

Mobile Mediality: Location, Dislocation, Augmentation

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Through everyday practices of moving around cities, people are creating new ways of interacting with others, with places, and with screens while moving, or pausing in movement. Many emerging forms of mobile communication are assisted by new devices and accomplished in motion, leading to practices of “mobile mediality,” understood as a new form of flexible and mediated spatiality. New mobile medialities create the conditions for generative cultural and spatial practices that are transforming fundamental dimensions of contemporary urban culture and urban space. They are also potentially presenting a challenge to the existing mobility regimes, which have dealt with movement, power, and control based on twentieth-century technologies. If digital social media and mobile information and communication technologies are enabling people to be on the move, to connect and disconnect, and to enact presence and absence in new ways, how are the day-to-day appropriations of mobile media and geolocational data producing new relations of people to space, community, interaction, and communication? And what implications does this have for the reflexive modernization of mobility regimes?

The emergent practices of mobile mediality elicit both utopian hopes and dystopian fears about pervasive computing (Greenfield 2006), remediation/premediation (Grusin 2010), augmented reality, and responsive environments. In the new field of Media Geography, it is suggested that we live in mediated localities:

Nowadays everything in the media world gets tracked, tagged, and mapped. Cell phones have become location aware, computer games have moved outside, the Web is tagged with geospatial information, and geobrowsers like Google Earth are regarded as an entirely new genre of media. Spatial representations have been inflected by electronic technologies (radar, sonar, gps, Wi-Fi, Bluetooth, rfid, etc.) traditionally used in mapping, navigation, wayfinding, or location and proximity sensing. (Thielman 2010, 2)

Widespread access to WiFi, mobile 3G, or GIS data in public spaces and in transit may potentially reconfigure urban mobilities and spatialities. However, the deployment of such technologies may simultaneously assist in the reformation of the dominant

mobility regimes, as well as providing potential spaces for critique, political dissent, and counter-organization. What are the potentials of mobile mediality to afford new sites for creative interventions, public participation, and social interaction? On the other hand, what problems of privacy, surveillance, secrecy, and uneven accessibility are emerging out of the new patterns of mobile mediality?

This chapter contributes to the emerging research concerning creativity, social mobilization, and the formation of new mobile publics and mobile arts practices within the software-embedded and digitally augmented urbanism that some describe as “remediated” space (Bolter and Grusin 1999), “networked place” (Varnelis and Friedberg 2006), or “hybrid space” (de Souza e Silva and Sutko 2009). It explores how new mobile medialities are reshaping urbanism and its “technoscapes” and “mediascapes,” creating new affordances for people to navigate public places and built environments, and for artists to engage with new media and urban spatiality, generating new forms of public interaction. The concept of “technoscape,” derived from Arjun Appadurai, emphasizes “that contemporary landscapes are shot through with technological elements which enrol people, space, and the elements connecting people and spaces, into socio-technical assemblages – especially the transportation technologies, such as roads, rail, subways and airports, but also the informational technologies such as signs, schedules, surveillance systems, radio signals, and mobile telephony” (Sheller and Urry 2006b, 9). Both people and information, bodies and data, move through these technoscapes, increasingly layered with informational augmentation of spaces and infrastructures.

Through the experimental convergences between locative arts practices (Hemment 2004, 2006a), playfully networked objects (Bleecker 2006; Bleecker and Knowlton 2006), and practices of critical geography (Paglen 2010), we can begin to see how artists and other cultural producers might serve as forerunners for a movement against the strictly regulated and increasingly controlled mobility regimes that cities and nation states are trying to establish in a world driven by fears of security, terrorism, ecological risk, and economic collapse.

PRACTICING MOBILE MEDIALITY: FROM AUGMENTED TO HYBRID REALITY

Mobile mediality depends on an invisible array of satellites, cell towers, WiFi, and Voice-over-Internet Protocols, smart buildings, and other infrastructure. Architectures of mobility and infrastructures of communication are mixing and blending visible/invisible, presence/absence, and local/global scales. As John Urry and I suggest in our introduction to *Mobile Technologies of the City*, the mobility systems that constitute cities and make them possible “include ticketing and licensing [of drivers], oil and petroleum supply, electricity and water supply, addresses and postal systems, road safety and public safety protocols, station interchanges, web sites, money transfer, luggage storage, air traffic control, barcodes, bridges, time-tables, CCTV surveillance and so on” (Sheller and Urry 2006b, 5–6). Some of these systems engage physical infrastructure, while others

concern informational systems; some involve moving things like bodies, vehicles, oil, or water, while others involve moving things like data, code, and images. We argue that physical and informational mobility systems are being tightly coupled into complex new configurations, such that mobility systems are becoming more complicated, more interdependent, and more dependent on computers and software. There “has been a massive generation of specific software systems that need to speak to each other in order that particular mobilities and ‘sortings’ take place” (2006b, 7).

Physical spaces such as buildings, cities, or entire islands are becoming saturated by a myriad of computerized interactions, and new forms of regulation and practices of space have been conceived of to manage these interfaces between physical and digital interactions. Taken to the extreme, it could be imagined that in the transmissible and transphysical city, as Marcos Novak argues, urbanism will become an interface to the net, “a new, nonlocal urbanism,” one “freed from a fixed geometry,” but certainly not “postphysical,” for it will still be interwoven into the physical matrix (Novak 1997, 269–70). While in some respects this vision echoes the science fiction realms of William Gibson’s postphysical cyberspace matrix, as described in his influential book *Neuromancer*, in more recent sociotechnological imaginaries, the digital has become more integrated into physical places. In “Place: Networked Place,” Kazys Varnelis and Anne Friedberg, argue that:

Contemporary life is dominated by the pervasiveness of the network. With the worldwide spread of the mobile phone and the growth of broadband in the developed world, technological networks are more accessible, more ubiquitous, and more mobile every day. The always-on, always-accessible network produces a broad set of changes to our concept of place, linking specific locales to a global continuum and thereby transforming our sense of proximity and distance. (<http://networkedpublics.org/book/place>)

This networking of place, they say, leads to “the everyday superimposition of real and virtual spaces, the development of a mobile sense of place, the emergence of popular virtual worlds, the rise of the network as a socio-spatial model, and the growing use of mapping and tracking technologies.” Geographers like David Harvey, Doreen Massey, and Neil Brenner remind us that the informational world remains grounded in the physical world, with its spatiotemporal fixes, power-geometries, and shifting scales.

There is not a real world and a virtual world (“cyberspace”), then, but the “new media are layering over existing spaces, systems of mobility, and infrastructures,” and reorganizing them through processes that Stephen Graham and Mike Crang describe as “remediation” (drawing on Bolter and Grusin 1999). Bolter and Grusin argued that in the late 1990s there were two contradictory media logics: transparency (in which media sought to erase itself and give direct access to “the real”) and multiplicity (in which diverse forms and practices of media proliferate). “In retrospect,” argue Varnelis and Friedberg:

the all-digital “city of bits” seems to be a historical artifact, the product of a digital culture in which the user was tied to a CRT (cathode-ray tube) screen.

The key technological devices that shape our lives – telephones and computers as well as the telematic networks that connect them – are now mobile, free of specific contexts but implicated in situational contexts, coloring those situations just as those situations color their contexts in turn ... rather than having one body withering away in front of the screen, it is progressively more common to navigate two spaces simultaneously, to see digital devices and telephones as extensions of our mobile selves. (<http://networkedpublics.org/book/place>)

Elsewhere, Graham summarizes ideas like Stefano Boeri's "eclectic atlases," William Mitchell's "city of bits," and Marcos Novak's "transarchitectures" to show how "urban landscape crosscuts, and interweaves with, multiple and extended sets of electronic sites and spaces" such that there is a "folding of urban landscapes into a wide range of electronic and physical systems of flow, mobility, and action-at-a-distance" (Graham 2004, 113).

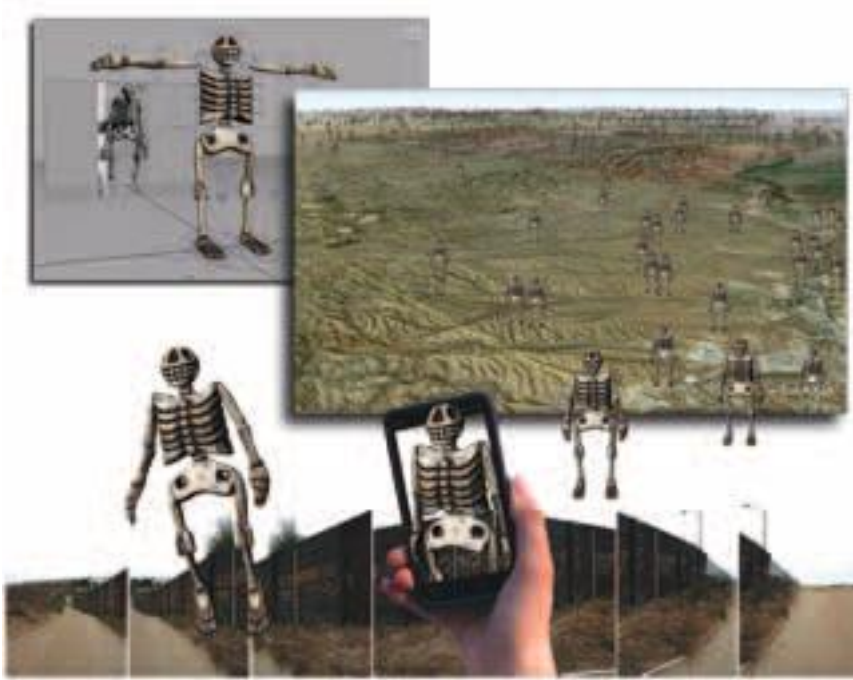
Locative art and mobile gaming are two of the arenas in which such emergent remediations are being explored, as old media recirculate via new media into alternative networked spaces.¹ Through the intervention of new mobile media, there is a remediation of painting, film, television, and understandings of art itself, and also a hypermediation of streets, urban space, public and private places, and gaming practices. A key question is whether these remediations are contributing to the formation of "free spaces" for experimentation, critique, and political communication, or simply feeding into the reformation of systems of state surveillance and commercial control. Are they enrolling us into updated mobility regimes as rebooted consumer subjects, or can the technologies be grasped to foment more transversal practices that cut across regimes of power and empower new kinds of subversive subjects?

Augmented Reality

The shift from "virtual reality" to "augmented reality" is the first step in thinking about this process. Whereas virtuality involved immersive experiences that served as replacements for embodied spatiality, "augmented space" denotes a physical space with added elements from digital space, an extra layer of information added over like a veneer (de Lange 2009, 59). For example:

The Virtual Public Art Project is an Augmented Reality platform for the public display of digital works of art. VPAP uses emergent Augmented Reality platforms to create virtual art in public spaces by merging computer generated imagery with physical, real-world locations. Unlike current AR smart phone utilities that enable users to view a location with an additional layer of information about that location – i.e. information about a restaurant, VPAP creates site-specific sculptures at a location that invite viewers in for close observation from all sides and from multiple perspectives. Augmented reality is a view of the physical real-world environment merged with virtual computer-generated imagery in real-time.²

According to Chris Manzione of VPAP, Virtual AR sculptures contain site and nonsite-specific aspects.



23.1 John Craig Freeman and Mark Skwarek, *The Border Memorial: Frontera de los Muertos*, Augmented Reality Public Art, 2011

The location of the sculpture is one of data and is stored in the phone or on the network, but to get to this data and see/interact with it requires your physical presence with another place. Once at the site, your experience is fully mediated, having nothing physical to attach your eyes to except through the screen of your phone.

John Craig Freeman is another public augmented reality artist with over 20 years of experience using emergent technologies to produce large-scale public work at sites where the forces of globalization are impacting the lives of individuals in local communities. His work seeks to expand the notion of public by exploring how digital networked technology is transforming our sense of place. With Mark Skwarek, for example, he produced *The Border Memorial: Frontera de los Muertos*, an augmented reality public art project and memorial, dedicated to the thousands of migrants who have died along the US/Mexico border (see Figure 23.1). This project captured a topographical section of the US/Mexico border where migrants died trying to enter the US and brought that 3D location into the gallery space with augmented reality whereby Mexican vernacular-style skeletons appear at the location of actual deaths. This project also exists in real-world scale at the Museum of Modern Art (MoMA). Gallery goers are able to virtually experience the locations where the migrant deaths occurred, projected via AR into the MoMA courtyard. Freeman and Skwarek also created Tiananmen SquARed, a project that re-creates the Goddess of Liberty erected by students during the 1989 Tiananmen Square protests in Beijing, and geolocates her back in the square, along with a nearby

AR image of the event known as “Tank Man” in which a sole man stepped in front of a column of tanks approaching the Square. However, the Goddess of Liberty has been placed not only there, but also at the sites of all of the recurrent protest movements known collectively as the “Arab Spring” – from Tahrir Square in Egypt to protest sites in Tunisia, Syria, Bahrain, Yemen, etc.

Skwarek's other works include *corporate brand-hacks* such as *The Leak in Your Home Town* (2010) – point an iPhone at a BP logo and the viewscreen ignites with the image of a swirling toxic oil plume in Flash animation, which leaps out of the corporation's once benign-looking green-and-yellow sunburst logo. Their political works are also now branching out to incorporate social media such as Twitter into the AR experience. In the *Liberty to Libya* project, an augmented reality dove circled the city of Tripoli, Libya. The dove was carrying a scroll on which Tweets from around the world could be seen. To use the project, participants tweeted the phrase “#libertytolibya”. The participants' Tweets were then displayed on the scroll carried by the dove above real-world Libya. Together with other AR artists, Freeman and Skwarek founded Manifest.AR, whose manifesto proclaims:

The AR Future is without boundaries between the Real and the Virtual. In the AR Future we become the Media. Freeing the Virtual from a Stagnant Screen we transform Data into physical, Real-Time Space.

In the 21st Century, Screens are no longer Borders. Cameras are no longer Memories. With AR the Virtual augments and enhances the Real, setting the Material World in a dialogue with Space and Time.

*With AR we install, revise, permeate, simulate, expose, decorate, crack, infest and unmask Public Institutions, Identities and Objects previously held by Elite Purveyors of Public and Artistic Policy in the so-called Physical Real.*³

This work is thus political not only in content but also in its geolocational placement. It attempts to locate mobile AR artworks in places that “hack” structures of power, and it does so quickly, intervening in of-the-moment political events.

Hybrid Space

The second step involves the shift from AR to an even more hypermediated and transparent hybrid space. At the Mobile City Conference in Rotterdam in 2009, geographers Stephen Graham and Mike Crang highlighted the current period of *experimentations in which artists, activists, and cultural entrepreneurs* (as well as businesses, governments, etc.) are trying to weave together mobile devices, GPS, GIS, RFID, mobile databases, ubiquitous computing, and urban architectures in new ways, which they described as Sentient Cities (Graham and Crang 2008). As wireless broadband becomes more accessible and affordable, a growing number of people across the world have access to these kinds of mobile interfaces with real space, and increasingly the Internet or “World Wide Web” is being accessed by mobile smartphone, not by computer. This leads to the notion of “*networked objects*” (Bleecker 2006; Bleecker and Knowlton 2006), where everything is

embedded with sensors and is hooked into pervasive communication networks, and software is “everyware” (Greenfield 2006). Varnelis and Friedberg likewise argue that: “Melding the geospatial Web with locative media promises that you can leave your mark on the world or read the marks others leave behind, re-creating place in a Borgesian digital map. Artifacts and places will be imbued with memories in a far richer way than ever before. Given a geocoded, Wikipedia-like interface, it is possible to imagine the entire world annotated with histories” (Varnelis and Friedberg 2006).

Hana Iverson, for example, is a Philadelphia-based media artist with a focus on networked communities and wireless technologies. Her public projects “Cross/Walks: Weaving Fabric Row” and education initiative “Neighborhood Narratives,” for example, employ the neighborhood as social practice to explore questions about place, embodiment, and social engagement inside of mobile and other alternative forms of distribution. Her current work uses cell phones and mobile media devices to gather and produce sonic, visual, and location-based information that is “integrated and fashioned into a new form of public art that functions in the midst of everyday experience. In much of this work, the art is dependent upon and in participation with physical movement that triggers the experience, hidden in the invisible layers of the urban landscape.” In mobile computing and immersive interaction, the space between the user of portable/wearable media and the image is one in which real time and space can play moment by moment against visual objects. Physical movement and spatial behavior thus “shift the representational status of the image from the screen/surface to space/embodiment.”⁴ Iverson’s recent work has extended into AR interfaces, as shown in the VPAP show in Philadelphia and in various collaborations with Sarah Drury of Temple University. In a show she curated called “Decollage: Torn Exteriors” at the Ventana244 Art Space in Brooklyn (May 2011), Drury explains that “Augmented reality using the smartphone allows the participant to visualize digital images ‘collaged’ over the present location, as seen through the phone’s camera” – “Many things embedded in the everyday landscape are invisible ... [AR is] a lens to see things that wouldn’t be seen otherwise.” Hence, rather than simply adding an artful collage layer over reality, Iverson and Drury propose a decollage that tears open the surface of things and reveals the informational reality beneath the surface.

Studies of mobile gaming have begun to raise crucial questions about emergent mediated practices of urban space as it is reconfigured by new affordances (Licoppe and Inada 2006, 2009). According to Sophia Drakopoulou (2010), in location-based games, the game narrative can influence the players’ movement within the city. The game world is notionally superimposed onto the city’s surface. Employing representations of space, these games create a social world that encompasses the vicinity of the players. The players’ spatial practice forms the conditions for progress within the game narrative. These games recontextualize and give new meanings to the players’ location, rearticulating the spatial cohesion of reality through mobile access to virtual networks. This phenomenon extends beyond gaming, however, informing all ways of moving and mediating, effectively re-spatializing and re-mediating mobility. Crucially, as Grusin argues in *Premediation*, “remediation no

longer operates within the binary logic of reality versus mediation, concerning itself instead with mobility, connectivity and flow. The real is no longer that which is free from mediation, but that which is thoroughly enmeshed with networks of social, technical, aesthetic, political, cultural, or economic mediation. The real is defined not in terms of representational accuracy, but in terms of liquidity or mobility" (Grusin 2010, 3).

As Grusin explains, the emphasis on immediacy now is "epitomized in the form of IT models like cloud computing or projects like Open ID and the Open Web, which aim to make seamless one's multiple interactions with commercial and social networking, with health and medical records, juridical and educational records, shopping and entertainment preferences," based on an "unconstrained connectivity so that one can access with no restrictions one's socially networked mediated life at any time or anywhere through any of one's media devices" (Grusin 2010, 2). Hence, while augmented reality in many ways maintains the distinction between the creatively visualized art object and the "real" space into which it is inserted, in a "hybrid space," movement and activities take place in both physical and digital spaces at the same time. As De Souza e Silva argues, "Hybrid space abrogates the distinction between the physical and the digital through the mix of social practices that occur simultaneously in digital and in physical spaces" (de Souza e Silva 2006, 265; de Lange 2009, 60).

Premediation turns to the affective and fully embedded politics of anticipation that is present in post-9/11 software cultures, social media, and regimes of security and their predictive temporalities. Space is animated and brought into being by this background of calculation and computation – "enacted environments" – in highly political ways, as mobility systems become crucial points of anxiety, fear, and securitization. The "Sentient City" also offers a continuous immersive and pervasive presence of the security state's apparatus of surveillance and anticipatory anxiety. But it is precisely this pervasive anxiety, I argue, that is leading artists and cultural producers to intervene in the new mobile medialities and to attempt to create openings for alternative practices, encounters, and ways of moving-in-the-world.

PERVASIVE GAMING, NETWORKED PLACES, AND LOCATIVE ART

Finally, this section turns to some artistic practices that attempt to blur the boundaries between the physical and the informational worlds, between the player and the public, and between the game space and the urban space in the emerging mobile mediality of networked places. Martin de Waal divides pervasive gaming into two types. In the first type, the so-called "magic circle" of the game still exists to some extent, but is extended out to the city space:

The first and most apparent approach of pervasive games is to use traditional games as a metaphor. This means to think of the city as a playing board, and to translate or vary upon the gameplay and rules of existing games, be they traditional urban games (treasure hunt, tag), traditional games (trading games,



23.2 "Recycled Spacetime," Conflux Festival, New York, October 2010

strategy games, role playing games, rock-paper-scissors etc.) or console games (e.g. pacman). (De Waal 2010)

In some cases arts festivals have used the game metaphor to move out into the streets of the city. For example, "Conflux is the annual New York festival for contemporary **psychogeography**, the investigation of everyday urban life through emerging artistic, technological and social practice. At Conflux, visual and sound artists, writers, urban adventurers and the public gather for four days to explore their urban environment." A number of pieces in recent Conflux Festivals made use of QR code in a kind of

treasure hunt or game, in which the codes were placed on public street scapes using stickers, magnets, metal tags, or paint (see Figure 23.2).

These markers are then viewed using a smartphone with a free QR-reading app downloaded onto it, which opens up a URL which might contain text, image, and/or audio content. For example, *Barcode Cinema* is a collaborative project of Kristin Lucas and Lee Montgomery:

Lucas and Montgomery will travel to the geographic locations of several geotagged images in the vicinity of Conflux Festival and physically tag each site with custom designed 2D barcode stickers. With the use of a web-enabled camera phone and a free downloadable application that turns a mobile phone into a barcode scanner, festival goers can interact with barcode stickers at Barcode Cinema sites to access locative media: image sonifications of geotagged images will be broadcast at locations Lucas and Montgomery have discovered from their own research of the communal landscape constructed by Google, Flickr and Picasa, among others. Users will hear a sonic interpretation of the surveilled imagery of the space they have accessed.

The works in the festival engage in different ways with “exploring, studying, and playing with urban public space; experiences you have with and because of the space; and walking, being with strangers.” The method is based on the **Informational Drift**, or what the Situationist International called a derive: “Contemporary geographies have come to be overlaid, augmented, and reimagined with the introduction of digital information networks. What does it mean, then, to apply the notion of psycho-geography amidst this new information-infused reality?” Here, in a sense, the aura of the work of the art is extended out into a mobile experience of urban space as derive.

This leads to a second model of pervasive gaming, according to de Waal, which is more about performance, ranging from theatre to performance art:

*Another – and perhaps counterintuitive – metaphor to approach pervasive games is as theater, rather than as games. Many pervasive games are event based, staged performances and often include actors. The main difference between these game performances and more traditional theater is that the public has an active role in the performances, and that instead of a script or screen play, there is a set of rules that actors and audience have to follow. **These rule sets make up a story engine that drives the performance.** (De Waal 2010)*

Blast Theory is renowned internationally as one of the most adventurous artists’ groups using interactive media, creating groundbreaking new forms of performance and interactive art that mixes audiences across the Internet, live performance, and digital broadcasting. Led by Matt Adams, Ju Row Farr, and Nick Tandavanitj, the group’s work explores interactivity and the social and political aspects of technology. It confronts a media saturated world in which popular culture rules, using performance, installation, video, mobile, and online technologies to ask questions about the ideologies present in the information that envelops us.⁵ *Rider Spoke*, for example, is a work for cyclists combining theatre with game play and state-of-the-art technology (see Figure 23.3):



23.3 Blast Theory, "Rider Spoke," at Ars Electronica Festival, Linz, 2009

The project continues Blast Theory's enquiry into performance in the age of personal communication ... The piece continues Blast Theory's fascination with how games and new communication technologies are creating new hybrid social spaces in which the private and the public are intertwined. It poses further questions about where theatre may be sited and what form it may take. It invites the public to be co-authors of the piece and a visible manifestation of it as they cycle through the city. It is precisely dependent on its local context and invites the audience to explore that context for its emotional and intellectual resonances.⁶

Michiel de Lange argues that the new forms of locative playful media are both **immersive (always on) and pervasive (always there)**, which he reads as **playful**. Similar notions can be found in locative art that occurs in and moves through urban spaces, seeking to reveal the nature of surveillance in the city, in a perhaps more disruptive or activist way. Drew Hemment, Associate Director of ImaginationLancaster explores the connections between people, emerging technologies, and possible futures. His work focuses on Art and Social Technologies, and he was instrumental in the emergence of the field of Locative Median (see Hemment 2004, 2006a, 2006b). In his research, art offers a set of resources for envisioning social and technological change in a way that is inherently participatory, opening up disruptive spaces of play. Hemment is founding director of the Futuresonic Urban Festival of Art, Music and Ideas, which later became known as **FutureEverything** and was conceived as a catalyst for moments of creative emergence across boundaries, with a distinctive focus on social technologies, art, and the city. Through Futuresonic, he curated the first major art exhibition on mobile and locative media (Mobile Connections, 2004) and the first major art exhibition on social networking (Social Networking Unplugged, 2008). One of his projects was *Loca: Set To Discoverable*, a collaborative

project on mobile media and surveillance which premiered at ISEA2006 and ZeroOne in San Jose, California, combining art installation, pervasive design, software engineering, activism, hardware hacking, SMS poetry, sticker art, and ambient performance. Deploying an experimental “node network” covering downtown San Jose for seven days, it tracked and engaged with 2,500 people more than 500,000 times:

A person walking through the city centre hears a beep on their phone and glances at the screen. Instead of an SMS alert they see a message reading: “We are currently experiencing difficulties monitoring your position: please wave your network device in the air.”

Loca engages people by responding to urban semantics, the social meanings of particular places: “You walked past a flower shop and spent 30 minutes in the park, are you in love?”

*Loca: Set To Discoverable enables people to question the networks they populate, and to consider how the trail of digital identities people leave behind them can be used for good or ill. It asks what happens when it is easy for everyone to track everyone, when surveillance is possible using consumer level technology within peer-to-peer networks without being routed through a central point?*⁷

Thus, the participant is challenged to engage (via the Bluetooth setting “discoverable”) with discovery of the open WiFi networks permeating urban spaces of premediation, and thus to experience interactive urban spaces, locative art practices, and mobile medialities in newly conceived ways.

TRANSVERSAL BECOMING-MOBILES

In conclusion, we can build on recent theories of mediality, mobile gaming, and locative arts practices, to try to envision not just inevitable effects of mobile mediality but also a contested politics around the locations and dislocations performed by emergent forms of mediated augmentation. By exploring the new experiences and social relations being performed in spaces of mobile mediality, I hope this ongoing research (and curatorial) project will provide new insights and knowledge about the meaning of public space, access, presence, (in)visibility, and (im)mobility in the contemporary city.⁸ In many ways the reconfiguration of complex mobility, communication, and information systems is not simply about infrastructures, but is also about reconfiguring the public itself, its meanings, its spaces, its capacities for self-organization and political mobilization, and its multiple and fluid forms (see Sheller and Urry 2003, 2006a; Sheller 2004). What new mobile publics are emerging in the transversal spaces of becoming mobile?

In their book *Splintering Urbanism* (2001), Stephen Graham and Simon Marvin emphasized the forms of exclusion, disconnection, bypassing, and differentiation that are crucial to thinking about contemporary mobilities, civic participation, public space, and access. Some arts practices that engage mobile mediality also engage projects of political activism that explore issues of mobility justice and the

digital divide, blurring activist art and media geographies to produce new spaces. Susan Kelly, for example, reviews work that deals with what she calls the transversal and the invisible:

*This work, often collaborative and concerned with issues of public and social space, the freedom of movement and of knowledge, takes on multiple forms and often works across many different sites. Common to new cultural and activist practices is a focus on experimentation rather than representation, a focus on means: on activity that brings into proximity the why and the how of coming together.*⁹

Such arts practices involve a dynamic between art and political organizing, through participatory communities that may engage with new medialities.

In Ursula Biemann's "Becoming Europe and Beyond| 2005," for example, artists/researchers/activists use experimental video production to explore borders, surveillant assemblages, and the mobilities of migrants, information, and infrastructures. B-ZONE ranges from the US–Mexico border to the North Africa–EU border, and Eastern Europe, as a research and collaborative art project concerned with "the transitory geographies of Southeast Europe, the Balkans, Turkey reaching as far as the Caucasus," following "the trajectory and traces of large-scale transnational infrastructures laid down in the territories of former communist states and beyond ... B-Zone investigates the spaces and implications created by these infrastructures as lived experience against the background of neo-colonial economic strategies, mass migration and war."¹⁰ In the related project called "Geography and the Politics of Mobility," Biemann and others create an exhibition that "traces the navigation of people through material as well as electronic terrain, actively engaged in communicating, networking, laboring, informing, servicing and searching," with the idea of electronic landscapes referring to "both the electronic communications networks and the landscapes visually generated by satellite media and other geographic information systems."¹¹ In these projects, she argues, we see "a certain discursive shift in the way location and dislocation can be conceptualized and talked about today." This work is exemplified in her contribution in Chapter 11 of this volume.

Emerging out of "tactical media" practices, there is a new practice known as "noborder networks" which use flexible, innovative media and art practices to contest the current governmental regulation of migration. Drawing on an anti-deportation/anti-detention activist perspective, these networks foreground principals of autonomous migration and freedom of movement, which are also implicit in some of Biemann's other work. Borders and checkpoints become a crucial point of cascading effects where the flows and "overflows" of hybrid spaces of remediated mobility systems crash together in situations of social tension, affective overload, and premediated identification. It is here that some of the most interesting hybrid reality projects are intervening, mediating our mobilities in thoughtful ways that bring attention to how bodies and places are put into motion through informational systems as well as physical space. Lisa Parks' work on Global Positioning Satellites, for example, explores how: "Electronic landscapes

have increasingly become the surface for action ... Representing a traversable space, satellite images are no longer the map of a static moment in time but a dynamic geography of moving and changing surfaces over which a steady flow of signals and data is recording human migration, refugee movements and border crossings. These migrations are registered and evaluated for scientific purposes which entail political consequences."¹² Thus, her project seeks to show the politics (including biopolitics) behind GPS-enabled premediation, as it intervenes in the management of borders and flows.

Other works in this field move mobile media geographies beyond the global North by engaging with counter-mobilities and subaltern medialities in the global South. The World Information City, for example, was a project in Bangalore, India in November 2005, which also used networked projects within open urban spaces to generate a kind of re-mediation of the urban public sphere:

Walking the city connects different spaces together. A map given to the visitor of World Information City points to the sites, where the art installations are placed. The possibility of freeing yourself from this map always exists as you discover the route and the smaller paths that lead you off elsewhere. Every visitor will only experience a part of the exhibition and its activities at any given time. This instability produced between the mapped route and the happenings that unfolded everyday was characteristic of a sense of play that the installations brought to the sites they inhabited (Abraham 2006).

As the curator Abisha Abraham put it: "The art exhibition was not meant to be just a spectacle. The attempt here was to try and create a fluid and permeable context, where new relationships would trigger off activity and collaboration. The exhibition as we conceived it would become an integrated part of the day-to-day of the city. The inside of an exhibition venue would permeate into the outside. A kind of osmosis would break through the membrane of separated worlds." It is crucial that contemporary engagements with mobile mediality move beyond the Global North, where rapid informational and spatial growth is remediating multiple global megacities.

The question I want to conclude with is whether social theory and social research can draw on locative arts and mobile gaming practices to develop better understandings of hybrid spaces and networked places as they emerge from contemporary practice. If artistic modalities are indeed producing new organizational forms, constellations, and situations, how can these be used to generate new research methodologies, new interventions in networked spaces, and even new ontologies of what constitutes the empirical (cf. Büscher and Urry 2009)? And if networked mobile cultural practices can move across scales, challenging the imposition of borders that govern subaltern mobilities as much as the boundaries of daily public space, how can social research draw on and learn from these creative practices? While I cannot fully explore these questions here, I want to suggest that in the spirit of tracing the new mobility regimes, we will need nimble methods and tools that are able to cross between research, arts, and political praxis, and to blur the boundaries of mediality and spatiality as much as the phenomenon that are under study. We can think of this as another

kind of augmented reality in hybrid space: the augmentation of spatial practices and politics with the open theory-building and informational-sharing practices of academic research. Social science will require its own mobile mediality in the future, especially if it is to address the ethics of mobility (Bergmann and Sager 2008), which will be so crucial to the questions of exclusion, (dis)location, and environmental sustainability that we all may face in the coming century.

NOTES

- 1 Interestingly, in his new novel *Zero History*, William Gibson has one of his characters, Hollis Henry, author a book called *Presences: Locative Art in America*.
- 2 VPAP merges the real-world physical environment of public spaces around the world with site-specific virtual sculptures that can only be viewed in-the-round using the iPhone 3GS or Android phones when one is at the sculpture's real-world location. Breadboard, NextFab Studio and Virtual Public Art Project (VPAP) collaborated with the City of Philadelphia's Office of Arts, Culture and the Creative Economy and DesignPhiladelphia2010 to host the first VPAP exhibit in Philadelphia as part of Design Philadelphia 2010.
- 3 Endorsed by the founding members of the cyberartist group Manifest.AR, on 25 January 2011: Mark Skwarek (US), Sander Veenhof (NL), Tamiko Thiel (US, JP, DE), Will Pappenheimer (US), John Craig Freeman (US), Christopher Manzione, (US), and Geoffrey Alan Rhodes (US).
- 4 Hana Iverson, <http://hanaiverson.com>.
- 5 <http://www.blasttheory.co.uk/bt/index.php>.
- 6 http://www.blasttheory.co.uk/bt/work_rider_spoke.html.
- 7 Loca is a group project by John Evans (UK/Finland), Drew Hemment (UK), Theo Humphries (UK), and Mike Raento (Finland). See <http://www.loca-lab.org>.
- 8 In February 2012 Mimi Sheller and Hana Iverson co-curated LA Re.Play, an exhibition of mobile media art in Los Angeles. See <http://www.lareplay.net> for details.
- 9 "Practices such as those initiated by *Routes*, Belfast, *No One is Illegal* and Florian Schneider, *16Beaver*, *Ultra-Red*, involve producing situations, sets of tools and procedures that can be moved in and out of by various constituencies. Such practices might be said to use artistic modalities, as opposed to representations or even expressions, creatively producing new organizational forms, constellations and situations as they move through physical and social spaces." See http://www.republicart.net/disc/mundial/kelly01_en.htm.
- 10 *The Black Sea Files* by Ursula Biemann explores the new pipeline connecting the world's oldest Oil Capital Baku at the Caspian Shore with the Mediterranean, *Postwar Footprints* by media researcher Lisa Parks investigates telecommunication and satellite infrastructure before and after the Balkan wars and *Timescapes*, a project by Angela Melitopoulos with partners in Ankara, Athens and Belgrade which follows the EU-financed "Corridor X," a historic migration route connecting Germany with Turkey, reconstructing the infamous Yugoslav "Highway of Brotherhood and Unity". *B-Zone* is a research project initiated by Ursula Biemann and funded by the German Bundeskulturstiftung. The research project is based at the Institute for Art and Design Theory, HGKZ Zurich. It entailed four one-week sessions in Amsterdam, Ljubljana,

Istanbul and Zurich between 2003 and 2005. *B-Zone* was exhibited at Kunstwerke Berlin in December 2005–February 2006 and at the Tapiés Foundation, Barcelona in March 2007.

- 11 Ursula Biemann, Introduction to "Geography and the Politics of Mobility," http://www.geobodies.org/03_books_and_texts/2003_geography_catalog.
- 12 Ibid.

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