
The Virtual City: From augmented urbanism to urban hacking

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Abstract

In recent debates, the question on how new information and technologies influence urban life has been reformulated to include aspects of a more profound change. This has to do with the technical ability to lay information on spaces, which remains visible to others. In this way, places can be identified with mobile phones and also allow the user to share information on this place with others. In this “augmented city,” communication among users can create new geographies. In this article, the author underscores the impact of the ICT (information and communication technologies such as smart phones, tablets, Augmented Reality technologies, social networks) innovations in urban life. In a second step, the concept of augmented urbanism will be understood as part of a more profound societal change in which the diversity of urban life styles is at stake. As for urban hacking, the options for norm-changing strategies are taken into account. It is argued, it needs to be framed as being linked to the spheres of art, sport and urban planning; urban hacking must be regarded a potential vehicle of local adaptation to global codes.

Keywords: virtual urbanism, urban hacking, augmented city, urban theory, urban sociology

1. Introduction

The permanent innovations of ICT since the 1990s have raised questions about the impact on “space” in the widest sense, but also with regard to very particular questions of urban life. In the most profound reconsiderations, space appears to be shrinking and compressed by the diminishing of distances. The appearance of economic, social and cultural phenomena as being “just-in-time” and transmission of “real time” have questioned the basic order of time-space-connections where the gap between two moments in time have been produced, signified and controlled the experience of distances and by doing so, enabling space as a chronical idea. With the emergence of ubiquitous communication, the perception of space has overcome the dual before-and-after order; ICT enable us to be present at the same time in different qualities but simultaneously.

Many considerations about the implications of this new space-time order have taken into account that profound changes in perspective on cities might need to be assumed (Boudin, Eckardt, Wood, 2014). In particular, the so-called “end of geography” has either led to overoptimistic claims of a decentering world where connectivity has become the main concern or produced dark fantasies about chaotic and ungovernable spaces. In the discourse on the effects of globalization on cities, the general assumption has been that cities were not dissolved as important living spaces for most people and that the spread of ICT does not solve the problems of hierarchies, and social and political inequalities - neither in states nor within cities

Another perspective concerns the micro level of cities: the personal interaction in shared spaces. One critique is that the meaning of public space has become challenged as people are more concerned with the communication that is displayed on their electronic device rather than with the persons physically around them. Underlying the assumption that “in former times” people interacted with their bystanders randomly, this rather nostalgic view misses the innovative spatial production that is undertaken by ICT users in public spaces today. In the modern city, communication enables meeting by travelling from one point in space to another; this function of communication has been added up by “staying tuned.” Research shows that communication does indeed enable meetings with absent persons. Mobility is increasing because of better and faster communication options.

Nevertheless, the logic of ICT-based urbanism has changed with regard to its spatial frame. The most striking difference between a permanent online communication and its space to the former modern urban life might be seen in its need for constant production of visibility. This has to do with the distracting effect of ICT that require a large amount of concentration, even if this is rather diffuse. The psychological focusing on two permanent layers of presence creates a different regime of looks (cp. Graham, Zook and Bolton, 2013). For the cities, shaping and designing space in its built environment has so far had a function for interactive communication on the basis of direct sensing. Still, large parts of the urban environment function according to the rule of direct-stimulus interpretation. Basic urban semiotics like traffic lights, shopping logos, official indications like school banners or police station signs, territorial claims like borders and gates were not abolished and still learned by urban dwellers in early childhood as an important symbolic order. What is common to all of these semiotic settings is that they are part of an introvert map that is created step by step in the run of the primary socialization of the individual and based on personal communication with (parental) authorities. Becoming a stranger meant that one has not undergone this process of personalized and space bound socialization in a particular place. This implies that the learning of the semiotic layer needs to be repeated. The modernization of life had, however, followed the same principles, so that traffic lights and house gates can look different but they can be understood in its functionality regardless the cultural context. The content side of this observation of a strange symbolic order was not touched by this estrangement and can be reconstructed by careful looks and in a directly sensed manner.

With the spread of ICT communication in the public realm, the meaning of public space has become a different, which not only dissolves the idea of space as distance but also of presence. While progressive architects have regarded public space in its functionality as meeting places and fostered their quality to comfort people to stay, the meaning of “being present” in a holistic way has become doubled or irritated by the presence of a “virtual other.” Still, it is hard to find the right terminology, which is not normative, and using metaphors that might be misleading for this transformed experience of virtualized public space. Like Kitchen and Dogde (2011) speak about the “digital shadow” that is left behind with our traces of ICT communication, the analysis mostly starts from the point of view of the ICT user. Few critics have so far reflected on the fact that the perception and experience of the shadow was predicted and foreseen by the public or private providers of spatial arrangements.

The main aspect of the ICT-related analysis is the personalization of individual perspectives. As we know from the classic essays by Walter Benjamin on the Parisian flâneur, the walk through the city is highly motivated by desire and emotional needs of the individual trying to find his personal place in mass society. In this regard, contemporary personalization of the use of communication and public space is only in the line of this process of individualization. In this, it can be regarded rather as a kind of radicalization of modern urban behavior than as a profoundly different way of interacting in the city. This means, that while the physical gaps no longer are as important as they have been, the

longing of city dwellers to “embark” mentally on different levels is the essence of urban dynamics. In Benjamin’s time, the dissociation from the present surrounding came as a shock and brought in memory of the past. Today, it appeared that the complexity of sensing and feelings in the city are parallelized and embedded into commodity spheres. The commodification of these feelings is realized by the production of security and safety. The major tools to achieve this stabilized emotional urbanity are the creating of shared codes, which are recognizable in the virtual and the built environment. Instead of the shock of difference and the unsolved problems of the past, this process of virtualization of urban aims at using symbols and aesthetic concepts which are enabling flows between both worlds without any kind of irritation.

2. Augmented urbanism

The basic principle of urban development can be described as a highly controlled and themed construction of symbolic landscapes in the city where ICT firstly has been made present to become a widely accepted tool for communication. This is in particular true for the first generation of ICT-related urban projects, such as the theming of cities according to particular narratives. Already in the early 1990s, this principle has been realized by paradigmatic concepts like Disneyland and Times Square. The dissemination of internet cafés followed up and made ICT-related communication popular and trendy. In this phase of urban development, the spread of electronic billboards and screens was paradigmatic. It symbolized a semantic hegemony of the idea of a superior form of communication and in this way broke the ground for the preference of norms that superpose existing perceptual freedom. In other words, the permanent change of uses of the public space that required a certain flexibility of norms—on what is allowed to be seen and done— subtly gave way to an understanding that being in touch with global communication lines and their codes of viewing are most important. Setting up screens became a kind of power demonstration that devalued other forms of non-virtual communication. Consequently, many cities adopted the idea that a city needs to have one identity and a pictorial appearance that can be branded globally by the code of ICT. While in the beginning, cities have been augmented to foster and enable virtual communication, from a certain point onwards, the cause-and-effect relation turned around: virtualized interaction affected urban life and augmented the urban reality in a variety of ways.

Augmented urbanism therefore implies not so much that cities offer spaces to link up to virtual communication like looking at screens, rather it means that virtual communication flows into the very logic of urban life. In this regard, the “normal” use of mobile phones and permanent online presence is a technical and social basis for the augmented urbanism. To understand this impact, the city needs to be seen as being both planned and lived by with its daily routines. Apparently, the routines of many citizens have been changed by the personalization of information that they receive, translate into their own spatial behavior, and thereby reinforce. Daily routines have become more effective and therefore have changed the rhythms of a city. Moreover, they shape new urban geographies by following individualized tracks of mobility. The major driving force for the creation of new mobility structures, however, comes from the activity of other users where the individual reacts and so forth. The main aspects of urban life are no longer related to the information given by its providers, such as shops, restaurants, hotels, traffic facilities, schools and others, but they are part of a larger act of communication where the interpretation (with “likes” in its simplest way) are crucial. For urban planning is the choice of residence is essential. Neighborhood descriptions and their visual appearance have become mostly a question of virtualized information.

The character of this augmented urbanism cannot be seen without its technical basis. While these ICT-related communication forms offer more options for choosing places to work, live, recreate and more, the generation of this information follows two main principles. Firstly, it searches for solutions that enable immediate decision. In this

way, from “first appearance” the emotional interpretation of “like” or “not-like” appears to be unquestionable. Led by the imperative of decision-making, the recommendations are either ranked or simple “yes” or “no” qualifications. In this regard, ambivalence of information and the need for own research are discredited. This principle of avoiding misunderstanding and thereby neglecting ambiguity leads to the second function of augmented urbanism, which is social sameness. The algorithmic logic of search machines and others seeks recommendations in the light of the individual user profile. By doing so, the search for affinitive other users leads to a filter bubble with the underlying unspoken philosophy that it is always the best to live with people or to go to place where you meet “your kind“. In its urban consequence, the shaping and building of people of the same taste – be it traditional, be it liberal-open minded – leads to the rise of gentrified areas and gated neighborhoods where otherness is structurally or by exhibiting your way of life excluded. At least for the European cities, the loss of a certain degree of social and cultural mix is at stake.

3. Urban hacking

Cities have reacted in many ways on the “lived by” augmented urbanism. Globally, the social segregation of cities has increased with a nowadays self-understood principle put into practice that living in your own community is recognized as being “the best way to do“. The appreciation of cultural and social difference has been reduced to highly controlled and rather timely arranged coulisses and events. The emergence of the festival and event city falls into this category. While thus urban life has become something of a Potemkin-style cosmopolis, urban planning in its core function, such as realizing public projects, has been confronted with the request for more public participation via ICT. This is even more true for the “digital divide:” this new form of participation does not challenge the basic principle of radicalized individual urbanism. Nevertheless, there is hope for an “augmented deliberation” (Gordon and Manosevitch, 2011). Its main emphasis lies in the potential of ICT to increase discussion about the best solution for planning problems. The ability to include other ways to reach other non-verbal sense helps to improve the creativity, flexibility and the inventiveness of the planning process and altogether they reinforce the norm of necessary conversation. Role play and gaming can even show ways how to manage conflicts of interest, which are often significant in planning processes. Outside the established spaces of planning, the use of ICTs can be indeed also seen as a kind of deliberative or anarchistic practice that does not accept the streamlining of spaces in the light of virtual sameness creation. While it is allowed to shape a layer of information and imagination on the information displayed on a mobile screen with look on a particular place – like getting the recommendations of other users when zooming in on a spatial address – disrupting and irritating informational practices are developing at the same time. As an attempt to classify these activities, the term “urban hacking” has found some acceptance in the academic world. It is introduced to describe activities that are counteracting pre-given codes on the meaning of space or spatial arrangements. In this way, they are invading the internet like hackers and use them for their own purposes by imposing a different code. This kind of urban behavior can be traced back to the 1970s with its culture war: hip-hop music, skateboarding, break dance, graffiti. The cultural logics of advanced capitalism have incorporated these activities into its repertoire of reproducible routines. Despite their successful integration in commodification, potentials of resistance have risen again with the “cultural jamming strategies in the risky spaces of modernity” (Friesinger, Grenzfurthner, Ballhausen, 2010). In their jamming, urban hackers do not necessarily follow any kind of political idea or are aware of their code switching and irritating conduct. Rather, out of a very self-understood feeling for autonomous moving, the new forms of public behavior in cities criticize mass production, cultural homogeneity and social conformism in an implicit way. There is also, however, a politicized part in the urban hacking phenomena if bicycling actions like Critical Mass are considered where many participants are posting political statements against the mainstream preference for car use. Clearly, politically motivated are also activists who strategically target certain companies with “adbusting” where they are laying critical information on the augmented urban spaces, for example pointing out environmental concerns about the companies. So far, the different examples mentioned in the discourse on urban hacking have a more profound and

often a less visible communality. This is, in short, the re-interpretation of the norms of homogenous interpretation of a space by both action and representing this in the information layers of the augmented spaces. There is, of course, a massive attempt of companies and public authorities to limit and to even criminalize these activities. One can, however, also find supportive spheres that protect urban hackers. Firstly, the aestheticization of cities allows hacking in the realm of art. This is also a two-fold relationship. As the history of graffiti shows, its disruptive character and freedom has also been tamed and civilized for exploitation by the art industries. Secondly, urban hacking profits from a return of the body and of movements where individual sport has become widely accepted as being normal in the city. To be seen as doing "sport" creates the need for distinguishing one selves from those who do only boring jogging – leave alone Nordic walking – by exhibiting more risky behavior. Thirdly, it is the field of urban planning itself, which paradoxically seeks for unconventional behavior to brand the city as being unique. Guerilla gardening, squatting, temporary use of vacant buildings and all kind of "urban pioneering" are creating a desired atmosphere of creativity and attractiveness. Pictures of these augmented spaces are worldwide creating urban brands that cannot be invented top-down and which are necessary to let the city appear as attractive for visitors, investors and especially the young and highly qualified workforce.

4. Conclusions

In sport, art, architecture, and urban planning exists an ambivalent attitude toward urban hackers who are aware that they are image-shaping actors. Their activities are inspired by mostly uncommon forms of interaction with public spaces, which they know from the virtual world. It is not only the information on how to adjust or to youtube skating on a bench. Urban hacking is an activity that re-adopts spaces that have been mono-normed by global codes of life-style recognition. The augmentation of urban spaces is an expression of power shifts where local needs have been subdued to the imperatives of globally recognizable forms of aesthetics. While ICT can be regarded as helping to establish the better promotion of arguments for the sake of a more participatory planning, the hacking of spaces is an expression of a non-verbal interaction with the already established norms of homogenous spheres. As a simple technique, urban hacking could also be instrumentalized for the sake of place branding and marketing. It can make places attractive as being alternative or "different," which in turn can be exploited for urban branding.

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