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Mediated Spatial Cultures: Place-making in London neighbourhoods with the aid of Public Interactive Screens

Abstract: This paper takes a mediated spatial cultures approach to examine how interactive urban screens are understood and utilised in two super-diverse neighbourhoods in London. Qualitative data was collected over a year of ethnographic fieldwork and six workshops. The study focuses on how residents construct a sense of belonging through both material culture and mainstream digital media (place-making efforts). Participants were grouped into three age groups according to their distinctive patterns of socialisation, digital media and material culture use. We show that individuals relate to public interactive screens with the frames of reference they already employ to approach other place-making efforts, which underpin the social life of their neighbourhoods. We demonstrate that the lens of mediated spatial culture helps elucidate how a sense of place is formed and patterned through different temporalities, materialities, media, imaginations, and behaviours, which are highly biographical.

Theoretical Perspective
In what follows we consider space as a socio-material and cultural construction; a site of flows and becoming, constantly produced and re-produced through myriad everyday practices (Thrift 2007: 20). Thrift, a proponent of non-representational theory conceptualises space as an emergent property of practice that occurs prior to conscious definitions. Hence, space is a site of open-ended possibilities, a non-discursive affordance to life in a given locale. Conversely, place is a more conscious and meaningful construction that people use to understand the space they live in. Although it is a complex construction in its own right, “a constellation of processes rather than a thing...” (Massey 2005: 141), place is distinguished by including social narratives and meanings. The concept of ‘place’ therefore, extends beyond non-reflexive practices, incorporating instead purposeful social action in the form of political activities, values, norms, memories, stories and histories. This interplay between spatial materialities, socialities and culture, which transforms a generic space into a culturally charged place, is conventionally known as place-making. Place-making activities occur when we make efforts to define, understand, experience, navigate, utilise, modify or regulate what is happening in and with space. Therefore, place-making activities bridge between space and place. They draw on the, mundane practices that serve to extend or maintain local social networks through face-to-face interaction, in addition they include more purposive efforts to build a sense of meaning and belonging. Place-making then, is about the production of locality (Appadurai 1996; Feld and Baso 1996). It involves turning a seemingly generic, ambiguous, unruly or “fuzzy” site of spatial possibility into a more meaningful and social entity where we recognise ourselves in relation to others.

When the everyday activities of place-making become patterned, prominent features of a locale they denote a distinctive spatial culture: a constellation of materialities and meanings that individuals recognize as familiar, plus understand as related. This is not to say places have a single, unified and unproblematic spatial culture. Anthropologists have long been aware of the provisional nature of places as ‘cultural constructs’, which are understood as fragile
achievements, inherently mutable and always under construction. Places are sites where cultural identities and differences are produced relationally, in contact with diverse movements of people and objects through translocal conversation (Appadurai 1996). This chapter focuses on the process of place-making the rather than the ‘end product’ of place. We contend that examining place-making practices can help elucidate how spatial culture unfolds and help unveil different cultural genres of practice that people use to produce a sense of place. A cultural genre of practice is a set of socially learnt activities that enable people to construct a coherent biographical worldview (Kapchan 1995). Cultural genres of practices are not exclusive to place-making. Place-making practices are a particular subset of cultural genres of practice that help simultaneously to characterise both people and places.

Place-making is constrained by the material reality that people contend with in their everyday lives. The notion of spatial cultures necessarily implies a sensitivity to the material objects that enable sociality in public spaces (Tilley et al. 2006). In this chapter the focus is on the use of digital media technologies and public spaces as material canvases that people use in their construction of a locality’s spatial culture. We take the perspective of Amin (2008: 8) who argues that places as “formative sites of urban public culture - collective forms of being human through shared practices - need not be restricted to those with a purely human/inter-human character, but should also include other inputs such as space, technological intermediaries, objects, nature, and so on”. In this spirit we enquire how both digital media and the built environment enable place-making practices in urban communities. To approach this question we develop the notion of mediated spatial cultures, defined as cultures that use media/objects to support the performances and practices that assert, enact or contest the communal possibilities of place. The notion of mediation suggests that there is ‘something’ in between people’s activities helping to achieve social relationships amongst them (Livingstone 2009, see also Silverstone 2005). Many anthropological studies recognise that “social relationships are the basis of... space, yet these relationships necessitate materiality... to work as a medium” of social interaction that help to build a sense of place (Low 2009, p. 18; see also Low and Lawrence-Zúñiga 2003). It is necessary to be attentive to the relation of all of these elements to achieve a mediated culture approach, understanding both how place is constructed and how people perform being-in-place.

Methodological Considerations

To explore these theoretical propositions this chapter presents anthropological research into a particular digital mediating object – interactive urban screens – and examines how these can be incorporated into people’s daily practices of community place-making. According to Gell (1998), an anthropological approach is biographical, since it attempts to replicate the process of meaning creation from the perspective of the subject’s life journey. For this research project, focusing on the lived experience and cultural dimensions of the human subject, a biographical approach was deemed most appropriate. Ethnography was used as the main data gathering methodology. Ethnography entails “sharing a process of sensory apprenticeship in order to appreciate... the way of seeing of the ethnographic subject” (Pink 2007: 244). Our informants were drawn from participants in community workshops run in parallel with the installation of the digital media screens in the two community buildings (details of the workshops are given in the following section). Consistent with the ethnographic approach we joined our informants at various life stages in their daily activities to understand more about their social and cultural practices of place-making. We not only talked with our informants during our workshops, but also observed their daily lives on numerous occasions. The ethnographic methodology proved a good way to explore cultural genres of practice in local communities. It helped to reveal the
diverse processes through which different people, things, public spaces, media, sensory embodied experiences and behaviours become entangled to form a sense of place.

In this ethnographic context we found in mediated spatial cultures a useful conceptual approach to exploring how new public interactive screens become implicated in the production of locality. The study of mediated spatial culture is of particular interest in locales where there is a large heterogeneity in local populations. Our fieldwork site was located in London, which is home to people from more than 179 countries and speaking more than 300 languages (Vertovec 2006). The borough of Waltham Forest where the screens were situated is one of the most ethnically diverse in Britain (Council 2015), and can be considered super-diverse (Vertovec 2010). Waltham Forest is characterised by a multiplicity of demographic differences in countries of origin, languages, migration histories, religions, educational and economic backgrounds, both among long-term residents and newcomers. In these cases, a sense of place does not arise implicitly as an incidental product of long held traditions and a previous shared cultural understanding. Instead, the local inhabitants of demographically diverse areas must make a greater effort to explicitly create a sense of locality through the purposive endeavours of place-making (Appadurai 1996). This process can, in turn, foreground the genres of everyday practice that people invoke to build a sense of place.

**Screen Nodes, Mediated Spatial Culture and Place-making**

Our research project involved implementing a network of four interactive touch screens designed to encourage public participation and to explore how screens located in public spaces can augment the urban experience and support local communities (gen. Schieck et al. 2012). The two main screen node applications that are discussed in this chapter are *Slideshow* and *ScreenGram*. *Slideshow* loops through a set of pre-loaded images in the screen node; *ScreenGram* enables local users to generate content by uploading images to the screen nodes via Twitter and Instagram, making use of hashtags. For further description of the applications see (North et al. 2013). In this chapter we describe the social interactions that occurred at the two London based screen sites.

The first screen was located in The Mill in Walthamstow, a building run by a non-profit organization as a community hub; the second screen was located in Leytonstone Public Library that fulfils a similar community role to the Mill in a municipal building. Both the Mill and Leytonstone Library are popular public buildings where people organize and enact initiatives that actively encourage a sense of local identity in their immediate neighbourhoods and of the borough as a whole. Both sites bring together a diverse cross-section of local residents to pursue varied social activities. In order to engage with the range of social groups we carried out two workshops in Leytonstone and four in Walthamstow that introduced the community to the digital media screens. A total of 70 people from the locality participated in the workshops. More information on the workshops and our urban screen software can be found in (North et al. 2013; gen. Schieck et al. 2012; Behrens et al. 2013; Motta et al. 2013). In addition to the workshops, we also carried out ethnography for over a year, and conducted 64 semi-structured interviews with locals belonging to different social groups. We divided our informants into three approximate age-related groups: children/early teenagers, adults/young adults, and seniors. In the following section we discuss how our informants integrated screen nodes within these pre-existing place-making efforts.
Playing in the present
One of the ways in which children and early teenagers generate a sense of belonging, community and place is by playing in public spaces such as parks, markets, malls, playgrounds or sites like The Mill and Leytonstone Library. Through play, children and teenagers assert certain degree of control over their spaces and their social experience within them, eventually claiming these places as an extension of their own selves. To a great extent, this is done praxeologically, that is, through a highly embodied and physical engagement (Warnier 2001). A park or public space, then, only becomes theirs in corporeal action: through play and interaction both in the space and with the space. For most informants this play was accompanied with interactions with friends, family and strangers. The material environment of public spaces, such as parks and play areas, opens up the possibility of mixing with others, getting to know people living in the area in different ways, forging both friendships and a sense of place.

Overall, we observed that children and early teens have a heightened embodied relation to public spaces when compared with other age groups because they place a greater emphasis on physical interaction. For instance, early teenage informants mentioned that one of their favourite activities in parks is running from one place to another through different routes, and thus learning how long it will take them to get from A to B in different conditions. This mastering of the physical environment, in turn, enables them to engage in social games with other teenagers (for example, through spontaneous races, surprising them by following unexpected paths and having the upper hand when chasing them or hiding from them). Since this intimate embodied knowledge of open spaces has a social dimension, it also helps them to relate to others, and to build a sense of place and social belonging.

Children also interact with public spaces (and other children their age) in a more embodied way than adults. For instance, children love to play in playgrounds with swings, experimenting with the force they need to exert to achieve certain height in their motion. No two swings are exactly the same. They have their own different histories of use and maintenance. They were perhaps purchased at different times, or are made of different materials that have withstood the weather differently. Each swing might pose slightly different physical demands to children, who experiment to find the appropriate amount of force to achieve the right height - that which they, their friends and their parents feel comfortable with. When they play with a swing, children generate both corporeal feelings and emotions in themselves, but also in friends and adults. By mastering the swing, and hence, the feelings and emotions that it triggers in themselves and others, children also learn how to play with other children and relate with their parents, negotiating simultaneously physical and social constraints or possibilities.

Children and young teenagers used the same physical, action-based approach when interacting with the interactive digital screen node. They banged the screen or touched it softly to ascertain if this makes any difference in the response of the machine. They used hands, feet or even elbows to test the machine response in relation to their bodies. They observed the reactions of their peers and parents in relation to their physical experimentation, and use these reactions as a means to engage in social exchanges. They liked to explore the opportunities provided by the technology: the sensitivity of the touch screen foil, the fluidity in application response, and their ability to exert control over the system. Whether it is by simply moving the pointer or by systematically exploring the visual feedback to their touch, their approach to the screens was dominated by the actions that they can perform, rather than by the explicit interactions that the developer envisaged for the application running in the node. In these ways,
children and early teens used the node in novel ways, inventing games that were simultaneously competitive and collaborative, and which relied heavily on physical interaction (for example, competition over free pointer mouse motion). Furthermore, their interactions with the screen software were framed by their interaction with family and friends, and the screen capabilities are explored in conjunction with the emotions and responses of others. Children and young teens experience the screen node spatially just as a park or a swing, and social behaviour is enacted accordingly (see Image 1).

![Image 1. Children using simultaneously the screen through heightened embodiment.](image)

Another way in which interaction with the screen resembles the way in which children and teens interact with open spaces is that they challenge individualistic views of ownership, in favour of a social use of screens that is simultaneously collective, competitive and communitarian. Both The Mill and The Leytonstone Public Library are places where children attend playgroups learn to share the space and resources with other children. They run, play and perform for others in these shared spaces. In terms of material culture, they enjoy books and toys that are not theirs, but which they borrow to play. These are not seen as alien because they are communal, since “public property may become viewed as private possessions and thereby potentially contribute to a sense of self (and of place)” (Belk 1988: 150). In a way, children explore the possibility of something being theirs whilst simultaneously belonging to everyone else, plus compete for use of public resources and the mastery over them.

It is interesting to note that place-making practices also impinge on the media consumption of children and early teenagers, particularly in the case of interactive media. When they play video games -such as the then extremely successful Angry Birds (Wikipedia 2014)-, children and early teens go beyond those actions provided in-game and develop physical interactions with friends that enrich their game play. These interactions include pushing, prodding, joking and teasing, and can be directly attributed to social consumption of video game play in public spaces. Conventionally, most of our children and teenager informants consumed Angry Birds on their parents’ smartphones, while waiting for the adults to complete chores and other tasks in public spaces, and share the game experience with other children.

The experiences of these informants with Angry Birds provided them with a referent to imagine future uses of the screen node. A six-year-old child stated he liked the screen node “...because you might be able to play Angry Birds on it too! (Wide eyes of excitement)”. In this case, he imagined not only a technically improved experience (e.g. a bigger screen) but also the opportunity to more easily share this improved experience with friends in a different and more embodied way. Hence, when considering the screen node, children imagine its consumption in similar terms to that of smartphones, but offering enhanced physical and communitarian opportunities that allow them to assert themselves in their personal and social identities. In this sense, children and early teens envision the screen node as an extension of their current place-
making practices. Overall, children and early teens fully incorporated the screen node to their usual playing practices in public spaces. In addition, the children and early teens imagined potential uses for the screen that enabled them to engage physically not only with the device itself, but also with other people next to them.

**Remembering the past**

One important way in which seniors generate a sense of place is through remembrance narratives involving the past of the neighbourhood and their lives within it. This activity is one of anchoring (Giddens 1984), in which subjects bring the past to inform the present, and ensure that valuable historical lessons remain with us. Although this is particularly visible when they interact with each other during community group meetings, these narratives are also important in other contexts. Whether sharing these stories with children in local schools or historical societies, seniors enjoy talking about the past in public spaces.

Given this predilection for reminiscence, our senior participants enjoyed the node applications that enabled them to preserve and share memories. Hence, they quickly identified the ScreenGram and Slideshow applications as a potential collective photo-album, which could help preserve and rework memories, acting as a vehicle for their remembrance narratives. In addition, since the screen node was located within one of the social hubs in which our senior participants congregate, the node could also serve as a focal point to talk about these memories while looking at relevant pictures. For these informants, the visual elements of the screen facilitate the verbal storytelling, which they traditionally employ to build a sense of belonging.

Seniors enjoyed the social opportunities afforded by using the node to spend time watching and discussing images that held personal importance for their own lives in relation to those of others in the neighbourhood. They stressed that they would have liked a pause button to dwell on images and comment them with others at their own pace, instead of having a timed loop as featured in both applications. Capturing a moment in a photo, and then re-capturing it again by pausing the image display in the screen node would better enable them to build intimate connections with places and people. This process is about reclaiming the experiences of others as their own and enabling their own experiences to be reclaimed in the same way by others. For instance, some of our senior informants were very enthusiastic to discuss and display an image their childhood that showed a local school dinner in which they celebrated with other neighbourhood children the end of the Second World War (see Image 2).

For many of our senior informants, this intimate relationship with images as memory aids extended well beyond the local screen node. Several have a digital photo camera as one of their cherished possessions, which they carry with them at all times. In the storage cards of the device they safeguard snapshots they have taken of old printed photographs, whose negatives have been lost, as well as images of recent events in their lives and neighbourhood, documenting local history. I was shown pictures of social events in the neighbourhood, paintings they have created inspired in classic artists, and vignettes of the flora and fauna in their gardens. They are often ready to take out their cameras and show its contents in conversations with others. Repeatedly we found ourselves chatting to seniors in public meeting spaces and getting to know their families, their friends, and their cherished memories of recent and past events, aided by the small viewers of these cameras.
Seniors regularly used the images in these cameras as an aid when interacting socially with others. Both their understanding of the screen node and the value that they see in it is an extension of the way they mobilise objects, images and conversations to reflect on events and forge memories of a local history. Seniors were not able to fully incorporate the screen node into their remembrance practices, since they lacked digital skills or tools to upload their images. However, they imagined the screen could be a local history living repository, just as their cameras (or even themselves) are. This new device could help extend the labour of public consciousness of the past they are engage with, as to constantly consider the past in relation to the creation of new senses of place.

**Bringing about the future**

When constructing a sense of belonging and place, adults emphasize less the physicality of the environment or its local history. Instead, they take a more instrumental, idealistic and future-looking view. They are interested in using the screen node to create what they consider a positive local environment. They seek to improve educational opportunities, increase awareness of future or imminent problems, and even foster better communication flows between different groups within their neighbourhoods. This place-making perspective is about enabling future ideals to happen in the present. It has resulted in the formation of many neighbourhood initiatives, from the transformation of an abandoned library into a community centre, to the foundation of local development economic districts.

Our adult participants see place-making is an opportunity for the purposeful pursuit of change in the locality; it is a scaffold (Greenfield 1984), an instrument to mediate between their imagined view of their locality and the reality in which it stands. Hence, our adult participants see their place-making activities as a springboard to generate local culture and bridge the gap between what their locale is and what it could become; a stage for the display of the unrealized potential development of the locale. Adults and young adults hence showed a proclivity towards place-making as activism.

We found many examples of this proclivity for activism as place-making that become relevant both because of the community-centred discourse that accompanies them and because of their physical and social effects in the locale. One specific instance of this involves a local blogger, who in 2012 decided to produce and sell “Walthamstow Dad” T-Shirts. He wrote in his blog:

*Proud Dads of Walthamstow, I salute you... Last year we sold 60 Walthamstow Dad T-shirts and raised £250 pounds for the Maternity unit at Whipps X. I just wanted to say a big thank you to all the tweeters for the gossip... Stella Creasy (the local MP) for championing yet another local cause, StowScene and its amazing website...* (Walthamstow Dad Blog 2012)
Another instance of local activism that brings the ideals of the future into the present are the two neighbourhood Art Trails, in which people showcase their artwork by opening their houses to the public. These events take place every year, during one week over the summer. In these, people from different walks of life open up their homes to the public, and showcase around 300 different art exhibits they create themselves. These events foment contact with people with different cultural values, backgrounds, worldviews and life choices. Furthermore, these events generate a third-space, where everything comes together: “...the abstract and the concrete, the real and the imagined, the knowable and the unimaginable, the repetitive and the differential... mind and body, consciousness and unconscious... everyday life and unending history” (Soja 1996: 56-57). Art Trails help generate an alternative public space, where residents enact the vernacular cosmopolitanism (Georgiou 2013) and mixing ethos (Wessendorf 2013), as social norms and values. Thus, residents come together to celebrate art, participating in public life through the respect, recognition and the defence of difference. The Art Trails offer a glimpse of a possible heterogeneous but harmonious community. They constitute an intellectual, symbolic and material practice that not only enables place-making, but also promotes culture as “the human capacity to expand worlds towards other potentially distant horizons and more complex outcomes of life” (Miller 2011: 215).

Although not all adults or young adults participate to the same extent in local activism or the Art Trails, many like to at least keep abreast of local issues. This happens both online and offline, usually thorough public notice boards, local newspapers, personal conversations in public spaces and direct communication from the local government. All these become part of place-making endeavours because they constitute a readily available system of references that is shared by adults in the locale and helps to create a sense of personal and community identity. Similar shared references arise from the shared experiences of immigration online through blogs. A 27-year-old local blogger thus explains the challenges of living and belonging in diversity:

My time in the UK has made me appreciate my heritage as a Black American Woman to a greater extent, all while learning to appreciate other cultures around me. I have met people from all over the world... I feel alone at times, get... frustrated, feel like... moving back home, but then I remember a quote that I learned growing up: ‘A test of a man is not where he stands in times of comfort and convenience, but where he stands in times of challenge and controversy’... I’m learning that despite the differences people have, they tend to be more alike than they are different. We might have different backgrounds, stories, and life experiences, but we all laugh, cry, bleed and love the same...Walthamstow, London is my home, and I’m looking forward to being a part of its community and way of life (sic). (Walthamstow Wildlife Blog 2010)

With regards to adults’ use of the screen node, those explicitly engaged in transformative activities (such as local activism) saw it as a means to extend their efforts, informing and educating the local population about relevant projects. Members of a knitting group, for instance, urged researchers to use ScreenGram to advertise knitted characters they were trying to sell to raise funds for their local community centre. Local artists used the node to extend the available physical exhibition spaces by imagining it as a window to display digital art, and proposed to integrate it to their Art Trail projects. The managers of The Mill community centre imagined the node as a virtual notice board that extended their physical meeting space, and
enabled users to connect with each other even if the building itself was closed. For those adults or young adults not involved in specific community-building projects, the screen node was approached as an extension of their online place-making activities and became an outlet for local useful information, locally-specific news, and a means to connect with other locals in conversation about future ideals.

As shown above, most adults and young adults in our workshops and interviews reported that they expected the screen node to embody a higher purpose. They approached the screen as an extension of their pre-existing place-making endeavours, uploading photos and short messages relevant to their communities. For instance, Image 3 shows photos adults commonly uploaded to the screen. These photos aimed to get others involved in either local political protests or the imagining of alternative neighbourhood landscapes.

For many, the mere physical presence of the screen node legitimised previous efforts for place-making, showing these to have been efficacious (as new resources for the improvement of the community had been produced). Activism-inclined informants presented the node in local events with pride, as a symbol of their achievements to bring a multi-cultural community closer to its unrealized potential. Those with less political persuasions saw it as an arena of constant small-talk and debate. However, in both cases locals saw themselves simultaneously as unique individuals with interesting ideas to provide and as members of a vibrantly diverse greater community.

Closing Remarks

Material objects, including the built environment, digital cameras and screen nodes, provide ways in which residents construct and convey their biographical worldviews. They are means of ordering social relationships and connecting with wider collectives. In other words, “they are a medium through which people construct their world (their neighbourhood) and reflect on it” (Tilley 2006:62). When interacting with the screen nodes, participants (irrespective of their age) enact genres of practice: socially learned and appropriate patterns of behaviour “whose repetitions situate actors in time and space, structuring both individual and group identities"
enabling a sense of place (Kapchan 1995:479). In the Waltham Forest case studies the genres of practice were: playing in the present, remembering the past and bringing about the future. It was through these patterns that residents constructed a mediated spatial culture: self-consistent units of behaviour that are supported by media and objects, and which exist only as they are performed.

When our urban screen nodes were installed, there were no prior referents to guide the neighbourhood residents in their interactions with them. This allowed people to think about how the screens resonated with their biographies, values, desires and habitual strategies to connect with others in public spaces. By inserting this foreign object in the locale, the various genres of practice and biographical dynamics governing the place-making of different groups became more explicit. We observed that “when a new medium arrives on the scene, the first and most important impact tends not to be anything which is itself radically new. Rather the tendency is to seize upon it in order to finally realize some desire that was already present” (Miller 2010:115). This observation is evident across all the cases presented, since residents approached the screen as an extension of their regular place-making practices. In turn, the screen enabled residents to fulfil their pre-existing desires to connect with others, in accordance with their life stages.

In this chapter we have shown that interactive public screens acquire particular meanings and uses through various biographical dynamics and place-making strategies. We emphasized the continuities between the already existing place-making practices and those practices enacted when interacting with the screen nodes. For children and teens we observed that this new medium was much more exciting than it was for seniors or adults. This was because they had previous interaction desires that had been frustrated so far. Public interactive screens enabled them to play embodied collective computer games in a highly unpredictable, public setting. This stands in stark contrast with current game consoles, which can only be played in private even when they allow collective use. This is a very predictable, and thus boring environment for play. The new medium and its setting is attractive because it allows for unexpected and highly embodied interactions, more akin to what parks and playgrounds can offer. In contrast, adults and seniors already used digital media (blogs, images and websites) to connect with other residents.

Since place-making practices rest between space and place, oscillating between the discursive and non-discursive registers, there are aspects of them that cannot be easily verbalised. Hence, an ethnographic approach becomes necessary to flesh out the genres of practice operating in a locale, which is itself necessary to making sense of the ways in which apparently spatial technological infrastructures become significant and embedded in the production of locality. In this sense, a digitally mediated spatial culture approach that spans its analysis across material culture, media, place-making practices and the biographies of people can be a useful addition to conceptualizing the impact that the deployment of a new technology can have in a given urban community locale.
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