

# Framing Augmented Public Space: a case study in the site specific nature of urban screens and the mediation of place and locality

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## Abstract

*This paper looks at the growing phenomenon of large-scale LED screen in prominent city centre locations and asks fundamental questions about the nature of the spaces and locations in which they are placed. In this investigation three key themes come to light that have a critical impact on the experience of urban space: namely, the mediation of place and locality, the distinction between the virtual and the real, the body as a frame for information. The work presented here is based on a long-term study of the BBC's Big Screen network, a unique network of connected screens across the UK. The case study that forms a central part of this paper is drawn from the analysis of content designed specifically for presentation on the BBC's Big Screen in centre of Bradford. Whilst they key focus of the paper is the transformation in the experience of urban space as a consequence of the introduction of the screens into prominent city centres locations, many other issues come to light in respect of the management of media content designed with the locality in mind and the ways that key partnerships develop that means that the screens have a distinctively local quality. In addition, more general issues are discussed in relation to the rapid rise in augmented public space and the role played by the interaction of a number of media technologies. Finally, this paper will briefly consider some innovative ways in which large-scale LED screens have been combined with other technologies such as mobile gaming and social networking in ways that transform participant's engagement with the locality.*

## 1. Framing Augmented Public Space

One of the most visible occurrences in the transformation of the cityscape has been the introduction of large-scale LED displays that are frequently placed in prominent city centre locations [1]. This has had a significant impact on the visual

appearance of the urban environment. In addition, this feature has led rise to the emergence of "augmented public space" [2], [3], [4]. What follows is an attempt to capture at least some of the reality of this transformation in the structure and experience of contemporary urban spaces where the virtual forms an integral part of the lived experience of the city and sits almost naturally and transparently alongside the physical structure of the built environment. Such a transformation has occurred primarily through the integration of the built environment with the "media layer" in that a wide range of digital display technologies and communications media now coexist with architecture. At a most basic level, one key argument the majority of cities in the UK now fall into the category of augmented public space rather than being confined to major international and global cities, as suggested elsewhere [5].

### 1.1 Some Characteristics of Augmented Public Space

The opening scenes of Ridley Scott's film *Bladerunner* (1982) - oft cited for its portrayal of Los Angeles in a starkly post-modern future world - provide a fictional impression of what, if taken to an extreme, augmented spaces might look like in the future. Harvey [6], discussed this film as both a visual expression of post-modernity and as an emblem of postmodern culture and representation: as a discussion of current ambiguities relating to time and space in contemporary culture as well being useful for its articulation of some of the components of the reality of the urban environment that constitute what is now called augmented public space. Many features of this film contain components of this highly visual and electronic landscape. For example, the entire face of high-rise buildings is taken up by massive digital screens displaying advertising and other forms of media. The striking aspect of these scenes is the sheer scale and saturation of media spaces in the cinematic version of this futuristic urban environment albeit via a somewhat dystopian vision. Yet many of the features

of the contemporary built environment already contain features that bear out this vision. Manovich [7] gives a further impression of these spaces, listing major international economic centres such as, Tokyo, Hong Kong and Seoul. But one could easily add New York's Times Square and major European cities such as London and Berlin to this list. However, the advent of urban screens in many city centres in the UK and the sheer pervasiveness of a wide variety of mobile communications – including cell phones, PDAs and laptop computers – means that augmented spaces have now become a distinctive reality in the majority of city centres in the UK. What has happened with mobile media is a notable overlapping of media content onto the urban environment. A similar phenomenon is to be found in the combination of architecture and forms of display technology, from large LED screens being the most prominent example, to smaller scale digital signage and so forth. Representations that are available in alternative modalities, say, for example, those that are provided by mobile communications devices are one of the many layers of representation implied in the notion of augmented public space – that is, the “overlying of physical space with dynamic data” (Manovich, 2006, p. 223).

The overabundance of information and events in this environment has the effect of disassociating the person from the space as a real or authentic experience [9]. Thus, the individual is not only distracted from the living space, but is caught up in a world of private messages which are not connected to any single location or scene. Transformations in the experience of public space form an important historical backdrop to current investigations of augmented public space[10]. Having said this, one of the features of the introduction of large scale screens in the UK has been to reinforce the local in the form of site specific messages that media the experience of place and locality. Such transformations emphasize the visual nature of the urban environment from the placement of advertising hoardings to the existence of large cinema sized digital screens. These transformations are distinct from what, over the last decade, has been labeled “Augmented Reality” [11]. This can be expressed as an experienced reality, combined with some form of computer generated simulation or modeling in which technological artefacts are adopted because of their ability to provide adjuncts to the real. In contrast, priority in this investigation is given to the physical experience of urban environments and space that is overlaid with dynamic information and media content [12]. Further, that augmented public space is dominated by information spaces and for the most part

these have historically been an integral part of the built environment for some time and range from simple street signage, advertising, pedestrian and traffic control systems, to more sophisticated electronic display mechanisms and the current use of “digital signage” [13]. A relatively new feature of the urban environment, then, is the introduction large LED screen placed in central locations within the city that provides yet another layer of information and media content. Add to this the use of personal communications devices in the form of PDAs, mobile telephones and so forth, and you have a rich layering of signs, information and media that is superimposed onto the urban scene and will have a significant impact on how the cityscape is experienced by dwellers and passersby. Inhabitants of these spaces are so often in a state of ‘always passing through’, in transit. One possibility of the new media forms investigated here is that of enabling those dwelling in the space to become aware of their surroundings in new ways and in many ways the potential here is to create new relationships between citizens and the environments they inhabit.

## **2. A Case Study on the Mediation of Place and Locality**

The mediation of place and locality is one of the key aspects of the advent of urban screens especially in the way that they have been deployed throughout major city centres the UK. Their site specific qualities, for example, the physical location of the screens (location and proximity to key features in public space, architecture, other forms of display etc.) and the structures employed in their management and maintenance (the partnerships that occur to support this, programming, curatorial practices etc.) as well as the actual design and delivery of content of urban screens are all features that give rise to the mediation of place and locality. This is similar to what Anna McCarthy [14] has established in relation to the deployment of conventional TV screens into public space where the site specific nature of television consumption in public space gives rise to the “variability of televisions relationship to all spaces in which it appears” [15]. An identical argument is provided in what follows but here it is applied to large-scale urban screens in the UK. This is especially true when considering the evolution of the BBC's network of screens. To date the BBC's network of screens amounts to 18 across the UK all located in major city centres. The fact that they are networked makes them unique in that there is no such similar network elsewhere. What follows is a brief case study based on

the consideration of the BBC's screen in Centenary Square, Bradford and considers the site specific nature of the screen - its local context - and in the light of this the way in which place and locality are mediated via these screens as part of the overall experience of the cityscape.

Consideration of the actual physical context of these screens is critical and each one is unique in the sense that the physical location in each case is itself unique in its design, evolution and the variable nature of the local environmental context. Even relatively simple physical features such as the height of the screen can have an impact on its reception. Its position in the built environment and its relations to passers-by will also have an impact and will be determined by features in the landscape such as the position and direction of pedestrian walkways or the location of bars and cafes, as in the case of the Bradford screen.

Screen management and curatorial practices are also often determined by the local context. The BBC's Big Screen network - aka "Public Space Broadcasting" - involves partnerships between the Broadcaster, local authorities, and hardware developers. Programming of content is now managed centrally by Locog and supported by local content managed by individual screen managers across the network. In addition to this local partnerships for content providers and artist groups have enabled more informal and home grown content to be provided for these screens.

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Fig 1: BBC's Big Screens: a site for video art

Similar to the rest of the network then in Bradford, the screen is owned by the local authority, managed by the BBC and maintained by Phillips. In addition, many local organisations are involved in presenting content. Similar arrangements occur across all of the screens where local organisations, schools, universities and arts organisations can influence, to some extent, the nature of at least some of the content and in many instances there is a local flavour to these offerings. A local arts development agency - Fabric - regularly screens content created by local artists in regular curated 'slots'. In addition, the screen is used for projecting content for live events, including public art, sometimes using interactivity through connectivity with mobile devices or through the use of motion tracking to elicit the engagement of passersby.



Fig 2: BBC's Screen, Bradford: local content for a local context

In addition, with the framing of content and its formal arrangement and composition on these screens clearly marks of the locality in each instance and there are, therefore, many cues to indicate location.



Fig 3: Framing national broadcast content for a local audience.

There are other ways of applying the concept of locality to Augmented Public Space. For example, as discussed in Allen (2008), the site specific nature of place and locality and the fixed and contextual nature of all media representations - as true of augmented public space as any other *place* - rests ultimately on the location of the body and the body will always be located in real space-time however much it might be in interaction with representations outside of the physical location. The body in many discourses, especially those generated largely across visual, spatial and tactile modalities, is the ultimate frame for information.

To add to this, "both the building upon which an urban screen is placed, and the space in which a building is located can be considered to be a form of *multimodal text*" [16], and the consequence of this is that it "leads to considering how only a blurred distinction seems to exist between space and information, as elements of space increasingly are powerful conveyers of information, whilst information - materialised into them - becomes more and more spatially related", [17].

### 3. Framing and the Body

One of the most critical questions to come out of this discussion rests on where to locate the body within augmented public space. One way might be in relation to an inhabitant's interaction with content, for example, displayed on urban screens. Here there are similarities to what Manovich has described in relation to the interaction inherent in the engagement with new media artefacts as "cinematic vision" [18] but with one fundamental difference. For him, the body is usually fixed at a single location. In the new context of augmented public space, the body is usually highly mobile, both in terms of its transit through the space, but also in relation to any virtual interaction taking place outside the space.

The body itself acts as an interface both on a sensory level in terms of its reception of information from the environment and in terms of receiving information from many technological artefacts, from personal stereos to mobile phones, all of which, can be argued, augment the body in some way. The consumption of media, therefore, becomes part of the augmentation of the body through the use of these artefacts. Featherstone stresses the "importance of the body as a framer of information and this has become more urgent with digitized media" [19]. Thus, framing and the framing of information ultimately becomes a question

of the body and its location in space. Like a mirror, the body is both the site of representation and is a representation itself. This runs almost counter to much recent debate about the virtual whereby it is assumed that the greater the emersion into virtual spaces, the greater the disembodiment and disassociation from the real and real space. Far from the latter, the body still has to be the site of consumption and therefore of interpretation: the point at which affect, mobility and action can occur [20].

There are two sets of current theoretical issues that impact on how to conceptualize augmented public spaces. Firstly, navigation can be considered in a particular way, namely in relation to how the body is positioned in space and also in relation to the space that is occupied by it. Secondly, the distinction between the real and the virtual through an examination of recent theories of human action can easily be applied to navigation and the body and incorporated into framing as a theoretical strategy. How is it possible to make sense of the uneasy distinction between the virtual and the real – digital/analogue – in terms of locality, the body, and the experience of urban spaces? At this level of abstraction, the argument seems to rest largely on how we position or locate the body in space, rather than on any consideration of the nature of technology *per se* or its use in urban spaces. The body has a sense of itself; it inhabits real space and is positioned at a specific location at any one time. It also becomes an individual element in itself within the environment that it inhabits or navigates from point to point within space. It consumes and interacts with representations, as part of the structure of experience, for example. Yet the body itself must be represented in some way, as an appearance or an image [21].

It was Massumi [22] who captured the essence of this distinction with regard to the virtual and the relation between the virtual and the body [23]. He indicated that the two were inseparable and, moreover, questioned the basis upon which the body is moved to action [24]. This idea can be applied to navigation and human mobility in general, in either real or virtual spaces[25]. This is important because the whole notion of navigation is predicated on the assumption that the body exists, or is always located, within real space. This is always the case even if a participant is engaged in some form of interaction in an implied space elsewhere. Even in virtual spaces there is a body that has taken some form of action and this action has occurred in real space. Further, it requires that there also exists the intention to move to another location,

another point in space: another point on the map, so to speak.

Thus, another important set of abstractions comes to light. The argument here is that there is no clear boundary between the virtual and the real and in fact the two different forms of representation are interdependent and is an important part of this distinction. Massumi argues convincingly that there are many representations, such as TV images or paintings, to take just two examples that contain qualities of what has come to constitute the virtual: “Digital technologies have a connection to the potential and the virtual *only through the analogue*”. This ambiguity would lead us, therefore, to question any clear distinction between them as Massumi continues:

If all emergent form brings its fringe of virtuality with it, then no particular medium of expression has a monopoly on the virtual. Every medium, however “low” technologically, really produces its own virtuality [27].

Thus, committing all representations in some way to the virtual means that many of the visual representations found in the urban landscape can easily be labelled as such. In theoretical terms there is a link between the issues relating to the real and the virtual, the position of the body in space, and modes of representation in augmented public space.

#### 4. Conclusion

There have been some interesting combinations of technology applied to urban screens and the spaces that surround them. For example, in Peter Aeschmann’s installation work *Augenblike*, where motion tracking data of bodies in the vicinity of the screens has been used to alter the nature of what has been displayed on screen. In this way the proximity of the participants to the screen alters the nature of the display as well as the forms of interaction that take place. In addition, there have been some highly inventive uses of social networking tools, for example, the use of simultaneous video feeds using *skype* technology to display remote participants onto the screens enabling them to be present in public space whilst physically located elsewhere. Both of these uses of urban screens invoke important questions about the nature of our inhabitancy of public space in the light of the ubiquity of display technologies in the urban environment. These combinations bring to light important phenomena regarding the nature of the experience of

urban and public space and the body and its location as well as to question the boundary between the physical and the electronic, the virtual and the real.

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