Urban planning and the ICT Toolbox

By
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Mobile technologies are not only changing the way we live, but are also making a pressing case to be included in the criteria for urban planners and architects. Ole Jensen sets out the argument for a more networked approach to city design.

I'd like to an address an issue related more specifically to technologies and I'm inspired by what Georg Simmels calls the 'will to connection'. Simmel actually described the human interest and ability to make connections as a key feature of a species like humans. In a famous quote, he talks about how humans leave traces in the landscape and also how they navigate according to these and follow along them. What I'm interested in is that some of the new technologies that afford the will to connection actually leave no visible traces. We cannot see all the digital communication as we could trace the path through a field in the old days. Nevertheless, I think these are important technologies. What I want to speak a little bit about is the notion of digital technologies, network technologies as part of a toolbox. I'm thinking here in particular of the practices related to urban design and planning, where most professionals would know that there are a number of various technologies that you can apply, including some of the latest GIS technologies etc. What I wanted to argue here - and this is coming from a chapter of a book called "Local and Mobile", edited by Adriana de Souza e Silva and Mimi Sheller, is that planning professionals need to add some extra tools. They need to think about an ICT toolbox and add some extra elements into that toolbox.

Three dimension of the ICT toolbox for urban design

I think it's clear that the contemporary city must be understood as complex assemblages of social-technical networks, built environments and human subjects. With the advent of networked technologies, I think new perspectives arise – but also new issues, of course. The scholar Rob Kitchin has termed it 'the programmable city' or, in collaboration with a colleague, he talks about 'code space'. Now there's an interesting discussion about how these technologies are being immersed into material spaces, how they are forming our practices in material spaces, how they increasingly challenge this notion of the digital versus the real, how we carry these digital interfaces with us and how we actually connect with the material world through these interfaces. So if you think about the programmable city as a kind of research agenda, or set of questions, I think you could start asking 'so what's happening in urban planning and urban design?' And I would like to talk about that from the point of view of an ICT toolbox. I think an ICT toolbox for planners and designers could contain at least three dimensions. Now, hardly surprisingly, it could contain hardware – the technologies, the devices, the gizmos, the objects, the artifacts, the stuff that we use to measure, for instance, GPS transmitters or those sorts of things. And of course software – the operative code, the apps that we download from our cellphones and those sort of things. But then, what I'm also particularly interested in, is what I would like to call the manual - which is what I think of as a theoretically informed conceptualisation of the city and its relationship to

mobility and technologies. So I'd like to think of the potential in mobilities research to act as a provider of parts of that manual. So we can qualify the discussion in planners' practices, taking it from fear or mindless happiness about technology to a reflexive engagement by thinking about some of these concepts that we develop in mobilities research - how they can work as manuals for the toolbox tools, and how they can enlighten people in terms of understanding what these technologies are actually affording and connecting.

The need for a multi-disciplinary approach

I think the need for an ICT or technology toolbox for planners will reach across a number of disciplines – city planners, architects, urban designers and various engineers could use these technologies in a very different way to what's being done right now. In Denmark, which would be my reference point here, there is the beginning of a multi-disciplinary, cross-professional discussion about some of these technologies. However, I think it is in its infancy and I also think a lot of municipal planners and urban designers - and people working out of architectural companies -are still relatively isolated and even not communicating a lot in these sorts of ways. Also, there is an issue about the way that municipalities organise city planning into pillars or areas or departments, like traffic or urban space, which of course doesn't make sense if you try to look at it from the point of view of the mobile subject who moves around in the city. Now, this is not a new situation. But I think the advent of location-based technologies and mobile communication devices actually challenges this idea of departmental engagement with the city in that respect. It also challenges thinking about the digital and the physical as separate realms, or the IT as something that the traffic engineers need to take care of, and that the public spaces are for the architects and so forth. I think that is really being challenged by the way that these technologies seem to afford a more widely understood perspective of the city and how people actually are understanding the city. So I think the demarcation of visible/invisible, local/global, physical/digital becomes problematic and I think we need the manual or the theoretically informed concepts to have a conversation about how to deal with these sorts of issues.

The need to engage with the generation gap

Moreover, I think we could add that there is a generation gap or generation issue in the planning community. I can speak mostly from my familiarity with the Scandinavian areas, but I know that there are quite a lot of people who have been practising urban planning for 30-40 years, are reaching the age of retirement and are not necessarily engaging and embracing these technologies. And I think you can see this in a more general term in society; that young generations growing up with digital technologies have a completely different understanding – for better, for worse – of these technologies and their potential. But I think that if we need to have, at least in Scandinavia, the next five years of planning not being stood over in the corner and not wanting to play with the apps, then we need to engage with them, theoretically informed and also with a particular level of theory. I'd like to give an example of that. I was presenting some of our research to the local municipality a year and a half ago and after the meeting I went to the canteen with my colleagues and the people I was meeting and I met other people sitting next to me. There was a woman, a little older than me maybe, and she was politely asking 'What are you doing?' And I said 'Well, I'm here from the university, presenting our latest research on GPS' and she spontaneously said 'Oh yes, that's scary'. And I think that speaks to a problem. Not for her necessarily, but in general terms how we understand and engage with these sorts of technologies. Mind you, this woman was actually a city planner. I think she was supposed to think maybe slightly differently about these sorts of things.

The downside of technology

Now I'm not trying to suggest that there is a particular way of doing this, but I think we could contribute from mobilities research to facilitate this discussion. I think there is also an awareness of the 'dark side' issues to these technologies. The whole discussion about the NSA and American surveillance, and Big Brother perspectives, has been around for a while. When we do research in Denmark, we have very

strict regulations on how we can do any kind of tracking, so there isn't a sense of these sorts of things. At the same time, people happily take away their rights when they download the latest app or buy a new phone or whatever. So there's a lot of commercial surveillance and a lot of public research that don't have these sorts of technologies to hand. From the research we're doing at C-MUS, the Centre for Mobilities and Urban Studies at Aalborg University, and in particular in the mobility and tracking technologies research cluster, I think we can draw a few ideas for why this is important for planners to engage with.

Why engaging with an ICT toolbox?

I think there are four reasons why planners should have an ICT toolbox including some of these more digital devices and those sorts of things.

1. It's part of the city

First of all, it's out there. As I speak, people up the data by numbers – they're organising their trips, figuring out where to meet friends, where to shop, all these sorts of things, regardless of whether the planner thinks that's scary or not. If you wanted to go a little more principled on this, you could say 'If you could claim to know and plan a city, you would also need to know and to plan for these technologies'. I think we've reached a point where city planners, architects and designers have to realise that digital technologies – wifi, apps – are as important as sewers, roads, buildings and streetlights. When you check into a hotel, you like there to be hot water in the tap, but you would also like free wifi. Increasingly, these kinds of services are being taken for granted as amenities or infrastructures facilitating some level of ordinary contemporary urban life. So the first reason is – it's out there, it's part of the city. As a city planner, you've got to know that and relate to that.

2. The data produced is a huge asset

The second point is that the data produced is actually a huge asset for the planners. You can think of various ways of reporting. City governments and architectural companies can install their own tracking technologies but you can also think about how the public and citizens are reporting back on a voluntary basis. We have a lot of examples of the public reporting holes in the road or problems with infrastructure and stuff like that; and you can do that in a much more systematic way if you wanted to. So there is actually an opportunity to increase your level of knowledge by getting new types of data about the city.

3. New participatory technologies

The third point facilitating this argument that planners need an ICT toolbox is related to the antidote to the Big Brother scenario. It is clear that these technologies offer lots of surveillance potential - some of them being states, some of them being commercial - that we can talk about in terms of power, surveillance and those sorts of things. But also, and I think this is often not in the equation when planners talk, these tools are new participatory technologies. We've done a fair amount of research in our group, exploring how these technologies can be used and I know there's a lot of talk about digital divide, so people who are not in command and control of digital technologies will not be able to participate. Now that is very true. However, from a research project we did very recently in a suburb of Aalborg where you have low income groups, lots of immigrants and lots of young people, we engaged with the young people in that area. And I'm pretty sure that they wouldn't have come to citizen meetings, charrettes and listened to long talks by a planner in a school somewhere late at night, throwing in charts after charts. We approached them and said 'what about mapping the areas that you like and do not like' and then commenting on these GPS maps and so forth. We actually have those young people engaging and thinking about the future of their neighbourhood and their city in a completely different way than you would have had otherwise. So I think there is actually a potential to think about these technologies as participatory tools as well.

4. A place for art in mobile technology

Now the fourth reason why I think these things are important is probably the most strange one from an ordinary planner's perspective. But if you look into the arts, you will see an increasing number of artists exploring location-based technologies, GPS, and figuring out how this will give us a new understanding of being, but also of places. And we have actually done that in our research – we had some projects where we put up cameras, lights and various loops between technologies and people in urban spaces as they move through. Some of them have been quite colourful and artful. You would see that some of these spaces become what I called performative urban spaces. They become spaces layered with technology where people can play with them – they can either change the light of a square or the light of a façade, they can exchange in making music or other types of artistic expressions by means of these technologies. Now I know these are probably seen as marginal to city planning. But I think that if you are a city planner and you're interested in how citizens engage with a city, and how they play with the technologies in the city, you will actually also understand the potential of these technologies as well.

Having in mind the digital divide

I'm not trying to suggest that this is all rosy and empowering – there are lots of problems with these technologies. There are digital divides, myself I experienced prior to my having a smartphone; I was in a US city once at a conference. I'd been there before so I thought why don't I show (people) around – I know a cool place, a nice public plaza with lots of ambience and life. I took the group to that place and it was deserted. Completely empty, nothing. It was highly embarrassing. And then one colleague said 'Hang on a minute'. She took out her smartphone and said 'let's go this way.' We went around the block and there was a tiny red door. We walked up some rather narrow stairs and when we came up there was a beautiful, very ambient micro-brewery. I'm not suggesting that people should necessarily go to micro-breweries in particular, but I think this was my moment of 'A-ha'. This was when I realised that she was inhabiting a different city from myself, because she could engage with a layer of information and data about the city - and figure out where to go – that I was not accessing. I'm doing that now because I have my smartphone and all is good. But what about all the other people who do not have smartphones? So I think there is definitely scope for discussion about how these technologies might not only have a digital divide - but even contribute to a reinforcement of digital divides. Having said so, I think most researchers would acknowledge that they're around and we probably can't think them away, so I think we have to deal with them. One of the ways of dealing with them is to have a conversation with our planning communities about understanding the importance and the potential of these technologies.

The networked city as playground

So I think the ICT toolbox for planners needs to include some of these digital technologies - partly because they're out there, they're part of the city, and partly because they offer new opportunities for getting better layers of data, more information and ultimately, hopefully, better city planning. But it's also because, if we actually use them the right way, they can increase the level of participation and contribute to democratic processes. I'm not saying this is inevitable and it will happen, by automatic, of course it won't. There will be issues about how people are using them in less democratic forms, of course, and finally I think the whole creative and artistic perspective is important to understand. This is also a way we are engaging with city planners in this research group - to understand that some of these spaces are much more than what they look like. They're actually playgrounds. You might think this is not serious but do you find any more serious activity than play? So these artistic practices related to the digital technologies may sound less serious but I would like you to think about whether there is anything more important than play, and whether cities should not be playful, if we should not engage social interaction by means of utilising play as a tool. Some of these might be digital, some of these might be really low tech. A good square, a plaza with a nicely-placed bench – people will start 'playing',

socialising and doing things. But I think we have to acknowledge that there is potential for the ludic, for the playful and those sorts of dimensions in this technology as well.

The rising conversation between mobility researchers and city planners So, coming to an end, the will to connection is as old as humans' movement across the surface of the Earth. However, I think we need to understand that the traces are no longer only visible. Networked technologies are creating new challenges, and urban planners and designers might benefit from expanding their toolbox with some of these technologies. However, I would recommend that we have a theoretically informed discussion about this – and this is what I call the manual for the toolbox; that the mobilities researchers engage in dialogues with city planners around the usefulness and the repercussions of these technologies to participatory practices, to the way cities are perceived and to the quality of life within cities. So, as before, I would like to end my talk by thinking what would the adequate policy implication be of having a conversation about more ICT toolboxes or more digitally-aware planners. I think it's really important to have the manual discussion from the point of view of mobilities research to avoid technological fetishism or a fear of technology that would be counter-productive to good city planning. With the work we're doing in mobilities research in testing out these technologies, the obligation from here is to take that to the planners, the policymakers, and suggest to them what are the potentials in these technologies, as well of course as what are the pitfalls, the downsides and the dark sides to it. So, all in all, I think the time has come for urban planners and designers to mobilise their will to connection.

Mobility

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

En savoir plus x

Movement

Movement is the crossing of space by people, objects, capital, ideas and other information. It is either oriented, and therefore occurs between an origin and one or more destinations, or it is more akin to the idea of simply wandering, with no real origin or destination.

En savoir plus x

Associated Thematics :

Lifestyles

- Living environments
- Digital technologies

Policies

- Cities & Territories

Theories

- Methods

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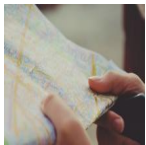
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