

Augmenting Guy Debord's Dérive: Sustaining the Urban Change with Information Technology

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Disclaimer: this is just few notes extracted from a paper I wrote with my colleague Mauro Cherubini called "To Live or To Master the city: the citizen dilemma" (Imago Urbis #2).

This short paper addresses the very topic of how sustaining a change from living the city to mastering it is done or could be done. The answer might lay in Information Technology. The claim here is that IT by offering new services more social and situated could fill the gap between a passive citizen to a more active one.

Prior to describing in which way IT foster this change of behaviour towards the city you live in, we first turn to cultural groups who already master the city: homeless, squatters, situationists, activists or skateboarder.

They reclaimed the street and they got it!

The title of this section comes from the "Reclaim the Streets" motto. Reclaim the Streets is a movement that began in 1996 in which activists in England decided to temporarily "reclaim" the street from cars and point out how capitalism and car culture deprive people of public space and opportunities for public festivals. It is basically a day-time rave, complete with sound system, dancing, and party games, with a certain political spin. Activists and squatters are definitely involved in a different way to live th city with demonstration or by wandering through it.

This section title refers to the fact some cultural groups already practiced space re-appropriation. each of those groups have their own goals and motivation for this but what is clearly important is that they consider urban space as a public area in which they want to be free to carry out their activities.

In the 50s, situationists lead by Guy Debord in Paris coined the term "dérive" to express their will to re-appropriate urban space. "Dérive" (literally: "drift") is a technique of rapid passage through varied ambiances. It consists in walking through the city, by being drawn by the attractions of the urban environment or the encounters they find there. Emotions are one of the most important way of selecting the way through the city. They created the term "psychogeography" in order to express this "the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behaviour of individuals." (Debord, 1955). Situationists then came out with "psychogeographical games" like navigating through Paris with a London map.

More recently, skateboarders' activities in an urban environment received more and more attention with regard to the way they conquer the city. In his book "Skateboarding, space and the city: architecture and the body", Ian Borden (2001) showed how skateboarders suggest that the city is not just a place for working and shopping but a true pleasure-ground, a place where the human body, emotions and energy can be expressed to the full. Skateboarding is indeed a way to discover cities by hanging out on various spots or selecting the best spots. As it fosters urban drift, it could be seen as a "urban reading technology" in the sense that skaters often have a different perception of the city. They are definitely very used to pay attention at specific details: stairs, edges, handrails and stuff like that. They are used to read the urban landscape. Some people argued skateboarding is just a particular kind of lenses, which transforms, not only visual "recognition" of meaning in places and objects, but a change in the particular configuration (social, psychological, physical) of how one approaches public space. We are now close to the skills explained in the first part of this paper. We can perceive skateboarding as a "tool" that help people to read city features and then re-appropriate the urban landscape. Very close to skateboarding is parkour/freerunning¹. The idea is to run in cities and face obstacles, trying to combine those movements with aesthetics and control.

¹ <http://www.le-parkour.com/>

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Even though the so-called tool (the board) is removed, the perception of the city they achieve is the same as skateboarders.

Augmenting Guy Debord's 'dérive'

We now move to the claim of this paper, that is to say the use of Information Technology for bridging the gap between people and their city. What we mean here with the title of this section is that technology could be viewed as a "proxy" that can improve awareness of city appropriation by involving people in different kind of activities (learning, working, playing). we argued that the situationists' "dérive" described in the previous section could be seen as a way to discover new parts of the city and then improve city consciousness or engagement. Therefore "augmenting debords' dérive" consist in using IT to involve people in new individual or collective activities to help them feeling that they can master the urban environment. In this sense, Social Fiction, an art group from Utrecht invents psychogeographical algorithms to explore the city, combining computer codes and streetwalking. During their walk through a city, users follow algorithmic instructions derived from computer code.

This section intends to present a non exhaustive list of technology that can help augmenting not only "debord's dérive" but also other activities individual or collective that leads people to re-appropriate the city.

Mobile phones Explosion

The widespread use of mobile phone is now correlated with an explosion of new services that turn a phone into a much more complex device. It impacts time and space especially with regard to coordination between people. Cell phones foster new behaviour like warning people that you are late, micro-coordinates schedule with others ("I am in front of the cinema, where are you?") or talk on the go. Since people do not have to set aside time and place there is a shift in space boundaries: the frontier between public and private space is hence blurred.

Phone texting is also a tremendous revolution in phone behaviour. A SMS (Short Message Services) is a wireless service that enables the transmission of textual messages (160 characters in length) between mobile subscribers. An active cell phone is able to receive or submit a short message at any time, independent of whether a voice or data call is in progress. SMS are mostly used by teenagers but also by other people forming groups/mobs/cliقة gathered for various purposes : hanging out teenagers, dispersed co-workers, students, skateboarders and so forth. Howard Rheingold coined the term "smart mobs" to refer to all those social communities who use mobile technologies (Rheingold, 2002). His definition for those groups is "smart mobs consist of people who are able to act in concert even if they don't know each other. The people who make up smart mobs cooperate in ways never before possible because they carry devices that possess both communication and computing capabilities" SMS is one of the major technologies used by those 'smart mobs'.

The very topic of coordination with mobile phones has been addressed by Ling and Yttri (1999). Those authors coined the term hyper-coordination to refer to the potential of cell phone for revisiting and revising arrangements with others. People among a group no longer need "to take an agreement to meet at a specific time and place as immutable". It allows users to feel a continuous contact and consequently review and revise commitments when circumstances change. Basic logistic is hence one kind of coordination type. Another kind is the fact that this enables them to manage accessibility and the mobilization of their social network. Thanks to the broadcasting efficiency of SMS, users can quickly communicate events in a location where the group is located. In the light of their results, they found that cell phones also expands the area that teenagers move in as well as the number of people they are in contact with.

In a sense, the public space is re-appropriated by cell phone users, it has two consequences: the first is that you create a private bubbles in public space and then if you are reachable everywhere, you can live more in public space (working, learning or playing everywhere). This could be a reason of living more out of your flat.

Additionally, the work of Ito and Okabe (submitted) is closer to our proposal since it really focuses on mobile phones and location. These authors conducted an ethnographic research about techno-social situations involving texting. They call 'augmented flesh meet' the fact that texting creates a technology-enhanced physically co-located gathering: "mobile phones have become devices for augmenting the experiences and properties of physically collocated encounters (before, during and after the encounter). Teens use mobile phones to bring in the presence of other friends who were not able to make it to the physical gathering, or to access information that is relevant to that particular time and place". Before the meeting, they arrange the meeting (time, place, lateness...). This statement refers to Ling's coordination cited previously. During the meeting, when a SMS come into a friend's phone, it is common to ask who it was from, what is the content and a conversation about that ensues. After the meeting, the conversation continues (participants thank the person who organized the gathering, add information ("I forgot to tell you...")); it is a newly emergent norm. The construction of these new techno-social settings and situations enable the stretching of prior boundaries of what it means to "be together". This is truly important: that means that the experience of the city is shared with people who are not co-present. Andrew Curry from Henley Centre argues that mobile communications have the potential to reinvent our ideas about the local: "Design predictions were that 80 per cent of information would be pan European, 20 per cent local, but it is actually the other way around. Phones are about mobility, but they are also about localness and specific 'regionality'. They are about a configuration of place that is a quite local sense of place. Phones are about remapping the locality."

Two other important fields in which cell phone tends to engage users in a more active way to experience the city is mobile games and the social use of camera phones. The field of mobile gaming benefits from the positioning capabilities of cell phones. BotFighters² for instance, is one of the world's first location based mobile game that takes advantage of mobile positioning and let's the users play against others in their vicinity by using a standard GSM phone. Players locate and shoot at each other with their cell phones (by sending a SMS) out on the streets, where mobile positioning is used to determine whether the users are close enough to each other to be able to hit. Uncle Roy³ and "Can you see me now?" propose the same game concept: self-reported positioning in which street players would report their won position, either explicitly by declaring their position to Uncle Roy or implicitly by their PDA sending information about which area of the map they were looking at to remote online players. Human Pacman⁴ is also a mobile entertainment system that is built upon position and perspective sensing via Global Positioning System and inertia sensors. Mobile gaming should be considered a new way to live the city through playing, discovering place and then adding a new layer of activity. The city thus becomes a board game.

The use of camera phones allows taking pictures of the city. What is striking is the fact that pictures does not stand quiet in the phone memory but are often shared through the GPRS network, for instance sent as MMS (Multimedia Message Services, an extension of the SMS that allows you to send multimedia content). Therefore, it is not only a matter of shooting pictures but also to share it among your social network. This is a new collaborating activity built on three processes: shooting, sending the picture to the group and then commenting it. This collaborative photography context is also expanded and explored by academics (Ito and Okabe, 2003). Mizuko Ito states that "Unlike the traditional camera, the camera phone is an intimate and ubiquitous presence that invites a new kind of personal awareness, a persistent alertness to the visually newsworthy that makes amateur photojournalists out of its users.". The group comment picture and then attention could be driven to city space related experience (for instance picture of building or area where teenagers like to hang out).

² <http://www.itsalive.com/>

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³ <http://machen.mrl.nott.ac.uk/Projects/CitywidePerformance/Unlceroy.htm>

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⁴ <http://mixedreality.nus.edu.sg/research-HP-infor.htm>

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Location Based services

The mobile games described previously are a subset of a broader category of applications that are known as Location Based Services or Locative Media. This term refers to information about the physical location as well as other contextual cues. The most commonly used context of mobile systems is the location of the user since it is easy to determine and it could be meaningful to use it in order to adapt the behaviour of a mobile application. Location-aware systems take advantage of the users change of location to aid them in certain tasks. The actual utility of context-awareness in mobile systems has been demonstrated in a wide range of application examples, in obvious domains such as fieldwork and tourism, as well as in emerging areas like mobile gaming.

The first type of Location-based services is devoted for individuals. One of the most obvious domain in which locative media are used is navigation. As a matter of fact, navigation Technology provides these functionalities: address search, optimal route generation (fastest, shortest), preview of entire route, history (saves previously visited cities and streets), nearest point of interest (POI) search based on current location, self-location, voice and written driving instructions, maps display during instructions, off-route and return to route notification, real time traffic update supports, accurate display of junctions and display of estimated time of arrival and distance to destination.

Social navigation in the city

There are also a wide range of collective Location-based services that could be use by a community of users in order to perform both individual activities (like finding a good restaurant thanks to your friends advices), and collective actions. This is called "social navigation" because the idea is to rely on the activities of others to help people achieving their goals.

Apart from navigation system mostly based on GPS, locative media falls in two categories that work on both synchronous and asynchronous timescale:

- collaborative mapping/spatial annotation, location-linked information (text or audio), allowing various application like collaborative mapping of an area, new forms of guiding for tourism or conferencing, spatial annotations, events triggering, location-based storytelling and so on.
- finding and tracking a person, a group or an artefact. Those systems offer both synchronous or asynchronous location awareness. Matchmaking devices belongs to this category.

The Cyberguide system (Long et al., 1996) is an example of location-aware systems used as tourist guide. It has been developed to provide city visitors with a hand-held location-aware tourist guide. It uses infrared beacons to send wireless transmissions to detect a tourist's position and orientation. The beacons transmissions can be translated into a map location and orientation. The idea of Trepia is different: Trepia tracks the movement of people through wireless access points, and then notifies you of other users who are in your area. Trepia⁵ is built on the idea that If two people are within range of the same wireless access point, they must be close to each other.

Among the large quantity of location annotation software available on mobile devices, we should first quote GeoNotes (Espinoza et al., 2001) because it is one of the first. It is some sort of mobile notice board. People can write messages in the form of "virtual Post-itsTM" at a specific location with a PDA. Other users that pass in the vicinity of this location can then read the messages. LLI (Mankins, 2003) offers the same idea of location-linked information, that is to say connect geography (the "physical world") with the Internet (the "virtual world"). Other systems like [murmur]⁶ or Tejp (Gaye and Holmquist, 2003) propose to leave audio notes linked to a specific place. Likewise, mobile blogging⁷ applications allow people to enter blog post on a PDA and add location information to each post.

⁵ <http://www.trepia.com/>

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⁶ <http://www.murmurtoronto.ca/>

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⁷ 'Blogging' or 'blog' are terms related to web-logs, the current trend of publishing personal diaries on the Internet

All those systems rely on the idea that the city is full of cues or signs that people can decode and turn them into something meaningful for their purposes. For instance a service that allows you to leave virtual notes to physical places is useful for rating restaurants and then finding the best one where you are downtown.

Location Based Services are of interest considering the new way people can deal with social spaces. The very concept of "social software" or "social middleware" is not just a over hyped buzzword. In addition, I would also say that the city is the perfect place to exert social navigation. Since cities concentrate people, it is more likely that they are full of signs that can be found and decoded. The social space is build considering the traces left in the environment (virtual or not) by people. We indeed all send signals into social space that can be decoded by others as trace for a potential use. For instance, "following the leader" to the baggage claim is an action we often perform: in this case, we see somebody (the first guy who jumps off the plane following a certain path (this is the signal). We decode this signal as a cue: this guy may be aware of the way one should follow to get to the baggage claim. It is the same mechanism that could engage people in finding signs put by other concerning many things: restaurants as I mentioned above, presence of stars (done in NYC in 2003 !), nice spots to hang-out and so forth.

Another example is warchalking⁸, which is "the practice of marking a series of symbols on sidewalks and walls to indicate nearby wireless access. That way, other computer users can pop open their laptops and connect to the Internet wirelessly. It was inspired by the practice of hobos during the Great Depression to use chalk marks to indicate which homes were friendly" (Swartz, 2003). Adding information capabilities to urban places is thus important and allows people to spread into public space and keep going their current activities. Finding signs and annotation is a new way of living the city experience.

Group sharing

Technology also allows nowadays optimizing group sharing with regards to information (as we saw in the previous section) and people. It is hence a crux issue when you are a newcomer to discover information about the city and people to know.

Weblogs or blogs are a new way to share information. A weblog as described by Wikipedia (often web log, also known as a blog) is a "website which contains periodic, reverse chronologically ordered posts on a common webpage. Individual posts (which taken together are the weblog) either share a particular theme, or a single or small group of authors". Local blogs that present news concerning the city like public initiative, transport news, policy or civic discourse are flourishing. In the same spirit, web forums and newsgroups about urbanism or specific topics like skyscrapers⁹ receives more and more attention. What is interesting on such forums is that we can use it to discover things from our city, commenting on what is happening in others area as well as showing to others people how your city thrives. Another trend is prospective portals¹⁰ that try to gather a community of citizens in order to imagine the future of their city with regard to different topics (social, culture, urban projects...). On a broader scale, the Mega-Cities Project¹¹ is a trans-national non-profit network of community, academic, government, business, and media leaders dedicated to sharing innovative solutions to urban problems. Their aim is to make cities more socially just, ecologically sustainable, politically participatory and economically vital. This kind of initiative is meant to share new information for city dwellers. An interesting trend also concerns homeless weblogs, done by homeless who manage to tell their story thanks to an internet access. Citizens could then be aware of how they live, that could be a way to enter this new part of the city.

⁸ The term was invented by Swartz, A. (2003). See: <http://www.warchalking.org>
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⁹ <http://skyscrapercity.com>

¹⁰ For instance the city of Lyon, France set up <http://www.millenaire3.com>

¹¹ <http://www.megacitiesproject.org/>

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The Urban Tapestries project¹² is a mix of information sharing and location based services. The idea is that the software which runs on a PDA "allows people to author their own virtual annotations of the city, enabling a community's collective memory to grow organically, allowing ordinary citizens to embed social knowledge in the new wireless landscape of the city. People can add new locations, location content and the 'threads' which link individual locations to local contexts, which are accessed via handheld devices such as PDAs¹³ and mobile phones."

The next big thing that is ready to happen is called MoSoSo (Mobile Social Software). The idea here is not to share information but rather to find people that can fit to your needs. It is based on cutting edge social software like tribe.net or friendster, which are none other than a matchmaking system. You describe yourself, your interests and your social networks. The system allows you to discover people who have the same interests. On a mobile device like a cell phone, this kind of system could allow you to discover whom of your friends or whom of people who can have the same interests are hanging out. Outestoi¹⁴ is based on this idea that you can be told if and when buddies are in the vicinity or if there is a service you want to access in the area (for instance, if there is a close Starbuck™ coffee). In the future, a MoSoSo could become an intelligent social network that would drive you through the city and discover where are wandering groups of interests.

Engaging people in collective activities

After talking about software applications that modify the experience of the city as side effects, we dealt with location based systems that propose new manner to access information about the city. The step further is really now to engage people in collective activities. Tourism and learning are two domains in which this could be applied.

The History Unwired project (Michael Epstein and Cristobal Garcia), done at MIT Comparative Studies, aims at raising tourism awareness in Venice and in Alcala de Henares (Cervantes's hometown), by showing information on PDA. Closely related is Metamedia's project at MIT named Flâneurs savants (knowledgeable wanderers). It goes further by allowing to enrich tourists activities while visiting Le Marais area in Paris. They can access a database full of old photographs and historical illustrations of the Marais neighbourhood. It includes architectural details and monuments, memorials, restaurants, markets, and stores shown on a PDA. The good point is that users are engaged in collective activity that ask them to scan the buildings and landscape for traces of a world that may no longer exist but that shaped how the neighbourhood developed.

Much more arty is the GPS drawings project¹⁵ that engage people in drawings things in the real world and generating the picture by tracking the GPS position. They for instance could trace an elephant in Brighton! This obliges people to have a critical reflection of the topology of their city and then to discover funny arrangements.

Learning is also a domain where this could be of interest. C3 project in Greece is aimed to improve kids' spatial cognition. Teachers want those educational activities to develop specific skills like map reading and constructing, navigating and way-finding. One group of children stays at school in front of a desktop computer, they look at the movement of the other team who is wandering in the city carrying a GPS. The two groups have to communicate to solve simple tasks like finding a treasure, exploring an unknown space or finding their way through a maze. This avenue of research is of the most promising but it is unfortunately not that explored at the moment.

Summary

In sum, all the technologies presented here engage people in city exploration and re-appropriation to some extent. Of course, the idea is not that they all involve citizens in city

¹² <http://www.proboscis.org.uk/urbantapestries/>

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¹³ Personal Digital Assistant

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¹⁴ <http://www.outestoi.com>

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¹⁵ <http://www.gpsdrawing.com>

discovery *per se*. We would rather advocate for the fact that they propose new way to live the city by wandering through it, playing there or finding people who talk to. We claim that IT could offer way to access information that was previously hidden and foster new kind of behaviour by allowing people to live more in the city. We saw that the use of cell phones allow to stay more in the streets and not to phone at home. SMS offer new way to coordinate in groups. The city is also used as a “board” for playing and then engaging in new city experience... All of this contributes to enriching people’s mobility through the urban environment and then the likelihood to discover new things, new groups, and new communities is increased. Of course all those activities sustained by IT as well as psychogeography is not learning how to master the city in itself, but it's a new way to experience it.

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