SASKIA SASSEN: SMART CITY

I want to give a critical account of the concept of Smart City and the way it has evolved; in my view, cities are very complex systems with great intelligence built into all kinds of their different sectors. The challenge is to mobilize all of those built-in intelligences. Prior to dealing with the term Smart City, we need to define the term “City”, otherwise the meaning of this term can easily be simplified and the very complex technical systems that a city comprises can be overlooked. An example for an oversimplified deployment of complex technical systems would be Songdo in South Korea: The very complex technical systems are deployed, especially in their interactive functions, in ways that are too simple to work and this then ironically downgrades the city as a whole.

In medieval times, an agglomeration of buildings, in contrast to, for example, a standalone church or a plot of land used for agricultural purposes, was defined as a “City”. Today, many agglomerations are private office parks or megaprojects, but they do not qualify as city. They are concentrations of buildings under private control; places that workers enter to work and that they have to leave when their work is done. Today, agglomerations of high-rise buildings do not constitute a city. The question we need to answer, especially when wanting to deploy technologies in a city, is: If neither an office park nor an endless suburb qualifies as a city, then what does?

When doing research, I am trying to remove myself from my object of study, my X: I go to Non-X in order to rediscover my X: By defining the city as a complex but incomplete system, one has to re-approach the notion of city. Out of this comes this notion that in this incompleteness, mixed with complexity, in other words diversities et cetera, lies the capacity of cities to have a very long life. An example for this would be the fact that all the very powerful major business cooperations in cities like London, New York or Paris and Vienna too, are dead. But what is still there is the city, in terms of neighbourhoods and public buildings and institutions, such as libraries, the government et cetera. This is a very interesting point to keep in mind, but the question of the quintessence of cities still remains. Regarding this, two points need to be considered.

First, to me, the city is a place where those without power - and that is the majority of people in the world and typically the majority of people in a city - actually get to make a history, an economy and a culture.11

The second important point is the notion of frontier, which in our western, European imagination is usually to be found at the edges of empires, but from a more generic viewpoint, frontier is any space where actors from different worlds have an encounter for which there are no established rules of engagement; at historical, colonial, frontiers, those encounters were usually ended though violence and Europeans killing their opposites. Today, our big cities are one of the few places where we still have these kinds of frontiers; said cities do not need to be enormously big, but they need to be a mixed environment. A city is a space, where those without power can have an encounter with power. Power today is extremely intermediated and abstract; high finance would be an example for this. It does not inhabit the city in a concrete way, like the old bourgeoisies did, who left their marks on the city though their offices and houses. They used the city as a space to enact their own power. Today, this is not the case anymore. In big cities, especially Global Cities, there is still a type of encounter possible that follows the same pattern: Power, and if it is just for one moment in a larger process, manifests itself through the actions of men and women who want it all and get it all. They make visi-

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10 The following text is based on a transcribed conference talk. The content and ideas were of course left unchanged, but some syntactical changes have been made in order to guarantee fluency within this text and to make it as accessible as possible for the reader. Translation Sarah Ritt.

11 The traditional working class communities were able to outlive far more powerful systems through making a history.
ble. A very important transversal element in this is the buying up of urban properties by larger corporations, which has skyrocketed in the past few years. The city, as a very complex legal and spatial regime, can – in principle – not be owned. Nevertheless, from mid-2013 to mid-2014 the top 100 cities in the world, and Vienna is high up on that list, have 600 billion dollars in buying properties of a minimum amount of 5 million dollars each; mid-2014 to mid-2015 that overall sum went up to over a trillion. London, for example, received 47 billion in 2013/14 and 57 billion in 2014/15. Another example would be Singapore: The city just bought a vast stretch of decaying, still inhabited land in Detroit. These examples illustrate that something is happening, regarding the acquiring of urban land.

Coming back to the Smart City, this concept makes me think of a set of interventions, of potentials which get deployed in a certain way that secure a kind of life of a real city. Each neighbourhood in a city has knowledge about that city that the government experts may not have. The neighbourhood is very particular angle into the city. And so one of the projects for me in terms of Smart City is this notion of open-sourcing the neighbourhood. An example would be the very famous app that is used to localize potholes in roads: Users click on wherever they find one and that information is transmitted to the central government. This has two functions: First, it mobilizes the knowledge of these rather marginal events that can be part of a neighbourhood. Secondly, it has a political function, which is that every citizen or resident can make a difference. Their knowledge, as elementary as it might be, matters to have a Smart City, and this is the critical point. The above-mentioned application actually has this double function: It brings in the knowledge that the central government may need, but it also means that people from very modest neighbourhoods feel that their bit of knowledge matters. This open-sourcing can also be expanded to other situations: When there was a storm in New York City, which brought enormous floods with it, some neighbourhoods knew a week in advance that their area was going to be affected by these floods. But the public transport officials in New Jersey had decided to move all their new buses into that area to protect them from the storm; the knowledge of the locals was not deployed. As a result, all these new buses were flooded. There is a kind of Smart City element that is very simple, very direct, but it is partly predicated on enabling knowledges of neighbourhoods to travel to whatever the necessary destination.

Another very important point is, at its most radical point, the re-thinking the way we understand the concept of the Smart City: Destabilizing this purely technical approach. In Songdo, this purely technical approach has worked in some ways but not in others.

In terms of research, this point of de-stabilizing is in the "before method zone". To me, it is beautiful to call it before method because method is a discipline. By being a discipline, it closes one up and it keeps eliminating things. And I think that the purely technological approach to the Smart City is in the “zone of method” and I want to pull it back to “before method”. Once one enters the method stage, there is discipline, clarity of purpose and the rules for further proceedings are established. What if the project of having a Smart City embedded in the long-life city actually requires this “before method-zone”? If technical systems are simply placed over a city, it is not automatically a Smart City. At this point, the notion of “making histories” comes in: Cities are full of the making of histories and it would be nice to think about the Smart City also in those terms. This is about making histories, this is not just about deploying big technical systems; we can do so much with existing technologies, let alone those that are going to be invented, especially on the interactive, rather than the infrastructural level. Where there is a very stable city, like Vienna for instance, inserting the Smart City concept will produce instabilities; maximizing the utilisation of certain potentials and technologies will produce instabilities. This makes it a bit ambiguous to bring Smart City into an existing, real city. One of the issues when introducing the Smart City is the larger ecologies of meaning which become extremely complex in cities. The Smart City becomes a complex configuration, so the specific technical capabilities of interactive technologies deliver, give us their utilities, their usefulness, through complex ecologies:

ARBEITERKAMMER WIEN
Individuals, intuitions, the question of social classes and different economic sectors all play into this. A group of women in Japan, discussing for example issues related to childcare, has all kinds of other meanings entering that digital space, than if it is the same group of women in Vienna: Digital interactive domains bring in other ecologies of meaning.

Even if the technologies employed in a Smart City in the case of Vienna are very standard, it is the interactive domain that makes things more chaotic: Upgrading a business district is radically different from upgrading the governmental offices. Apart from the before-mentioned technologies, these ecologies also bring with them the logics of users, which can diverge significantly from what engineers perceive as an interactive, Smart city. The simplest example for this would be the software in our laptops that is capable of various things, which we never use. I found that software and hardware engineers often live in different worlds, but for Smart Cities, we need engineers who can see both sides and who tell the software developers precisely what their machines can do and what software they need to mobilize all of these functions. The applications that serve in a city vary even within it, within different neighbourhoods, so, different kinds of socio-digital formations make legible different articulations between the technical and the non-technical. What residents of a poorer neighbourhood need in order to interact with each other cannot be compared to what an office park needs in order to do the same thing, even though they might use the same technology: the larger ecologies of meaning make the difference. Open-sourcing different parts of the city helps to become aware of all the different little knowledge systems and neighbourhoods are very important spaces for this. The central government cannot by itself understand how they can employ some of these technologies. In places like Songdo, the users of these technologies are reduced to choosers: They might be able to choose between five different ways to place their screens in certain angles, but they are not in contact with the central system.

In my research, I have compared financial traders to human rights activists. Those two types of actors need to communicate with each other, and even though they come from very different worlds, they have a point of interaction where they are doing exactly the same thing: They mobilize the smallest units. Financial traders take little bits of capital from many different people, even though it is very little, and human rights activists want to gather all kinds of bits of information, even if it is just one tortured body, they want that information. From a technologist point of view, they are using the same properties: Open access, simultaneous access and so on, but they go in very different directions with it. This is important when trying to understand the difference between the technological and the social.

What is interesting to see in modest income neighbourhoods is that the digital is critical for making a difference; we must keep in mind that most residents in big cities are poor and the government should really focus on enabling these groups to create a larger whole, which is bigger than each of these actors alone, driven by repetition and not by the notion of wanting to become a bigger cooperation or firm. So, the recurrence of conditions and situations constitutes those very different smaller, different localities in settings, different struggles, as each neighbourhood has its own major problem but that recurrence as a multi-cited whole could make a difference and I think a difference that would be for the good of a city.

Compared to a city like New York, Vienna seemingly works fine, but London for example is beginning to have problems as well. So such possibilities and systemic drives undermine generalisation about the local, the powerless, and the immobile, and if Smart Cities would be a way to get all of these poor neighbourhoods together, manifesting, it would make the whole city better. The velocity of these technologies becomes a driver towards an informalization of knowledge, even though there is no intention to do so, and even if this happens in high-level sectors but it is particularly interesting for low-income citizens. By taking these small bits of expertise that are there and have your local gov-
ernment mobilize them to solve problems, you create bodies of knowledge that emerge out of neighbourhoods and you thereby create new types of knowledges. Informal knowledge is ascendant and neighbourhoods are specialists in informal knowledge.

In intelligent cities, one very big risk is obsolescence: The stones in a building could be there forever, but the technology that is embedded in it will at some point be outdated; one has to find the right balance here. The real challenge will be to use all these technical systems and I have illustrated ways of using them while still keeping the city a real city: Complex, but incomplete, not closed down. The city actually has speech, but we do not know its language anymore. An image to think about in this context would be a beautiful car that can handle any terrain, its speed is amazing, it has all kinds of features, but as soon as this car reaches a crowded downtown, it is forced to slow down and move almost as slow as pedestrians are walking: Its capabilities are neutralized. I say that is speech. That is the city talking. The city is saying: “Car, all of that what you represent does not work downtown.” This speech can also be found in the neighbourhoods and by speech, I do not mean talking: In a sense, even if we do not see it, the city is hacking technologies. I would say that whatever is there of city-ness, properties of the city, in Songdo is talking back. It is saying “you can’t be a city”. The residents of Songdo refer to it as kind of a dead zone, but very practical, very useful.

We also have to ask this question in the reversed way, because this is important: Can technology hack the city? If we keep going the way we are going in some places, it can. Songdo, in my view, is de-urbanizing the city. Coming back to the city and its speech, the city as a hacker, by which not the criminal activity is meant, but its original meaning of unsettling a design. Original design here can apply to many different things, of spaces, of technologies, of the self-interest of individuals, the capacity of making a collective good, even if the individuals involved are selfish and nasty.

Another major point is that you cannot depend on the good will of people to have a great city: When Latin American immigrants, from Colombia, arrived in a totally degraded neighbourhood in New York City, each one of them wanted to have the prettiest house on the block and spent time and effort to re-do their houses so in the end, out of a selfish notion, they upgraded their neighbourhood and thereby created a public good. Another example would be the young, well-educated Americans that moved into New York City to work for the so-called New Economy; in contrast to the Latino immigrants, they received no attention, they were an invisible in-group. They worked in prestigious law and finance companies and they were fascinated by the brownstones by the river in front of a huge park and they started buying these houses. Because the area was very unsafe at that time, they bought big dogs in order to keep themselves safe. These people acted selfishly too, and what happened in this case was that these men with their big dogs frightened away the small-scale criminals and the park was slowly reclaimed by young mothers with their strollers. The practices of selfish people made a public place, the park, safe and accessible for the average citizen again. This is the point I am trying to make: That there is a third space in there, namely the city, that enables to extract a collective good out of individual practices that might be extremely selfish. That is truly an important property that cities have. So when I think about the Smart City, I think of those kinds of features that are built into the city, built into the neighbourhoods. It goes from knowledge systems to actually systemic properties which we have a very difficult time naming and capturing.