DIGITAL CITIES: TOWARDS A NEW IDENTITY OF PUBLIC SPACE

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INTRODUCTION

During the last years, the world has come through significant changes, whose consequences have affected essential aspects of our lives. These changes can be summarized in three major milestones. First, the rural to urban habitation ratio has reached an unforeseen peak. In 2009, for the first time in human history, the total amount of people living in cities exceeded that of people living in the countryside. Second, there has been a generalized shift from an economy based on industry to one that is driven by information and service provision. Last, the prevalence of wireless connections over cable-dependent ones, combined with the expansion of devices that make use of these connections, gradually lead towards the implementation of Mark Weiser's concept of ubiquitous computing. As a result, cities are brought in the center of attention, in the context of digital connectivity and new media[1].

In the contemporary world, a wide range of our everyday activities has started taking place digitally. Communication, shopping or working, to name but a few, have started migrating online. However, this tendency has not led them to completely move from physical to digital space. On the contrary, they co-exist in a complementary way. In this scheme of territory expansion, we observe a great portion of activities related to the public sphere transcending or finding more fertile grounds to digital platforms of communication. Reversely, there is a simultaneous phenomenon of public space hosting the privacy of people's activities, as they communicate through their personal devices. While our existence starts to expand beyond the limits of physical space, our experience of the urban environment has to be thought of as consisted of multiple layers, through direct contact and through the mediation of digital technologies. The redefinition of public space in terms of both physical and digital existence rises as an essential question.

In 1748 Giambattista Nolli engraved the Pianta Grande di Roma, an iconographic plan of Rome. The Nolli Map, as it is universally known, is using black color to represent the built, shady, private space of blocks and buildings, while open air and enclosed public space (such as cathedrals or the Pantheon) is noted in white. Taking into account the transformations occurring today, a contemporary approach of such cartography arises as a challenge.

THE NOTION OF PUBLIC REALM

As the thin line between public and private space tends to become blurred, the emergence of digital connectivity raises controversial issues concerning the notion of private and public realm both in physical and informational space. Simultaneously with the primary conception of the city, the idea of public and private space was expressed. Their definition and separation was crystalized on the spatial characteristics and the physical borders of the traditional city.

In the ancient Greek polis-state the distinction of public referred to "polis", describing the relations inside a community or actions concerning the whole. The term "private (idiotis)" was used to indicate the restricted physical space of "oikos", the home that is non-political and contains household's matters, as H. Arendt explains[2]. These two spheres, clearly defined by their spatial borders, coexisted in a dialectic relationship. The existence of one was indicating the absence of the other. According to Alexander and Chermayeff a community cannot exist without privacy[3]; without a core of privacy, the community becomes chaos.

This idea of definition and separation of space by physical borders is still prevalent until the end of 20th century, as analyzed by M. Foucault[4]. The social space is seen as a sequence of vast environments of enclosure, each having its own laws. The individual never ceases passing from one enclosed environment to another: the house, the school, the factory, the hospital or even the prison. The spatial limits of these environments define a condition of control on social hierarchies, interactions and informational flows.
However, many approaches on public space arrive on definitions that are not only related to its spatial identity but rather to some qualitative characteristics. Mark Francis defines public space as a "participatory landscape"[5], whereas Hegel will approach it as a "field of political action".

Public space constitutes an "impersonal field of codified and exchangeable informational flow" for Simmel; a public podium, a place of free speech where "verbal expression prevails on visual communication simulating the ancient Athenian Agora" for Arendt. In a later, more complex definition given by Sennett, public space will be conceived as a multi-layered field of ambiguity, exchange, informality and subjectivity where the individuals can play different roles, in the theater of the world[6]. Under the above scope, the term of public does not necessarily describe a spatially defined place. It also concerns a field where particular actions and exchanges can take place, a more extended condition that exists independently of location. These definitions of the public realm, based on its immaterial aspect, are the connecting node for exploring the fusion of its limits and its emerging new identity.

MUTATIONS OF THE IDENTITY OF PUBLIC SPACE

William Mitchell contends that today it is the network, rather than the enclosure, that is emerging as the desired and contested object[7]. "A decentered and territorializing apparatus of rule progressively incorporates the entire global realm, managing hybrid identities, flexible hierarchies, and plural exchanges through modulating networks of command"[8]. As the use of digital networks becomes an essential part of everyday life, a new digital layer is added on the existing urban landscape. The new state of connectivity

results in a disruption of physical presence as you can simultaneously exist and participate in many different places. A fifth dimension of space is occurring, in a fluid situation where the traditional spatial limits transcend to a more complex and fragmented situation. Public and private spaces are interpenetrating altering definitively their original identities.

Public torque to private

On one hand, public space has broadened, extending its field in the digital world. New platforms of social interaction are created; places of political free speech, exchange and participation as blogs, forums, groups or websites emerge. These platforms correspond to another scale of public space, the global-urban space, being accessible by a bigger number and wider range of people. The main attribute of this digital emerging public realm is that it cannot be constrained by the traditional spatial limits.

Contemporary man, as a networked being with extended senses and field of action, can use this new public space while physically remaining in the privacy of his home. The de-territorialization of public gives the ability to the traditional cellule of privacy to become a place to host all possible connections, public conversations and functions. The home emerges as a center for communications receiving information and entertainment, obtaining goods and services, and linking in with workplaces.

Ela Kaçel[9] indicates the close relationship between the "electronic devices" and householders. Since early 20th century a transition has occurred in domestic space, from "home-scale" to "room-scale". Individuals' personal spaces, therefore, separated from each other. To her, now we are practicing a new phase: from "room-scale" to the "electronic device scale". In this sense, personal devices remove constrains of space and time, arrange our ties with the outside, and transform every "private" world to a "public" one. The room, becomes the personal device from where, safely and protected (?) we experience and digest the shocks of the urban environment.

At the same time, a paradox reverse is taking place. In the same way that external information and images flock in the private space, internal information flows to the public. The home, becoming a node of communication, is not only tending to include the extension of the public realm; its interiority is flipped, turning what was inside out. Images, videos or Skype calls having for background room walls, snapshots from mirrors framing bathroom tiles or even kitchen tables with homemade food, circulate on the web being the fond of this emerging home-centered social interaction. The interior facades of private space become the frame of the digital public life, the street fronts of this emerging digital urbanity.

"Click, click through cyberspace; this is the new promenade". The network is the new urban site before us. Its places are constructed virtually by software instead of physically from stones and timbers, and they are connected by logical linkages rather than by doors, passageways, and streets...".[11] The question deriving is whether acting from one's private space, participating to public through distance, without physical presence equals to what we used to call public attitude or participation to public life. And if yes, does this mean that the contemporary man, being networked and in constant contact with the public, has perforated his private sphere?

Private torque to public

On the other hand, the emergence of networks as the defining scheme of our era, affects public space, suggesting a world that is logically, spatially and temporally discontinuous. They offer a state of connectivity that can only be experienced at their nodes, mostly leaving the user unaware of what intercedes amongst them[12]. As cities become more and more dependent on networks, they tend to adapt to their fragmented character. This may be witnessed in a diversity of ways.

Digital networks suggest a state of connectivity independent of locality. Moreover, the fast pace of contemporary life, the augmented need to stay connected ("I link therefore I am"[13]), or just the ability of doing so almost ubiquitously strengthen the current tendency, of people being online continuously. Therefore, people stay connected to their private networks even if they are located in public spaces. Each person, using her own interface, consists a distinct node in one or more networks at a time. The attention is directed towards a personal object (i.e. a screen or a smart phone) that is transformed into a gate of communication. Consequently, interaction with the direct environment shrinks. Individuality is overstressed, as people take distance from "public activity". Public space tends to transform from a common ground of social interactions to a neutral space, hosting distinct individualities that carry their privacy with them. Therefore, people choose to enclose themselves in "bubbles" of private space and move through the city continuously remaining inside them. Taking into account the fact that automobiles are probably the ultimate piece of technology for isolating people from the stimulation of their environment[14], the vision of the self-driving car (as perceived by Google and other companies), liberating passengers from driving it and thus from inspecting the surrounding, could be the direct materialization of these bubbles.

In the information age, the abundance of information has been continuously augmenting. The city itself is a structure with augmented density of people, infrastructure, built environment and, thus, information.
As Nicholas Negroponte observes[15], we are transcending to the post information age, where extreme personalization rather than access to information is the object at stake. This personalization is happening to the scale of the individual.

Ideally, people will not be overwhelmed by excessive amounts of information that indeed exist, because they will not be any more undistinguishable receivers of a neutral broadcasting. Contrary, a set of smart software is able to filter information on their behalf. Today, we can already see such applications, that vary in the level of control and may range from amazon's proposals on future buys, or Facebook's proposals on social interaction (friends, groups, events) to the new personalized maps by Google. While some of them may only have an advisory character, others filter information, so that parts of it never reach the user. A future of "ambient intelligence" would suggest that we only get to access pre-selected information, as processed by algorithms customized to our personality. In order to understand some possible effects of this state to our relation with public space, we will try to illustrate the example of the personalized Google maps.

Google promotes its new maps, as offering "a map that's unique to you, always adapting to the task you

want to perform right this minute"[16]. The way it works is that it only shows highlights, which it assumes to be directly connected to your search. Every click on the map results in a new customization, as it "instantly changes to highlight information that matters most"[17]. By using the map, your account is enriched with information of your searches and clicks, so that Google can always build "even more useful maps with recommendations for places you might enjoy"[18], based on your profile. At first, this may seem to be of great advantage to the user, who will now have to choose only among places she is interested in, liberated from any useless information. However, when everybody will have efficiently built her profile, we will result with every single person looking at a different map. If we consider that a map is a tool through which we identify the city, that would mean that people would no longer have a common reference about it[19]. A possible implication of this could be that public space loose its identity as the product of a common imaginary, and rather be partially perceived only to an individual level. This will further weaken its perception as a place of collective activity, as people would be tempted to think of public space as an extension of their own private spaces.

CONCLUSION

It is now evident that a cartography of the public and private space in the contemporary city cannot be approached in absolute terms of black and white, as has happened in Nolli's map. A pure locational assignment of public and private seems to be inappropriate, too. Manuel Castells identifies the emergence of space of flows, which dominates the historically constructed space of places, through the medium of informational technologies. It is in this context, that we consider the flow of information, rather than the location, to be the factor of defining a space as public or private. In fact, it may not be exact anymore to refer to public or private spaces, but rather we should talk about public or private condition of presence in a space.

As the flow of information is realized through digital networks, their topological structure tends to replace conventional geographies. Discontinuities and spatial deterritorialization, implemented to the nature of networks, have started to be introduced in the urban environment. However, the existence of a digital layer over the city's landscape does not prescribe the complete inheritance of its characteristics to the urban environment. On the contrary, an amalgam of urban places and electronic spaces (Graham and Marvin) that consists the contemporary city is creating a more complex environment, having the properties of both the physical and the informational space. The interaction between these different layers results in the temporary formation of spaces with different degrees of private or public character, whose place and intimacy change together with people's flows or established connections. The cartography of the contemporary city is not static or fixed. It is transient and dynamic. The city is a continuously mutating living organism, responding to its users' actions. In real time.

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ENDNOTES

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