

The Locative Commons: Situating Location-Based Media in Urban Public Space

by Marc Tuters

At last month's Transmediale festival in Berlin [1], the Utrecht-based arts collective Social Fiction received the festival's prestigious Software award for their .walk (dot-walk) project, that combines computer code and "psychogeographic" streetwalking. During the walk, participants carry out an algorithmic series of instructions derived from computer code, that "calculates" the city as a giant "peripatetic computer" [2]. It may seem amazing that such a simple idea can even be considered software, but the concept behind it is the clever part, based, as it is, on a metaphor for how order emerges from chaos, borrowed from the ant colony, which generates maps through the brute force, random exploration of a territory.

Dot.walk could be said to be significant of a general tendency that has been emerging amongst artists to consider the space of the city as a site for public art projects. Of particular interest here has been the concept of psychogeography, developed by the Situationist International [3]. As the name "psychogeography" suggests, artists are once again interested, via technology, in the connection between the so-called internal ("psychic") and external ("geography") worlds. In practice, psychogeography brings the art installation and its public (although the distinction often begins to blur here) from the contained space of the gallery into the body of the city.

The central trope of psychogeography is the "drift" or "dérive", a kind of meditative walking practice through the urban landscape. The walk encourages the drifter to "get lost" in order to break with ingrained patterns of routine. According to the SI, the dérive reveals the landscape as a source of endless possibility in which a multitude of paths open for remapping the city.

The Tragedy of the Commons

The psychogeographic dérive is contiguous to the political tradition of urban theory –from radicals like Henri Lefebvre (1947) to liberals like Jane Jacobs (1962)- which claims that random encounters in public spaces, often referred to as "the Commons" are essential to the functioning of a democratic society. Psychogeography encourages encounters from outside our of own contained and carefully constructed realities. As Immanuel Kant (1790) proposed, it is not be through received norms that we develop "judgment", the critical foundation of cosmopolitan ethics—but in the confrontation of new ideas. Today, we network these ideas to the surface of the globe.

The canonical literature on public space identified the Parisian coffee houses of the 18th C as playing an important role in social change, housing the raucous debates that gave rise to age of democracy –Habermas (1962), Sennett (1974). By contrast today's ubiquitous Starbucks cappuccino bars offer the digital, mobile class a refuge from the pace of city, a space of introspection rather than random encounter. Offering pay-access to wireless Internet on site, and even sending text messages to the mobile phones of potential customers when they pass close by a location, Starbucks, and other branded "destinations", like Riga's recently completed Coca Cola Centre, form an archipelago of pseudo public spaces throughout the world's cities. Particularly in the post-911 world, the function of these places to provide random encounter is practically eliminated in these insulated pay-access locations under the operative logic of 'risk aversion'. Based on these observations, sociologists and urban theorists have developed a narrative of loss and decline in the contemporary literature on public space – Zúkin (1991), Sorkin (1992), Hannigan (1998), in which contemporary public spaces are characterized theme parks, or walled gardens.

Situationism proposed a critique of Capitalism, particularly in relation to urban planning and architecture that identified the latter as handmaids of State power and found them guilty of contributing to a fragmentation of the public. According to Guy Debord (the group's most influential figure), in his 'Society of the Spectacle' thesis (1967), popular culture recycled authentic experience as spectacle and, in the process, interpolated the individual into a passive consumer. Debord's theory would form a basis of the postmodern critique of so-called hyper-reality by a younger group of French intellectuals, also involved in May '68, namely Jean Baudrillard and Paul Virilio [4].

Networked Urbanism

For Virilio, hyper-reality was not so much an effect of ideological manipulation, as Debord had claimed, as it was the product of speed, instantaneity, and interaction of images [5]. Formerly an architect, Virilio believed that the impact of real-time telematics on the city is that the bricks and mortar of architectonic space have become a "Monument Valley... of some... dead past society whose technologies were intimately aligned with the visible transformation of matter" [6]. Accordingly, this article argues that we should consider the immaterial realm of communication technologies, towards creating what Denis Kaspori [18], following Virilio, calls a cooperative and evolutionary practice of "open-source architecture".

The digital city has emerged in the last two decades as a significant phenomenon impacting how we understand urban life. Traversed by the flow of communications, the city is re-ordered by technological systems and networks establishing a considerable digital architecture. In the digital city, technology often seems to outpace our ability to chart its effects, however, networks are busily involved in a whole-scale transformation of the concept of urbanism. Take, for example, the phenomenon of networked interactive gaming where populations of players equivalent to actual cities simultaneously interface with the same virtual online environment (whole economies of exchange have grown up around these "game worlds" as well).

It is arguably the case that we are witnessing a transformation of the historical notion the "city" a notion held since the surplus of agriculture delivered to accumulative centers, some 10,000 years ago, led to the construction the communal living spaces. that we have held for 10,000 or more years. Today, the imagination of programmer, with her coded control of the virtual's interface with the real, is the architect and engineer who constructs a consensual, urban reality shared by millions worldwide, a virtual reality that forms a meaningful part of their real existence. We can look here to games like Second Life [7], which allow players to collaborate on creating these VR worlds, as potential models for an open source urbanism.

Of particular interest with respect to the latter is the manner in which mobile and wearable technologies are emerging to connect these virtual communities with architectural and urban space. The possibilities inherent in so-called "augmented reality" led the noted technologist Scott Fisher to claim the following: "as the processing power and graphic frame rate on microcomputers quickly increase, portable, personal virtual- environment systems will also become available. The possibilities of virtual realities, it appears, are as limitless as the possibilities of reality. They can provide a human interface that disappears—a doorway to other worlds" [8]. At last year's ART+COMMUNICATION festival in Riga [9], for example, one guest demonstrated a system for playing the popular online video game Quake in urban space, as opposed to behind a desktop computer. Developed at the University of South Australia, this wearable computer was mounted into backpack that project the 3D space of the video game over the landscape of 'the real world' through a head-mounted display, and coordinate the two via GPS (Global Positioning System) technology [10].

The Real-Time, Mobile City

Having paid multiple billions to purchase sections of the spectrum for wireless data transmission, cell phone companies have been anticipating a boon to the industry with the arrival of a low-tech version of this augmented reality technology for cell phones. Already, in some European countries, it has been possible for some years now to receive maps based on ones location, and more recently service have become available that allow one to locate friends nearby. Since the cell phone system is locked up by corporations, a critical uncertainty exists regarding the fate of this technology. While the noted technology journalist Howard Rheingold believes that these technologies will be fundamental to urban life in ten years from now, he has identified two possible futures, one open system like the Internet, where "entire populations of city-dwellers create, use, and exchange information and media associated with geographic locations", and the other, a closed system for "passive consumers of pre-packaged content fabricated by a few dozen synthetic superstars" [11].

While we tend to associate the notion of a public spaces with an aspect of the built environment, mobile communication technologies, may have introduced a kind of mutation into the body of the city that requires us to re-asses our idea of a "public space" in the 21st C. While telephony made it possible to be vocally present while physically absent, the mobile telephone has brought this paradox into a more active engagement between the body and the city. In Helsinki, for example, the city with the greatest saturation of mobile phones (some 90% of the population), groups of teenagers are synchronized while apart, able suddenly to form a gang and just a suddenly to disperse, a technique that has been compared to the flocking of birds [12]. In the past several years mobile phones have been extensively used for a new kind of urban warfare with emergence of a set of tactics reminiscent of the clashes between nodads and Romans. From the famous Battle of Seattle, to countless soccer riots, the mobile phone has been used to coordinate the real-time decentralized movements of crowds, and in the process outsmarting the police who themselves are centrally organized [13]. The same phenomenon was observed during the series of FlashMobs which began in New York [14], where anonymous text messages spurned a series of mass, brief gatherings where silly actions were performed before dispersing. It seems, as Virilio had anticipated, that networks have somehow changed the bounding and containing function of space, poking the city wall full of holes. While Virilio's critique frames these developments within the urban narrative of loss, others argues that these events signify a new type of public space made possible through mobile technologies.

In so far as mobile may be secretly transforming the potential of social relations in the public spaces of the city, it is also involved in a redefinition of the public/private distinction. For teenagers in Asia and Europe where domestic space is at a premium and most homes only have one land-line, the mobile phone (particularly with

regards to text and multimedia messaging) allows users to maintain open channels for intimacy regardless of the context, making public spaces the site of countless one-sided conversations. Accordingly, despite the imaginative uses to which they have been applied, in the context of urban public space, the issue of mobile networked connectivity is problematic. I would argue that this, however, is arguably largely a design problem.

Locative Media

Only very recently come collaborative research and development projects between artists designers and technologists, have begun to address the problem of designing an interactive urbanism aware of the potentials and problems of a mobile, networked connectivity. In Liepaja, for example, last summer, the RIXC Centre for New Media Culture organized an international group of artists (your author was amongst them) at the K@2 media space in Karosta, for a workshop to explore the idea of associating digital media with location [15].

Having paid multiple billions to purchase sections of the spectrum for wireless data transmission, cell phone companies have been anticipating the arrival of location-based services as a boon to the industry. Already, in some European countries, it has been possible for some years now to receive maps based on ones location, and more recently service have become available that allow one to locate friends nearby. In the UK, the Urban Tapestries project, for example, has done a great deal to develop and publicize the notion of community knowledge sharing through location based mobile telephone, producing large-scale public demonstrations of software applications, developed in affiliations with Hewlett Packard and Orange [16].

The Locative Media Network [17] seeks to marry the interests of the psychogeographer (whom we may frame as a "city hacker", after Social Fiction) with those of the online community networking enthusiast. Weather consciously or not, the majority of efforts in the area of location-based media, however create and store data centrally managed servers (see, for example, Urban Tapestries). The Network's researcher are not only politically opposed to this as a 'walled garden' approach to a public space, but moreover believe that such approaches destined to made obsolete by emerging methods for data creation and storage, namely the semantic web [19]. A kind of Esperanto for the Internet, the semantic web constitutes a set of protocols for structuring your data online, semantic web grammars allow authors to index their sites, so as to make them machine readable to the entire Internet. Semantic web grammars like RSS, used in weblogging, are machine readable by free softwares applications, allowing publishers to syndicate their data as 'feeds', to which readers can selectively subscribe. The semantic web permits a reader to receive a customized real-time compilation of the Internet. With the incorporation of location data, blogging can be seen as the model for authoring an augmented public space. Bloggers who publish their posts to RSS feeds can now incorporate geo-locative semantic information, thereby setting into motion the actual, real-world contact between virtually separated databases. Examples of this have been developed here by Blogmapper [20], SpaceNameSpace [21] and Social Fiction [22].

The beauty of the sematic web model for when applied to networked urban space is that it is a truly personalized mode for data storage that allows authors to leave information on their own servers. This makes authors responsible for their own content (freeing the system designer from any concern about providing access or managing content) calling for a new global responsibility in managing information and knowledge-virtual democracy in the 21st Century. Since the system is decentralized like the architecture of the Internet itself, it furthermore makes it virtually impossible to eliminate all trace of memory from a location, the semantic model of networked urban space thus becomes a weapon against 'urbicide', the deliberate denial or killing of the city [23].

Ben Russell's Headmap Manifesto [24], a foundational piece of literature in the discourse on "locative media", proposes a set of tactics for applying semantic web ontologies, to the mobile location-aware technology thereby transforming the latter from a means to push location-based content (a la Starbucks), into the basis for new kind of mobile networked presence. Russel argues that FOAF (friend of a friend) networks, applied to locative, mobile telephony, would allow for the emergence of an economy of exchange based on trust. Comparing urban infrastructure with that of the open-source software development community online, he suggests that there exists an unused abundance in the city, the key to which is trust. Russell envisions a future in which networks of friends could exchange personalized, location-encoded maps to access a network of friend of friends. Inspired, in part, by anecdotal observations from the Burning Man arts festival in Nevada [25], where 25,000+ people gather in the desert to form a temporary city based on a gift economy [26], Russell envision locative media as facilitating a kind of portable temporary autonomous zone. Like the ants colony that creates an orderly map of territory from its random exploration, there are allusions throughout Russell's writing to possibility that a collective urban form can potentially emerge from the collective action of essentially selfish actors, coordinated though an intelligent system, perhaps even the basis for a new social contract of selectively accessible self-centered utopias.

After-Architecture

One might frame the ideas of Ben Russell and those of the Locative Media Network of researchers as software art, but to give some more historical context, I would compare them with 60's utopian architecture groups such as Archigram and Superstudio [27]. Sheltered by academies such as the Architectural Association in London [28] (where a Locative Media media lecture series was recently organized) and inspired by Situationism, these groups often framed themselves as anti-architects expressing their oppositional political stance to the State and the compromised integrity of their field in relation to the latter, by designing fantastical landscapes –based on what a members of Superstudio, Massimo Banzi called: "the instinctive right that every individual has to create his own environment" [29].

The Italian group, Superstudio, for example, is best known work is the Continuous Monument, a featureless Euclidean space, that was intended as a refutation of the consumer world's 'system of objects' (as Baudrillard called it in his early work on design). Freed from the fragmentary space of the modernist tower-block, the inhabitants of Superstudio's hypothetical structure were nomads who could plug-in –this was pre-wireless- at any point and spontaneously materialize a minimal domestic fantasy life –a technological utopia of object-less nomadism, in which the body became the vehicle (rather than the car, for example). An architect himself in the 60's, Paul Virilio developed a somewhat similar vision of urbanism also based on putting the body in motion. In what his group Architecture Principe called the Function of the Oblique, floors and walls were built with curves and at angles, which Virilio felt forced the body back into an active relationship with the environment [30].

Dismissed in subsequent decades totalizing theories by postmodernists [31] and post-structuralists [32], the Supermodernists have enjoyed a renewed interest as of late. The postmodern style, which emphasized a vernacular architecture of flourishes "quoted" from other styles, has to some degree passed from interest, and the post-structuralist critique, emphasizing the micro-politics of difference, has led to a frustrating fragmentation of interest groups often without an over-arching plan –leading back to a dull functionalism. Due in part to a technological advances designs which would have been impossible to construct with materials available in the '60's, some of the Supermodernists have become like a reservoir for a new architectural renaissance, that has had a particularly dramatic impact on museums throughout the world (what some call The Bilbao Effect). It is mostly, however, only at the level of aesthetics that the Supermodernists are being copied, by a cabal of super-architects (Gherry, Foster, Rogers, Liebeskind, Koolhaas, Grimshaw). By whom the political projects of the former have, for the most part, been set aside as quaint relics of a bygone era.

The Locative Commons

"The city, yes, let's keep talking about it. But architecture, it's finished, over. Curtain." Paul Virilio [33]

It is perhaps no longer in the domain of architecture, which Virilio considers to have been poked full of holes telematic networks, but rather in that of open-source, social software development, and perhaps even more specifically softwares that deal with questions of urbanism and utopia (the theme of this past year's Transmediale [34]). Groups of wireless community activists such as the London-based Consume [35], for example, are exploring nomadic urban environments similar to those proposed by Superstudio (although without the nice collage sketches), by building an open-access wireless Internet cloud –a wireless Commons- across parts of the UK. Similarly through a patchwork toolkit consisting of community oriented mapping applications and texts such as the Headmap Manifesto, the Locative Media Network propose a locative Commons. Both are involved, to some degree, in a recuperation of aspects of the Supermodern project, warts and all.

While mobile telephony arguably goes some way towards bridging the digital divide –cell phones being the most accessible form of communications technology invented so far- yet the visions of a wireless or locative Commons still tend to require more complex hardware than your average person has access to or understands. In addition to developing an propagating memes about open-source urbanism, the role of digital communities such as the Locative Media Network thus becomes to create systems that avoid the obsolescence by implementing popular publishing systems (i.e. the semantic web), that keep the technology available and accessible for non-technically savvy groups.

Echoing Russell's Headmap Manifesto, recent literature on mobile location-aware networked connectivity has focussed on its transformative potentials on community, positing something akin to the emergence of a spatialized Internet. However, unlike the early Internet, which relied on public funding and open standards to foster innovation, the vast majority of the spectrum of mobile networked connectivity belongs to corporations, who also have controlling interests in the delivery systems (both at the level of hardware and software) creating vertically integrated, walled garden, model that discourages third party developers to generate content. However, there exists a vast untapped reservoir of geo-located content referring to every part of world that has been publicly funded through tax moneys, in the form of GIS, or the Geographical Information Systems. While

some countries have begun to adopt a policy of open public access to GIS, generally speaking, this data is only ever used by professionals. Groups like the Locative Media Network must thus take on another role as lobbyists of the GIS industry and state geographers, in order to allow for some of this wealth of knowledge to flow into the fields of new media research and urban studies, as well as to become the basis for an open framework for shared spatial knowledge.

At stake is not only setting the terms for public access to the vast databases of open source information but constructing the sustaining architecture to do so. If in the construction of the public nation state, the 19th Century was defined by railroads and early tele-communications networks and 20th Century the development of the social safety nets, then the 21st Century will be recognised for making available the digital domains to the public at large in the tradition of furthering our concept and implementation of democracy.

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