaleidoscope Mobile Learning Special Interest Group.
- Sharples, M., 'An Interactional Model of Context'. Presentation at Kaleidoscope Philosophy of Technology-enhanced Learning Workshop Knowledge and Context, London Knowledge Lab, 29th June, 2007.

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