

# **Framing, Locality and the Body in Augmented Public Space**

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## **Introduction**

This chapter deals with a range of issues related to the structure and appearance of Augmented Public Space in terms of framing. It also develops key theoretical perspectives concerning the ways that information and media content is superimposed onto the urban environment. In doing so, it analyses the importance of locality on the character of display and argues that in the long run it is the body that is central to the framing of content and so is crucial to our understanding of augmented public space. This is exemplified in the widespread adoption of urban screens in UK city centres which forms a case study, but is not exclusive in its application to urban screens. The issues dealt with are relevant to all forms of augmented public space and in any situation where the built environment coexists with layers of information and media content – the “media layer”.

As a result of this coexistence, it appears that on the surface the distinction between the physical and the digital is self evident. It is argued throughout that one of the defining characteristics of augmented public spaces is actually to hold this distinction at bay and so prompt the questioning of its transparency and to present the real and the virtual as something of a problematic distinction. Another critical issue is that, on the one hand, there is an experience of such spaces that is both transitory and incomplete (Augé, 1995),

especially when the intervention of technologies of visual display is taken into account, and on the other hand, there is an experience the urban that is clearly fixed and tangible when considering the physical structure of the built environment and especially when aspects of representation in the built environment become fixed in terms of locality.

These two opposed senses of space are, however, united via the body as a frame, as a container of all information (Featherstone, 2006, p. 235), which is perceived by subjects and is the locus for the perception of place and location: a frame that is both content and context.

Research into augmented public space, though still to be fully articulated, either in terms of any general theory or of any concrete application, has tended to encompass the following three strategies as different ways of interpreting the increasing integration of architecture, communications technology and various forms of display technology in the urban environment. First, urban planners and architects themselves now employ forms of three-dimensional display, so-called *virtual* or *augmented reality*, to extend more conventional ways of constructing plans for urban spaces. An example of this is MIT's "Augmented Urban Planning Workbench" (Ishii et al., 2002). Second, is in terms of the integration of real-world architecture in urban spaces that is itself combined with display technology. This can take the form of big screens in city centres, digital signage and information spaces. Added to this are other forms of information display and media content received by the individual through a variety of mobile communications devices. Third, is the way that ideas concerning the overlapping of media content have been extended to encompass other forms of display and communications technology and

interaction that interrupts inhabitants' inhabitancy with the urban environment and links them potentially to other spaces and other localities and consequently to forms of public space that have no tangible boundary. This chapter is only concerned with the latter two of these strategies.

### **Framing Augmented Public Space**

There has been a significant impact on the visual appearance and experience of the urban environment as a consequence of the emergence of augmented public space. What follows is an attempt to capture at least some of the reality of this transformation in the inherent structure of urban spaces, where the virtual forms inherent in the interaction with media content are experienced simultaneously with the real 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 range of digital display technologies and communications media now coexists with architecture. At the most basic level, one key argument is that, due to the application of display technologies such as large LED screen displays into city centre environments and the pervasive use of personal mobile communications devices, the majority of city centres in the UK now fall into the category of augmented urban spaces rather than this being confined to major international and global cities as suggested elsewhere (Manovich 2006).

#### *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 (1990, p. 308) 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 the components 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 (2006, p. 219) 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 “overlaying 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. 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 (Manovich 2006). Such transformations also emphasise 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 labelled “Augmented Reality” (Haller, Billingham and Thomas, 2006). This can be expressed as an experienced reality, combined with some form of computer generated simulation or modelling in which technological artefacts are adopted because of their ability to provide adjuncts to the real. In contrast, attention here is given to the physical experience of urban environments and space that is overlaid with dynamic information and media content (Manovich, 2006, p. 219). Augmented public space is dominated by information spaces and for the most part these have been an integral part of the built environment ranging

from simple street signage, advertising, pedestrian and traffic control systems, to more sophisticated electronic display mechanisms and the current use of “digital signage” (Latta, 2006). A relatively new feature of the urban environment is the large LED screen placed in central locations within the city that provides 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.

As a consequence of the superimposing of media onto the built environment there is a collision, therefore, between "non-place" (Augé, 1992), in the form of superimposed information media content, and the experience of urban public spaces in their physical form producing an experience that is multi-layered, multimodal and multi-sensory. Rather than connecting the urban environment with its location and surrounding, what these different layers of representation do is connect the space to a continuous city of signs and representations – a set of global messages like the universal language of airport signage or continuity seen in interiors in global hotel chains. These are homogenous spaces that are connected through the consistency of signs and representations. I could, for example, board a train at King’s Cross station in London, where a the big screen displays the national news, complete my journey at Bradford, enter Centenary Square and be presented with the news from the same source. This is exactly the way in which the homogenization of public spaces is manifested in “non-place”.

Place and non-place are rather like opposite polarities: the first is never completely erased, the second never totally completed: they are like palimpsests on which the scrambled game of identity and relations is ceaselessly rewritten (Augé, 1992, p. 79).

Non-places are exemplified by such structures as massive shopping malls, airport terminals, global transport systems and global communication systems and the persistent experience of 'always passing through'. The ubiquitousness of the many forms of signage and information display on a global level is all part of the saturation of visual messages which is again an important characteristic of augmented public space.

### *Real Space and Virtual Space*

There is a difficulty in distinguishing between real space and virtual spaces. This is so frequently a matter of context and location, whereby, non-places, for instance, exist only as a matter of interpretation or rather its existence only occurs through the representation of contextual cues provided by the environment. Here, the notion of framing is central, since it identifies the ways in which expectations are invoked on the basis of the presentation of content. For example, particular cues are employed, when watching a television news programme. These relate to the form of the content or its genre and thus indicate important information about the type of message that is being communicated and, therefore, about the way in which such a text is to be interpreted. This could easily be applied to the analysis of urban screens in the built environment. On one level, they occur as large television screens. Add to this that, in the majority of cases, these screens

are frequently used for broadcasting national media content and news output in particular – such that there are specific cues in the text that are given in the sense that they have become transparent. A similar logic can be applied to the space surrounding these screens: all architectural details function in the same way by providing cues about the nature of how they are to be interpreted.

### **Urban Screens and the Localisation of Content**

Currently, Bradford in the UK is an important case where aspirations of economic, environmental and social regeneration are being realised in plans to reorganise and rebuild much of the city centre. An integral part of these aspirations is articulated via an architectural vision that incorporates the display of media content and public access to information technology.

[Insert Fig. 1 here – landscape]

Big Screen Bradford, Centenary Square, Bradford.

For example, a large LED screen display has been attached to the side of a key new architectural structure in the City's main public space, Centenary Square (Fig. 1) which houses bars, restaurants, shops and an art gallery. This space also includes hotspots where inhabitants can connect wirelessly to the internet in addition to accessing media content and communication with others using mobile devices and engage in virtual interactions

outside the space. Such an environment integrates all of the trapping of an augmented urban space. An environment where inhabitants are both physically present in the space at the same time as engaging in virtual interactions that occur outside of the physical space.

It is by virtue of their location that urban screens are public spaces and it is this that frames them as integral parts of the urban scene, perhaps as natural a part of the environment now as billboards and advertising hoardings, as well as being important sites for the display of media content to the public. This is why organisations such as the BBC, in partnership with local authorities, are so interested in establishing ways of managing these spaces which offer new opportunities for public participation and community engagement. Participation on such a scale has led to many experiments, such as in Manchester, where recently the use of these spaces has been investigated as sites for generating locally-based content and engaging users as active participants in events.

Struppek (2006) argues that urban spaces are themselves sites of engagement with the city which is, in a sense, a self-reflective organism. In many respects, this has been the case ever since signage and billboards have been an integral part of the city in the modern era and where media spaces such as advertising hoardings that in themselves have become such a defining feature in the development of the urban experience through saturation of visual messages. Now these spaces combine with many forms of digital information display. All of which coexist with buildings. On top of this the inclusion of large screen displays into strategic locations in city centres has created sites where

dialogue between the city and its participants takes place. This gives a privileged position to urban screens, not because they employ any novel technology but because of their location and potential audience. It is this that provides their novelty and interest. It is the location of the screens within the urban environment that determines the context in which they are used and engaged with. Part of their transformative potential, therefore, is articulated through the dialogue that the city has with its inhabitants and the locality (see also Jewitt and Trigg, 2006).

Their positioning, in such prominent locations in city centres, means that the locality – the space in which they are positioned - has a direct impact on their function. There are two immediate consequences of this: first, their position directly affects the type of content that is displayed and its planning, management and organisation, and second, in relation to the way that content is specifically designed to engage with the inhabitants of the space in the immediate vicinity and surrounding space. In addition, their salience is given by their prominence in the locality, their size and position such that what is most significant is their scale and location. In the first instance their locations are selected to ensure that media content, in a variety of forms, can be presented to very large audiences. Thus, it is their site-specific nature that provides their novelty and Anna McCarthy has argued this in relation to the pervasive occurrence of television in public space (McCarthy, 2001, p. 2). But this site specific phenomenon, especially when the nature of the display is taken into account, is equally as applicable to urban screens. What also makes them unique in contemporary urban spaces is that they occur seamlessly within the built environment. They have also become sites through which major players in

broadcasting use as a public medium and through their joint administration by both local authorities and organisations such as the BBC can result in tensions between local and national/global representations.

The localisation of content is most certainly one of the most important developments in the strategic use of urban screens by organisations such as local authorities and the BBC and for many signifies an opportunity to tailor their use for a local audience and participation as well as to experiment with new modes of interaction. In addition, specific events have been created around the screen in Bradford city centre, for example, intended to display local creative talent and using the screen as a central focus of interest in contemporary arts events. It is important to recognise that the visual presentation of content is framed to serve the expectations of local audiences through the presentation of cues and through the visual composition that indicates place. News content, for example, is branded to reflect the location and for consumption by a local audience and is literally framed by messages about local news and events.

The site specific nature of the content is worth dwelling upon. Many urban screens are, partially at least, being employed for the purposes of the presentation of artistic content and to encourage the participation of local inhabitants. *The Bradford Grid* is a visual arts project using artists who either live or work in the Bradford region. In essence, it is a long term survey of the region's urban environment producing a substantial archive of both still and video images as well as sound recordings established in 2003 and set to continue on a long-term basis. In short, a map of the region is cut into squares and, on a regular

basis, individual squares are chosen at random and each member of the team visits the area represented and records, in their own chosen style, salient aspects of the urban environment. Transformations in the urban scene, particularly relevant as the region itself is undergoing regeneration and major shifts in urban planning, are recorded using a variety of modes, still photography, video, sound recordings and written responses to the urban scene.

The project was commissioned to produce installation work based on the new output from the locality, the immediate vicinity around the screen and displayed as part of a contemporary arts festival. The creative strategy employed in the production of the installation had to make reference to the way that inhabitants use the space in order for it to work and involved constructing a series of short video pieces none of which lasted for more than three minutes. Interestingly, this duration for each episode was based on an estimate of how long it takes for an average user of the space to perambulate through it, including a little dwell-time. There are two critical issues here, therefore, that have an impact on the way that media content is managed on the basis of how aspect the physical space determines how inhabitants use and engage with it. Firstly, the choice of content adds to this notion of the screen acting as a mirror for the space around. Second, the duration of each of the episodes for this commission was based on an assumption of the level of mobility expected of participants and the average length of time that they dwell within the space.

[Insert Fig. 2 – landscape]

Extracts from the “Bradford Central” installation for Bradford’s Big Screen as part of the STIR Contemporary Arts Festival.

In addition, a soundtrack was used in an attempt to draw passers-by into the work the assumption here being that visuals are actually less likely than sound to capture the attention of inhabitants of the space. All of these issues in relation to the organisation and management of content for urban screens indicate some important new avenues for research. They all have implications for the way that augmented public space is characterised in terms locality and how this impacts on their character of display.

Framing is central to how we begin to understand the display strategies for media content intended for urban spaces and fundamental to how we form an understanding of augmented public space. The compositional characteristics mentioned above lead directly to issues of identity and branding since augmented public space is so often dominated by branding, advertising messages and information displays that contain more subtle forms of branded message.

Whilst Bradford’s Big screen, it is owned by the local authority and managed by the BBC, content is dominated by BBC news and current affairs programmes but it incorporates a strong local flavour by covering local events and promoting events in the district. The Big Screen experience with this emphasis on locality works in opposition to the notion of non-place and interestingly provides the opportunity of transforming the function of similar forms of display technology for uses that engage the participation of the inhabitants of the space. Experiments in artistic content and community engagement

are an example of this. On a theoretical level there is also an important juxtaposition that deserves to be fleshed out. On the one hand, there is a tendency towards the fragmentation of experience that is characteristic of how subjects are located and participate in and interact with augmented public space and in forms of virtual environment. On the other hand, urban screens, as an integral part of the media layer in augmented public space, has a tendency to position the inhabitants of real spaces through their locality and engagement with the immediate environment, space and surroundings. Both have the potential to subvert the global and homogenized world of non-place. This is the case, especially if much of the content is displayed in a creative and community context. There is also an overlap between the real physical space of the city and the virtual spaces of the media that are superimposed upon the built environment.

### **Framing and Locality**

The previous section explored how framing governs the organisation of content in relation its orientation to the audience and ways that the branding of information is framed for a local context. In this way the actual compositional and spatial structures of content and its branding function simultaneously to serve the requirements of the local context. Thus, the character of display in augmented space, exemplified in the spatial properties in the design of content indicates place and location. In addition, both aspects of framing connect the character of public display in more general terms with features of the surrounding space and can, therefore, be translated onto other features of augmented

public spaces. Framing can also be related to the actual physical structure of urban spaces, indicating, for example, entry points and navigation paths through the space, or suggesting the extent of boundaries and borders.

Framing binds aspects of the represented spaces with those of the social world. The closer that an element is to another, the likelier it is that both are seen as being related in some way. They are connected in some way purely by their proximity to one another. It is here that spatial properties are bound up with forms of social action. This position is taken from initially from “social semiotics” (Hodge and Kress, 1988) whereby the closeness and distance of represented objects maps directly on to those of the social world. This notion of proxemics, first developed by Hall (1966) and further applied to the analysis of multimodal texts by Hodge and Kress (1988) has found recent application to the built environment (O’Toole, 2004, Alias, 2004). Its application to augmented public space might be fruitful, whereby the relative position of bodies in space indicates specific forms of social relationship. For example, this notion of framing has been applied to the navigational properties of both printed and online texts and it is not difficult to see its potential in explaining aspects of augmented public space. Proximity is the way that content elements in a multimodal text are grouped together. These form distinctive zones where related informational items can be found and in so doing assist navigation as is the case with the spatial qualities of the visual design of a website, for example. Both the building upon which an urban screen is placed, and the space in which the building is located can be considered as a form of multimodal text and, as a consequence, can be described in terms of the framing of elements within a composition. In many forms of

multimodal text grouping can occur on the basis of the organisation of content to serve navigation and facilitates specific modes of access to the text.

As city centres become saturated with the layering of dynamic information and media content and inhabited by users of communications devices, the more these technologies are either integrated with the built environment or encourage users to be dislocated and disassociated from it. This gives rise to another paradox. For example, in particular forms of virtual interaction inhabitants are present in spaces outside of their physical location. This will inevitably mean that the fundamental nature of space in urban environments as unified or fixed entities is brought into question and also questions the relevance of describing these spaces in terms of their physical boundaries. Thus, the urban environment, largely as a consequence of its integration with new technologies, is clearly shifting notions of mobility, from forms that are fixed within a specific set of physical relationships within a bounded space to much more transitory and boundless ways of treating such concepts as location and place. And in terms of framing, once you've drawn a boundary around an urban space as a physical entity the position of entry points can be established, for example, informally by the users of the space, or, indeed, by planners. The problem is, with augmented public space, once these boundaries become less distinct, so too will the manner in which inhabitants enter into it -- its entry points.

Not only has architecture and the planned aspects of the built environment within urban spaces become less stable as physical structures, but the saturation of display technologies has also meant that there is a further blurring of the distinction between the

physical environment and digital display technologies and this leads to the questioning of the distinction between virtual and real. This is especially the case with regard to the media layer where display technologies, including urban screens, digital signage in all its forms, as well as everyday use of computers and miniature screen technologies, not to mention the potential for virtual interaction, are all now superimposed onto the experience of urban public space. This gives rise to a further blurring of the distinction between *the real* and *the virtual*. Such an ambiguity can function at many different levels. Where there was once a real physical boundary to urban spaces there is now a variety of possible boundaries dependant upon how each individual uses the space and upon the nature of the media with which they interact. Clearly, the physical structure of urban spaces is shifting significantly in terms of framing. A city-dweller might walk into a central square and be quite clear about its external boundaries on a physical level but in an augmented space where do these boundaries actually occur and at which point does a person actually enter the space?

### **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 (2001) has described in relation the interaction inherent in the engagement with new media artefacts as "cinematic vision" (Manovich, 2001, p.103)

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” (Featherstone, 2006, p. 235). 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 (Massumi, 2002).

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 (Featherstone, 2006).

It was Massumi (2002) who captured the essence of this distinction with regard to the virtual and the relation between the virtual and the body Massumi (2002, p.30). He indicated that the two were inseparable and, moreover, questioned the basis upon which the body is moved to action (ibid, p.5). This idea can be applied to navigation and human mobility in general, in either real or virtual spaces (ibid, p.134). 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*” (p. 138). 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 [...]. (p. 175)

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.

## **Conclusion**

In augmented public space an inhabitant's trajectory is always transitory. On a simple level the engagement with the space is always one of just passing through. To capture the spirit of place, it is necessary to move beyond the branded messages prevalent in so much of what we call augmented public space to a sense of locality that reflects the reality of the urban environment and its inhabitants. The case study on urban screens at the centre of this chapter bears this out. The management of urban screens in the UK where important curatorial partnerships have tended to work to manage the presentation of content has meant that, in many cases, these spaces can be used for the display of content fixed to the locality and as an important avenue for the display of artistic content and a way of engaging the participation of the inhabitants of augmented public space. In theoretical terms, the understanding of augmented public space from then point of view of the breaking down of the physical boundaries of space and place, or the blurring of the distinction between the real and the virtual can both be resolved by focusing on the body and its location in real space.

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