New Media and Urban Motilities: A Territoriologic Point of View

Andrea Mubi Brighenti

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Abstract

The paper aims to contribute to the study of new media technologies in urban environments. It unfolds at two levels, epistemological and substantive. First, it discusses the issue of the conceptual tools that we can deploy to understand new media, arguing in favour of notions and methods that enable research to capture the double nature, socio-technical and bio-political, of the new media in urban environments. In particular, the paper claims that new media can be seen as a continuation of the process of 'urbanisation of territory' described by Foucault, aimed at the creation of a flexibly controllable space of events. Secondly, it criticises substantively the techno-enthusiast user-empowerment ideology that surrounds new media and addresses issues of inequality, control and resistance in and through new media in the city. The argument is that the augmented, hybrid or mixed urban reality of new media like personal and locative media is neither determinist nor unboundedly mobile. While the freedom of movement and the diverging styles of mobility are becoming a crucial factor of stratification, new tensions and struggles over the nature of urban 'events' are likely to take place.

1. Introduction

The relationship between the city and the use of new media technologies is being increasingly investigated. While it is recognised that new media have a significant impact on urban space and urban travel, several questions about how to conceptualise and elaborate suitable methods to study this relationship are far from settled. The present paper aims to contribute to this debate. It unfolds at two levels, which are presented one after the other for the sake of convenience, but are in fact intimately interwoven.

The first line of enquiry is epistemological. It discusses the issue of the conceptual tools we can deploy to understand new media. My argument is that the notions of territory and visibility, understood as relational and 'evental' concepts, can provide us with useful

Andrea Brighenti is in the Department of Sociology, University of Trento, via Verdi 26, Trento, 38122, Italy. E-mail: andrea.brighenti@soc.unitn.it or andrea.mubi@gmail.com.

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tools for imagining the urban environment edited by new media. Specifically, I suggest that new media can be conceptualised and studied as specific territorial and visibility regimes in the contemporary city. This perspective entails an emphasis on three aspects of the relationship between media and the city: first, the idea that the social field is characterised by constant 'prolongations' between two planes or layers: the material and the immaterial (hence, the social has two simultaneous facets: the 'socio-technical' and the 'bio-political'); secondly, the idea that communication in urban environments entails a symbolic economy of attention *qua* intervisibility of actors (hence, visibility constitutes a 'threshold of the social'); thirdly, the idea that urban space consists of events and affordances (hence, an interaction-evental point of view of the city). Such a perspective challenges the view that new media are simply deterritorialised or deterritorialising devices—i.e. devices that simply enable users to skip distances. Instead, I argue, they are territorial devices that increase the complexity of all existing territories. Territory should not be conceived of as an 'all-or-nothing' object but rather as a multidimensional set of relationships defined by prolongations, affordances and events.

The second line of enquiry is substantive. Although critical analyses of new media have emerged recently, a consistent part of new media literature still leans towards techno-enthusiasm. The new media advertising ideology, pivoted around so-called user empowerment, has produced an 'iCan-YouCan' discourse which is perhaps best represented by *Times Magazine*'s 'Person of the year 2006' ('You': 'You control the Information Age') and which is also mirrored in some scholarly productions (see for example, Mitchell, 2003; Greenfield, 2006; Fenton, 2008). Because of this, two crucial elements have been underestimated: first, the extent to which new media can become means of control rather than emancipation; secondly, the degree to which new media can directly and indirectly foster existing social inequalities. While ubiquitous computing and the diffusion of locative media in the city are often emphasised for their empowering effects, what is often overlooked is the fact that urban spatial motility is going to become a crucial factor of social stratification in the near future. Paradoxically, even studies concerned with the political significance of the new media, like Fenton's (2008), are markedly more focused on the ways in which new media allow for a reimagination of hope rather than the ways in which they may turn out to be an additional factor of social differentiation and inequality. Awareness of this 'dark side' of new media seems to me to be essential to enable a better evaluation of the place and the scope for resistance practices in contemporary urban space.

Consequently, in this paper, I would like to explore the tension between the fact that, while as remarked by Kwan (2007, p. 435), in line with Castells and others, "places are increasingly connected by networks of movements and flows", in practice we also face a concurrent proliferation of boundaries and the emergence of differential regimes of movement. In parallel with the uneven impact of ICTs on the 'pace of life' described by Crang *et al.* (2006), we see the emergence of radically diverging *styles of motility* for different social groups. This factor seems to me to be so important that I would venture to say that—just as Ulrich Beck (1986/1992) once suggested that class-based societies have progressively turned into risk-based societies, since social stratification is now determined more on the basis of the risk group to which one belongs than on the basis of the class group—it may be equally important to analyse society in terms of differential motility groups. This fact is also importantly related to the phenomenon Wacquant (2007) has called 'territorial stigmatisation' and Sampson (2009) 'neighbourhood stigma'. In other words, not only is the *freedom of*

movement in the city increasingly distributed in a differential way, but it also gives birth to specific territorial configurations which turn into self-reproducing patterns. In seeking to identify the role that new media play in this process, I criticise the idea put forward by some new media scholars that distance is of declining importance as an organising principle of urban form. On the contrary, I contend, it is important to avoid reductionism by conflating the planes of the material and the immaterial, and instead capture the peculiar territorial stratifications shaped by new media. Mediation does not replace place; rather, it defines new forms of flows and boundaries, new proximities and distances which interweave with other more traditional continuities and separations in the city. The 'augmentation' of space that leads to 'overlaying dynamic data over the physical space' (Manovich, 2006) is often, as observed by Crang *et al.* (2007), more a matter of 'subtle shifts' than grand dichotomies—shifts that nonetheless make "multiple emplacement" (Crang *et al.*, 2007, 2411) possible.

The aim of this paper is not to advance an encompassing, unheard-of solution for the study of urban travel. Instead, the paper tries to bring together insights from various threads of scholarship in a positive way in an attempt to foster a dialogue on these issues. On the one hand, it draws on the scholarship of critical geographers, in particular Doreen Massey (1994, 2005, 2007) and her relational conception of place that emphasises the openness and connectedness of places through routes. Such a perspective offers a convenient argument for a "relational politics of place" (Massey, 2005, p. 181). Combined with the 'mobility turn' in sociology or the 'new mobility paradigm' (Urry, 2008), such a view calls, in essence, for a 'critical mobility thinking' (Jensen, 2009). In transport geography, similar ideas are increasingly matched with rising awareness of local–global connections, that is, the perceived necessity of studying how each single transport system is shaped by decisions made at a myriad of different scales and places (Keeling, 2009).

However, I also contend that relationalism and connectionism, while necessary to de-essentialise places and open up the prospect of a "politics of place beyond place" (Massey, 2007, p. 15), should be complemented with a phenomenological perspective on (more or less mobile) locales. The experience of mobility—and of multiple, layered or intertwined mobilities—is crucial not only as an addition to the connective dimension of places and flow, but actually as a force that sustains certain associations (or dissociations) and shapes new ones. In other words, it is necessary to grasp the linking points between the ecology of transport systems and the phenomenology of travel experience.

Recent works in human geography and transport geography (Hanson and Giuliano, 2004; Garrison and Levinson, 2006) as well as in mobility studies (Löfgren, 2008; Watts, 2008; Adey, 2008, 2009; Bissell, 2010; Budd, 2010) seem to reveal a new—or, at least, renewed—interest in the *experience* of mobility and the *affective atmospheres* of travel. Such a reorientation, Schiefelbusch (2010) has observed, constitutes a challenge to the classical rationalist utility-maximising-actor paradigm of transport geography, which invites scholars to take into account travellers' perceptions of comfort, discomfort and, more generally, of the ambience in which travel unfolds, as well as meanings and significance attributed to experienced mobilities.

Interestingly, the line of inquiry on the experience of mobility seems almost necessarily to prolong towards the study of *immobility*, such as in the case of enclavism and forced localisation (Atkinson and Blandy, 2005; Cresswell, 2010). For instance, the fact that urban mobility represents a form of liberation is proved, *a contrario*, by youth gangs: the latter do not so much attempt to control a territory as they attempt to secure

for themselves the possibility of moving around, and especially of moving out of their stigmatised neighbourhoods; theirs is a struggle against forced immobility. Incidentally, Lefèbvre (1991) made this clear in a famous short article for *Le monde diplomatique—Manière de voir*, in which he described the right to the city as comprising the right of not being 'dispersed and stuck into ghettos'. In relation to travel, spatial segregation has a further form, though. Today, a 19th-century type of class segregation reappears in new guises: whereas once there were different class compartments in a train, we now tend to have different trains for different classes, sorted according to speed and comfort. Such cases elicit some more general considerations about transit systems. Transit spaces have become increasingly 'asymmetrical' according to vectors of entrance/exit: while incoming is highly patrolled, outgoing tends to become increasingly irrelevant for the system; an asymmetry which is clearly mirrored by experience.

2. Urban Flows, Urban Media, Urban Borders

As Lash and Urry (1994) have persuasively argued, modern society is a society on the move. In particular, Urry (2003) derives travel from the contemporary networked social morphology theorised by Castells (1996) and singles out what he calls 'meetingness' (a notion which can be traced back to Georg Simmel). Following Urry, travel, meetings and talk are necessary to sustain the network morphology, transposing it from a virtuality of connections into an actuality of social relationships. In general, the modern city emerges as an environment of flows and circulation, in which mobility is essential. In the modern urban space, people, goods, information, ideas and desires gather, meet and are transported.

However, mobility is always differential, in the double sense of differentiated and differentiating. In particular, as Simmel (1908, §IX, p. 506) first observed, modernity produces a fundamental asymmetry: on the one hand it bestows on the settled subjects (*Sesshafte*) all the advantages of mobility; but on the other, it does not grant to the unsettled, 'vagabond' subjects (*Unsteten, Beweglichen*) the complementary advantages of immobility. In this sense, the modern city is defined not only by flows but also partitions. Just like movement and travel, so too constraint, segmentation and enclosure are prominent features of urban fluxes and trajectories (Marcuse, 1995; Amin and Thrift, 2002). The activity of urban government entails precisely a type of control over a space of dislocations which is obtained through the fractioning of space and the establishment of enclosures of various types. Michel Foucault has described both the rise of enclosed institutions that partition space in order to discipline bodies (Foucault, 1975)—what he later called 'anatomopolitics'—as well as the birth of the modern 'police' organisation, a process of 'urbanisation of territory' aimed at regulating the co-existence of the population and the circulation of goods and people in an open, flexibly controllable space—what he called 'apparatuses of security' or, more famously, 'biopolitics' (Foucault, 1977/2004).

Flows and boundaries are complementary rather than opposite entities, relative to the adopted point of view. A boundary only makes sense in relation to a flow, or better as the *specification* of a flow—and vice versa; in fact, boundaries represent a moment of *visibilisation* of flows and can be imagined as differential *gradients* of motility. Flows and boundaries have a double nature: on the one hand, they are socio-technical because they imply the inscription of social relationships into a material support which is technologically shaped, like transport vectors, media, etc.; on the other hand, they are bio-political because they have to do with control over a given space and a population. Transport infrastructures, regimes, standards, circulation,

distribution, access points and checkpoints characterise the materialisation of flows and boundaries in the city. Just as with mobility for Simmel, *freedom* too, as Bauman (1988) once remarked, is a relational and differential notion. The early-modern meaning of the word 'freedom' is, not by chance, intimately related to movement: it refers precisely to the possibility of 'going anywhere'. The freedom of movement constitutes a complex spatial-legal concept, which includes not simply the factual degree or the measurement of spatial movement, but also the institutional and legal framework within which such movement, if ever, occurs. Such a relational conception allows us to see that freedom was born as a privilege and has substantially remained so. The very process of individualisation in the modern sense begins when traditional social ties become weakened and the individual is 'released' from those ties through the possibility of 'going anywhere': individuality, this typically western modern concept, was born *as* a form of mobility.

The role of mobility is thus crucial to understanding modern social life, and urban life in particular. Urban space is a space of travels which are both material and immaterial. Urry (2008) usefully distinguishes five major types of travel: corporeal travel of people, physical movement of objects, imaginative travel through narratives, virtual travel on the Internet, communicative travel in person-to-person messages and conversations. Every medium interweaves in various ways material and immaterial elements, joining them in the travels it creates or makes possible. Urry's typology has precisely the advantage of underlining the similarities between urban travel and the process of mediation. In this respect, Iveson (2009) has observed that there is a persistent, often implicit, tendency to oppose the city and the media. The idea that the city—the 'true' city—is defined only by unmediated relations is mythical and represents an old ideology in the conceptualisation of urban life which mirrors an essentially anti-urban or urbanophobic attitude. According to this ideology, only 'immediacy' and 'face-to-face' are authentic. Yet, in fact, the city is always mediated: not only the urban infosphere, but every form of urban encounter, as Iveson reminds us, entails mediation. Rather than postulate a dichotomy between the city and the media, research should focus precisely on the different forms of mediation and on the specificities of the various prolongations between the material and the immaterial that constitute urban mediations.

If, as I contend, urban mediation can be conceived of as an ecology, concepts like landscape, environment, affordance and niche (see in particular Gibson, 1979; Alley, 1985) are useful to make sense of urban life. Concurrently, new media literature has stressed the 'immersive' quality of the new-media-altered urban landscape. Such a new media landscape is a *datascape*. Notions such as 'augmented', 'hybrid' or 'mixed' reality (Ohta and Tamura, 1999; Manovich, 2001; Bolter *et al.*, 2006; de Souza e Silva, 2006) aim to capture a type of mediation process which, as Manovich (2001) first argued, is located beyond the dichotomy between 'real' space and 'virtual' space. Augmented reality is based on real-time overlay of computer-generated images with the physical environment. Wearable technology (Cranny-Francis and Hawkins, 2008) and attentive user interfaces (Vertegaal and Shell, 2008) illustrate how embodied actors engage the material interface of an information system to create new forms of hybrid browsing through urban environments.

The mixed reality of new media urban datascapes is shaped by social practices in which fiction and imagination play an important role. In this sense, classic contributions on the 'imageability' of the city and the 'experience' of urban space (Lynch, 1960; Lefebvre, 1974/1991, 1996) still prove timely when

interpreting new media. New media contain an in-built image of the city or, more precisely, of the modern urban imagery. Crang (2000) has suggested that new media are designed on the basis of a model of social relations that is soaked in the urban experience of modernity. In my view, new media can be understood as a prolongation of those *dispositifs* of 'urbanisation of territory' described by Foucault which, in the 18th century, aimed at the creation of a flexibly controllable space of events. In this sense, Thrift (2004, p. 591) has theorised a "plane of endless calculation and recalculation, across which intensities continually build and fade", a plane which has come into existence through the spread of 'qualculative' activities infused into space, forming the armature of contemporary mobility (see also Greenfield, 2006). The plane of calculation makes possible 'sentient cities' (Crang and Graham, 2007), whose very spaces are forged by informational and communicative processes. The augmented, hybrid or mixed urban reality of new media like *personal* and *locative* media is neither determinist nor unboundedly mobile; it is a reality or a land-data-scape which consists of spatially dislocated events across various scales ranging from 'personal' palm screens to large display surfaces (Manovich, 2006). Later, we shall come back to this point and examine the nature of these events; for now, suffice it to conclude that the new media can be better conceptualised in their relation to the city if we imagine the urban environment as a set of affordances and as a process, or event, rather than as a mere stage or setting for mobility.

3. Urban Motilities

A 'mobility turn' seems to be on its way in the social sciences (Urry, 2008). Recently, Canzler *et al.* (2008) have separated mobility from *motility*: the latter refers exclusively to 'geographical movement', whereas the former entails a 'change of conditions'. For these authors, mobility and motility intersect but do not coincide, given that not all movement entails change: since movement in space may not change the state of the actor, one can move without being mobile. In particular, under the rubric of motility, the authors address issues of intentions, strategies, choices and capabilities of the actors. Similarly, Scanlan (2004) has observed that automobile traffic is paradoxically largely 'immobile' because of its narcotic quality and the peculiar passivity, it engenders (for a narrative-essayistic exploration of automobile anaesthesia and boredom, see Sinclair, 2002).

While Canzler *et al.*'s point is useful to distinguish the occurrence of movement from its effects—thus problematising the identity between the act of mediation and the specific mediation at stake (or the mediating and the mediated mediation)—it is also clear, I think, that no movement can be completely uneventful. On the contrary, to some extent, movement constitutes an event in itself. An evental-environmental perspective allows us to overcome the problems of both objectivist and subjectivist frameworks: from this perspective, each motility shapes specific territorial configurations and, more precisely, territorial stratifications of material and immaterial layers. Territorialising can be understood as a series of ways of carving or inflating the environment through boundary-drawing acts that *make* and *institute* territories (Brighenti, 2006, 2010a). Consequently, to understand the role of new media in the territorial configurations of contemporary urban space neither a 'subjectivist' nor an 'objectivist' point of view on motility seems satisfactory. My proposal is for an environmental sociology of urban motilities composed of a three-fold exploration: a dromology of displacements; a rhythmanalysis of flows; and, an affectology of travels.

The dromology of displacements along trajectories includes the study of speeds of material and immaterial transfers and their

medium. What matters to dromology is not speed *per se* but the composition of differential speeds. Thus, dromology seeks to take into account what happens when different speeds converge in a place or depart from it. Speeds and slownesses are not only quantitative physical attributes of movement; rather, they define different types of space. A dromology configured in this way is probably less 'dramatic' than the one originally conceived by Virilio (1977), according to whom speed annihilates distance. Yet, it could provide a useful way to apply the notion of speed to social research. In fact, distance is not annihilated but rather variously moulded as a pliable element that qualitatively transforms environments. The dromology of displacements is related to classical studies in trajectology and, insofar as different trajectories allow for different types of flows and intersections, it represents its living counterpart. More radically, however, a dromological perspective would enable us to understand how the nature of the spaces of trajectories is formed: indeed, the quantitative and qualitative dimensions of speeds and slownesses represent the moment when the design of trajectories is put to test. It is certainly true that, as observed by Massey (2005, p. 118), one always travels across trajectories rather than on an indeterminate surface; however, the sheer calculation of trajectories—the domain of classical transport geography—is now no longer sufficient, because differential speeds change spatial morphologies and environmental qualities.

The rhythmanalysis of flows includes the study of circadian, hebdomadal, monthly, seasonal and yearly traffic frequencies of passengers, vehicles and data. Notably, rhythms are not always scheduled and predictable; rather, they result from foreseeable *and* unforeseeable changes occurring in series of events. As noticed by Thrift (2004), extensive calculation does not *per se* entail predictability. A crucial aspect to consider is that rhythms are both enacted and perceived. Rhythms have a *blind* moment and a *visible* one, and the becoming-visible of a rhythm constitutes the differential moment that is necessary to create a rhythm out of a mere repetition. In this sense, Simone Weil once distinguished rhythm, which implied a moment of pause or distancing, from cadence, which she associated with mechanical factory work; and, clearly, the city is not a factory endowed as it is with multiple overlapping and modulating rhythms.

The affectology of travels includes the study of the affects that are generated during transfers. Affects are related to the combination of the *Stimmung* (mood or atmosphere) of places and the direct 'action' of bodies, objects and forces upon each other. Such action can be conceptualised as a 'pick-up' in Gibson's (1979) sense. The qualities of the crossed urban *visualscape*, *datascape* (ranging from physical signals, writings, advertisement, to portable media, enhanced reality, etc.), *soundscape*, and the qualities of the physical *environment*, such as light and air (temperature, humidity, cleanness, etc. as well as their variations in time) are also to be considered. For Bissell (2010), affective atmospheres form a ubiquitous backdrop of movement, yet a forceful rather than inert one (see also Anderson, 2009). Yet atmosphere should not be understood as a gentle metaphor: as Sloterdijk (2005) has shown, the material construction of social foams entails the creation of a co-fragile, polyatmospheric system in which the issue of 'sharing an atmosphere' becomes a crucially political one. In a further sense, an affectology of travels also includes a study of what people most prosaically do during travels. The interest in apparently mundane details concerning travellers (see for example, Watts, 2008) resides in the fact that urban travel often generates contradictory affections that need to be coped with at the risk of their contagion.

Notably, different occupational groups can be described as different combinations

of elements from these three domains. For instance, mobile professional businessmen obviously have very different types of travel from commuters in terms of speed, rhythms and affects. Similarly, the knowledge deployed by seasoned commuters as opposed to newly arrived migrants (Löfgren, 2008) is necessarily translated into differential speed, rhythm and affects. The traveller is an affective creature, like a tick (Adey, 2008, drawing from Deleuze). Daydreaming during train rides is interrupted by the trained urban skill of waking up at the right time. Colours and colourations function as guiding intensities, as the study of signage reveals (see Denis and Pontille, 2010 on the Paris and New York metros). Yet, not only does the urban traveller carve his or her environment (making a 'world' for him or herself), s/he also constantly becomes part of co-fragile social ensembles in which affections spread by imitation and contagion.

In short, the three domains of dromology, rhythmanalysis and affectology are in practice so strictly interwoven with each other that their distinction is, to some extent, discretionary and must be understood merely as a methodologically convenient way of organising the study. For instance, it is clear that soundscapes should be rhythmanalysed (noise peaks, pace of appearance/disappearance of soundmarks, etc.), that the dromosphere directly induces affective consequences of chief importance and that affects feedback on, and thereby changes, speeds. Furthermore, there is a plurality of motilities related to different activities such as work, consumption—including leisure, shopping, tourism, etc.—and all kinds of urban rallies, demonstrations, parades and celebrations.

In general, the question for a comprehensive study of urban motilities is not so much 'what territories do people go across?', as much as 'what territories do people *compose* by coming together, passing side by side and getting connected to each other?'. The affectology of travels connects urban motility to interaction in public. Public realm and urban circulation are mutually constitutive because the public is a space of encounter with social diversity in a situation of spatio-temporal proximity. According to Joseph (1998), the major characteristics of public space are accessibility, circulation and observability. I have implicitly suggested synthesising accessibility and observability into the single category of *visibility*, and interpreting circulation through the notion of *motility*. However, a further aspect must be taken into account—namely, *mediation*. Mediation is constitutive of the public. Gabriel Tarde (1901/1989) first observed that the public is fundamentally made possible by the media, insofar as they enable synchronicity of attentions in a context of spatial dispersal. While the crowd exists only if assembled in a single space (Tarde regarded it as at a 'lower degree of development'), the public—this sort of 'mental' crowd—is a spatially scattered social territory kept together by mediations that define a single emotional focus of attention throughout the people that form it (Brighenti, 2010b).

Each mediation works through a series of prolongations. Each locale is porous because it prolongs towards an elsewhere which, although not present in the here-and-now of the locale, becomes part of a single *plenum* (Garfinkel, 2002). Objects, actors, events, practices and other concatenations not present in the here-and-now of the locale are important and even crucial components of the plenum. Processes of import and export come about essentially through the media, which act as bridges, corridors or thresholds that traverse the plenum in multiple directions and connect the various here-and-nows. Portions of elsewhere and at-other-times are constantly imported into the locale, just as portions of the here-and-now are constantly exported, projected towards somewhere-else and at-other-times. Thus, the media can be imagined as 'projectors' that enable the motility—in terms of extension and compression—of here-and-now.

Prolongations constitute territories that are hybrid, material-cum-immaterial constructs. In other words, territories bridge spatially and temporally dispersed locales and, by doing so, they keep actors engaged into social relations. Recognising that territories exist in the tension between the material and the immaterial helps us to avoid reductionism of both the message-as-medium type (*à la* McLuhan) and the space-extinction type (*à la* Virilio). Because, as already said, territories are *imagined*, *relational* and *materially evental* entities, we can conceptualise them as *practices*. Territories are practices, insofar as a practice is a set of repetitions and differences that span various environments. Extensions and compressions are inherent to prolongations, just as they are to practices. Connecting past knowledge to present circumstances, practices enable us to make the environment we share *meaningful*—in other words, they enable us to territorialise environments.

The visibility of relations in public is not simply a visual matter, but rather a field defined by the capacity of being aware of someone's existence and, consequently, being meaningfully affected by someone else's action (Brighenti, 2007, 2010b). Visibility is a feature of the social world that makes it possible to establish a series of thresholds between noticed and unnoticed, relevant and irrelevant, foreground and background activities, actors and processes. The visible concerns, on the one hand, the inscription of social relationships into a material support (the 'socio-technical') and, on the other, the possibility of exercising control over a given space and a population (the 'bio-political'). Cutting across the spheres of the material and the immaterial, territories, prolongations and visibilities span, in short, *urban space* and the *public sphere*.

4. Features on the Border

Social studies of science and technology have alerted us to the idea that technological development and technological applications do not follow a merely technical logic, and rational efficiency may not even be their primary aim (Feenberg, 1999; Bowker and Star, 1999). Recognising that technology is shaped within rich contexts invites us to avoid any crude determinism. So, the technical aspects of the new media are important but far from determinant of their social outcomes; rather, they suggest a set of affordances which can be incorporated into social territories, with their events, stratifications and prolongations. Here, I confine myself to highlighting the most relevant features of new media for our present discussion (drawing in particular on Burke and Briggs, 2000; Manovich, 2001). Of course, the series of the following characteristics can be found in various mixes in different new media and are not necessarily always present in each of them. My list is intended as a reconnaissance of possibilities.

First, there is the aspect of *portability* and *personality* which refers to the fact that new media devices are—at least potentially—mobile and often designed for motilised single users that interface through various protocols into larger information systems shaped as networks, streamings, wireless meshes or compute clouds. Portability leads to the use of new media in a permanent state of 'dispersal' in the city according to the motility regimes in place. Secondly and closely related, there is the aspect of *interactivity* or—as it was once called—hypertextuality, given that users constantly interact with their devices, browsing for content, submitting queries, tagging or bookmarking items, and are in turn alerted, tipped, etc. New media interfaces are usually designed in a way that tends to solicit high levels of involvement and attention: not mere content provision but rather immersive environments which invite a whole range of reactions such as service customisation, etc. Thirdly, there is the aspect of *digitality* which enables the convergence between different media forms. Smartphones serve as a

clear case of convergence between various previously separated media. Fourthly, there is the aspect of *locativity*. Increasingly, new media incorporate GPS positioning systems and interactive mapping systems, or 'maps 2.0' (Crampton, 2009), in which detection of the user's position allows the system to provide him/her with a wealth of information about the local territory that is being navigated or crossed. Fifthly, another less explored but arguably relevant aspect is the *aesthetic*. New media have developed their own aesthetic perceptual style which is an integral part of a newly emerging urban visualscape and imageability. The new media aesthetic turns into a symbol of status for a set of 'creative' lifestyles embraced by young urban professionals. More generally, specific *ways of seeing* and imagining space emerge through the new media, as in the case of the 'new aesthetic of danger' examined by Wallace (2009).

Several classical notions embedded in traditional media and their culture are redefined by new media. Some authors associate personal media with symmetrical communication processes (for example, Lüders, 2008); but, on the one hand, here 'personal' has a stronger meaning than often implied: indeed, physical technological devices such as phones, pods and pads are strongly perceived as *personal effects* and even bodily extensions of urbanites, a fact which provides powerful territorialisations; on the other hand, digital convergence and cross-contamination determine a situation in which it is increasingly less fruitful to attempt to distinguish broadcast (or mass) one-way communication from personal two-way communication. New media can be used to navigate urban space accessing net protocols, web applications, widgets, applets, etc. which are clearly neither personal nor symmetrical. Techno-enthusiasts celebrate the fact that new media make the city more accessible and legible, ensuing from a more informed user navigation through urban environments. Visibility and even 'transparency' of the city are pledged as forms of user empowerment. However, these discourses largely underestimate inequalities, selectivities and the whole range of other effects that are implied in these visibility regimes.

In particular, the evaluation of new media 'efficiency' or 'performance'—for example, the hypothesis that new media allow for a more productive use of time otherwise lost to congestion, queues, unproductive travel—has been so far mostly hypothetical, if not doubtful. Rarely have plausible rival hypotheses been taken into consideration. New media are generally deemed to be more flexible than fixed communication systems: the usual argument is that, because they enable people to make plans 'on the go', they allow for more flexible arrangements (Kwan, 2007). However, there are reasons to believe that new media may actually increase, rather than decrease, the number of communications necessary to reach the same level of agreement that would have been reached without them. New media produce such a degree of communicative inflation that unprecedented additional resources are required to retrieve and select information in the plethora of overwhelmingly abundant messages. Basically, it is impossible to evaluate comparatively the efficiency of personal mobile media because the whole ensemble of elements and environmental affordances works in a different way. The ubiquitous computing of new media produces a state of ubiquitous *interpellation* of the user, to borrow an old notion from Althusser. It is a situation in which, as Beer summarises

> Things, spaces and bodies are enmeshing as we become increasingly inert and the territories we inhabit gain the capacity to think for us (Beer, 2007, p. 230).

Such socio-technical 'externalised thought' involves both the multiplication/inflation of data (as well as the worrying concerns about

data processing, data mining, data storage and data protection) together with a deep re-articulation of territorial relationships. Whereas industrial capitalism was based on settlement, contemporary capitalism defines urban space as a bio-political smooth space: a motilised space where everything *must* flow smoothly. Whereas, as classically analysed by Marx, at the time of the rise of industrial capitalism, laws were directed against motility, against the 'otiose and vagrant', nowadays a proliferation of laws against immotility, together with a new design for public spaces, are aimed at preventing, discouraging and punishing undesired immotilities: as Deleuze first put it

> The disciplinary man was a discontinuous producer of energy, but the man of control is undulatory, in orbit, in a continuous network (Deleuze, 1990, p. 244).

This new condition must be understood in the light of the fact that motility is anything but uniform or unbound: while the neo-liberal city represents itself as a smooth space of unrestrained circulation, it is based upon a complex pattern of stratification of motilities (Harvey, 2008). As already hinted, motility and immotility should not be viewed as opposing but rather as complementary and selective practices. Scholars have observed that selection and triage become increasingly focused upon bodies and 'bodily (re)bordering processes' (Adey, 2008; Amoore and Hall, 2009), as in the case of profiling algorithms. In this sense, new media technologies motilise borders, turning them into a virtuality that is proliferated, scattered and disseminated, only to be instantly actualised whenever and wherever needed.

In our attempt to make sense of the relationship between technology and politics, both the perspective of the 'political consequences of politically neutral technology' and the perspective of an 'inherently political technology' are misleading. The socio-technical shaping of artefacts is always coupled with their bio-political usage. Certainly, technology is a political problem because it creates conditions and situations that impact upon issues of power, equality and freedom. Yet, at the same time, politics itself is a technology, a technological problem field, as Foucault's analysis of bio-political *dispositifs* revealed. Consequently, a territoriologic point of view suggests the study of the socio-technical and bio-political prolongations between the planes of the material and the immaterial, analysing the affordances and events in terms of generated speeds, rhythms and affects.

5. Urban Space, Control and New Inequalities

Do new media operate primarily as bridges or walls? Are they more suitable for empowering or surveilling? They are tools—but for whom? They are environmental—but what kind of social environments and spaces do they create? In the analysis of contemporary 'software-sorted geographies' (Graham, 2005), 'everyware' (Greenfield, 2006), 'sentient cities' (Crang and Graham, 2007) and 'new media urbanism' (McCullough, 2007), an assessment of issues of inequality and control cannot be postponed. In particular, I would urge the consideration of the following three crucial factors: new media literacy and styles of media use as a new dimension of social stratification; new media as surveillance and sousveillance (self-surveillance) tools; the connection between new media and phenomena such as segregation, triage, discrimination and conflict in the city.

First, there are inequalities both in terms of access to technology, due to economic factors, and, more subtly yet perhaps even more crucially, skills and knowledge. On the one hand, access comprises various elements, ranging from ownership or possibility of using technological devices, to the actual access to

networked resources, archives and services. On the other hand, new media literacy refers not simply to the capacity to understand the immediate content just retrieved, but especially to the awareness of the larger context in which information is provided, including knowledge about the visibility regimes within which new media operate. This concerns the possibility of subtracting oneself from the automatic forms of control that, in ICTs, come as in-built. In particular, the high level of technical complexity of new media technological apparatuses still leaves the literacy of the average competent user a long way from the technical knowledge of the actual functioning of a certain regime or protocol. Furthermore, if the digital divide is certainly a consequence of the (increasing) polarisation of wealth under contemporary capitalist conditions, it is not granted that better material conditions alone would automatically improve media literacy. Lastly, this type of inequality must also be assessed in terms of the positions of dominance in the market detained by the few big companies that constantly attempt to impose their devices and related copyrighted and patented formats. As revealed by Crang and Graham (2007), corporate and military projects to develop ambient intelligence that supports new media motilities follow logics that are at odds with emancipatory and democratic aspirations. This fact is also related to the presence of an infrapolitics that sustains (through repair and maintenance, as recalled by Graham and Thrift, 2007, and Denis and Pontille, 2010) the invisible infrastructures functioning as armatures of urban travel and communication.

Secondly, there are issues related to surveillance and self-surveillance. As Haggerty and Ericson (2000) and Lyon (2007) have observed, surveillance is increasingly based on data flow-tracking and data mining rather than mere visuality. New media are highly traceable and trackable (i.e. visible) on many territories at once. Locative media, for instance, provide specific geo-reference so that it becomes possible literally to 'follow the actor' everywhere. Contemporary surveillance turns individuals into dividuals (Deleuze, 1990), or bundles of profiled, sorted, relational and searchable data. However, that does not mean that bodies lose their importance. The continuing relevance of what Foucault called anatomopolitics is revealed for instance by the practice of sousveillance (Mann *et al.*, 2003), which seeks to exploit the current abundance of visual recording devices to diffuse and multiply control as opposed to a model of central monopolised big-brother type of control. Yet while certain uses of sousveillance may have democratic potential thanks to counter-control over power-holders—for example, denouncing police brutality, as happened, for instance, in 2001 at the anti-G8 demonstration in Genoa—other uses are far less edifying. Indeed, they easily give way to 'optic delation' (Virilio, 1988). This is, so to speak, the Durkheimian moment in the new media. The 'dog shit girl' case reported by Dennis (2008)—the story of a Korean girl who ran away from the subway without cleaning her dog's faeces, but was filmed with a mobile phone and publicly disgraced on the Internet through blogs, to the point of contemplating suicide—reminds us that sousveillance can be tragically used for persecutory, afflictive and do-it-yourself forms of popular 'justice' and vigilantism, if not witch hunts, possibly also supporting mechanisms of moral panic and similar unpleasant effects.

Thirdly, there are issues related to segregation and conflict. Cities increasingly turn into massively surveilled spaces where a wide range of technologies explicitly designed for the securitisation and sanitisation of space are deployed to produce and reinforce social sorting and targeting. An array of systems ranging from automated vehicle identification to RFID (radio frequency identifiers) locative micro transponders implanted in objects and bodies (for an extended

review, see Lahlou, 2008) can be deployed to strengthen the selective targeting of areas and subjects that are already discriminated against, as well as to introduce new hierarchies of people on the basis of their differential power to consume. All this turns into forms of discrimination against those who are territorially marginalised and perceived as 'out of place' in the central most affluent districts of the city. Also, social sorting based on a combination of geo-referenced data and actuarial profiling techniques is likely to have disadvantageous effects for subjects coming from already stigmatised areas when trying to access privileged areas. From this perspective, curtailing spatial motility ultimately leads to a reduction of social mobility, too. Another case is offered by Graham's (2004, p. 326) discussion of electronic road pricing systems as means to manage, through mere in-built software code, differential prioritisation and marginalisation of subjects, with significant social outcomes. All these examples show that new media could selectively curtail freedom of movement. In short, despite the new media's emphasis on open social networks and similar social morphologies, their use in the contemporary city rather seems to push schizophrenically towards, on the one hand, hyper-individualism and, on the other, reactive (and reactionary) communitarianism.

6. Conclusions: The Scope for Resistance

On the basis of what has been said so far, what are the prospects for resistance and emancipation? Manovich (2001) critically observed that new media functioning subordinates the syntagm to the paradigm: what the user actually gets is only one actualised possibility (a syntagm) within a larger matrix of possibilities envisaged and foreknown by engineers and programmers (a paradigm). Thus, what the users sees is in fact only an epiphenomenon of the matrix (see also Picon, 2008). Similar reflections imply a rather gloomy view for freedom, entailing that nothing unexpected can be produced inside new media. However, resistance is tactical, interstitial and 'diavolutionary' by nature (Brighenti, 2008); it is certainly not paradigmatic—yet it does not mean that it be reduced to a mere syntagm either. Resistance practices tactically reshape visibilities in order to produce 'second-order' visibilities capable of challenging the invisibility of environmental control. Hence, they ultimately concern the urban *event*, or the 'encounter' (Amin and Thrift, 2002, drawing on Deleuze; Boullier, 2010). A number of unconventional actions have been recently carried out in places of transit, ranging from art events to political protests. Crang and Graham (2007) have reviewed a series of artistic and activist practices aimed at challenging the politics of the spaces of transit, re-imagining and re-enchanting urban environments. In a project called 'A wall is a Screen', proposed by the homonymous German collective, films have been screened in business districts areas by night, with a powerful effect of *détournement* ('Street noises—the art group reports—seem to have an impact on the action of the film/plot'). As concerns political action, Stavrides (2010) has recently documented that, during the 2008 Athens uprising, protesters "blocked for hours the ticket machines, explaining to metro users that the metro corporation actually uses underpaid cleaners overexploited by ruthless contractors".

Resistance seems to appear whenever an *event* that is not simply an *occurrence* takes place. This entails an opening-up, a radical pick-up of the affordances in the urban datascape. A whole new politics of flows and boundaries, of walls and display surfaces is emerging before us (Manovich, 2006; Brighenti, 2009), a socio-technology and a bio-politics of sentient cities and affected travellers, in which actual urban motilities are far from merely being an epiphenomenon of the transport system or of infrastructural

design. In order to develop a 'politics of place beyond place' (Massey, 2007) and a 'politics of mobility' (Cresswell, 2010), we need to explore the interplay between new media and urban motilities. My suggestion is that we can move in this direction by analysing the three domains described earlier as the *dromology* of displacements along trajectories, the *rhythmanalysis* of flows and the *affectology* of travels. Jointly, these concepts overcome the dichotomy between objectivist and subjectivist approaches to new media and point towards a more comprehensive study of socio-technical and bio-political prolongations in contemporary urban environments.

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