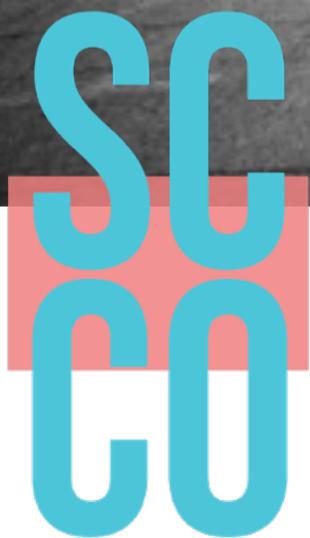


SMART CITIES

for city officials

A SOCIAL SCIENCES APPROACH



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MODULE 6

The Role of Cities and City Officials

In this module we discuss how the Smart Cities projects impacts the role of local governments, raising new questions of democracy, accountability, and legitimacy. Who is making the decisions? Who will be held accountable if a project has sour consequences? What are the challenges in the municipal organization and structures? What are the longstanding implications of the change in leadership, with authorities seen more and more as enablers for innovation?

Module 6

The Role of Cities and Public Officials

GUY BAETEN- After discussing various aspects of smart cities, we are finally coming do discuss in more depth the second half of the title of this series: the “city officials”.

CHIARA VALLI- Recent research shows that urban practitioners often meet practical challenges in concretising sustainable development policies, including: vagueness of tasks and objectives, unrealistic expectations based on over-ambitious promises to secure national funding, prevalence of technocratic reasons over social values, complex negotiations with private actors, conflicting social and economic priorities, but also the messiness of daily working life and multiple tasks. In our conversations and focus groups, public city officials have confirmed that they meet similar challenges when dealing with their cities becoming “smart cities”.

We talked about this with our smart city scholars and experts, to see how the social sciences have looked at these challenges. We discussed the changing role of city officials and looked for social sciences perspectives that may provide helpful contributions to the conversation.

GUY BAETEN- One of the ways social scientists have looked at smart cities and the role of public officials is how smart cities projects re-draw the lines between private companies and public administration. The introduction of smart technologies and the participation of the private sector has in fact impacted the role of local governments in fundamental ways.

This restructuring has raised questions of democracy, accountability, and legitimacy. Who is making the decisions? Who will be held accountable if a project has sour consequences? How is the public administration’s responsibility to protect the public good to be maintained in the smart city governance?

Today we will also talk about the challenges that a digitalised city management brings into the organisation and structure of the municipalities. For example: do municipalities need to adapt their methods and skills?

And what are the longstanding implications of the change in leadership that sees authorities more and more as enablers for innovation?

These are some of the questions that came up in our conversations with city officials and practitioners, and we brought them with us when talking with smart city researchers.

CHIARA VALLI- Jennifer Clark, author of the book “Uneven Innovation” and researcher of regional economy and smart cities for over 20 years, argued that one of the most disrupting changes from smart cities for the role of the public sector is the idea of a constant upgrading, that we get from the technology sector. Jennifer Clark thinks that constant upgrading is not simply a choice of technological services in cities, it’s a global competition question.

JENNIFER CLARK -The smart cities project really highlights the fact that change is happening all the time. And we've already had this issue happened through the economic

development conversation. So if you think about how much industrial transition, industrial restructuring, that story of the late half of the 20th century for cities and regions, certainly going into the 21st, we think about climate change and sustainability, and how transition is now becoming the norm, not something we come to and say, "now we have to change", no, we are changing.

And this is a big part of the change in perspective for municipal officials, which is that they really are managing growth and change. That is the job. And we can't put the job in autopilot. "We are industrial specialisation x and y, that's what I do for 20 years." No. Your firms are part of a dynamic transition, and how the municipality manages labor market specialisation, and demographics in terms of socio-economic transitions, all of these things are happening in real time.

We can't turn off the change, I guess, is what I am saying. I think that it is difficult because we are kind of used to a backwards looking set of institutional infrastructures. You set up your institutional infrastructure and it works for a period of time. That period of time is now not 25 years, it's more like three to five years. And so this idea of a constant upgrading that we get from the technology sector, is something we do need to adopt within how municipal officials think. This is going to be restructuring the work we do within municipalities. And the way we think about the work of smart cities, is that we have to think about this as a constant project.

What does that mean for how we train people? Well, in a lot of places have had this issue already within labor markets, which is this idea that as we see the technology upgrading within traditional industry, we see the question of how do you work with incumbent worker training? This is a big issue with labor market restructuring. I think we're going to have to look more at incumbent worker training for people who work within municipalities to. And you guys are actually doing this right now, thinking about what is actually the kind of coursework needed? What can be provided directly to people who are already in municipality so that they can have the specialised skills that match up with the technological change they're being asked to make decisions about, and set priorities about? I do think this is going to be lifelong learning, it's never going to be over. I hate telling my students, because they say, "No, I'm going to get a degree in urban planning, and then I'm done with school". And I'm like, no, it's going to be a long road. But I don't think that's different from other industries. I just think that from the public sector perspective, sometimes we don't embrace that as quickly and we're just going to have to.

One of your questions is about, what we do in times of austerity when it actually becomes more expensive to run cities? And the answer is, well, yeah, it is an issue of the distribution of risks and costs between the private sector and the public sector as well. Because cities are platforms for economic activity. In the US, about 92% of our gross domestic product comes from cities and regions within metropolitan statistical areas. These are the engines of economic activity for the nation state. If that's the case, investment is a serious national priority. You can't just say that this is New York's problem or Seattle's issue. No. This is the engine of national economic activity. So if you have places that don't have a global level and competitive infrastructure, they are literally not going to be competitive. They're not going to be competitive not just on the question of whether they seem to be smart cities, they're not going to be competitive for biotechnology, nanotechnology, aero spatial

industry. They are not going to be competitive for anything. They are going to be in a different tier of economic activity in terms of globalisation.

And the reality here is that we talk about it as a smart cities conversation, but it's really a global competition question. And that's kind of different from 50 years ago. So one of your questions, looking backwards, what is different now from how it was before? globalisation is one of the things that makes this really different. And for those of us who are missing travel, you think about that when you were traveling around and you go to a New York City, and you look around at the infrastructure and then you look at Seoul, and you say, "Whoa, like the infrastructure in Seoul is so much better than the infrastructure in New York City". You know, at some point, New York City is going have to get up to that standard right there. At some point, that's going to be a competitive disadvantage for cities who are built on legacy and incumbent systems that are seriously not sophisticated enough to compete with places that have put together the real hard investment around the integration of ICT and into the incumbent built environment. That's tough. And it's going to have to happen or they're going to be consequences in terms of competitiveness going forward. So that's the bad news.

“And the reality here is that we talk about it as a smart cities conversation, but it's really a global competition question.”

The bad news is that this isn't just a question of whether you want wi-fi kiosks, or whether you want to have free Wi Fi for your citizens, or whether or not you really want to have like electric scooters. That's the first round of stuff. The real hard problem here is the global competitiveness on classic, old school economic development questions, which is what industries are actually globally competitive, and which ones aren't within your nation state, based on the infrastructure that you provide.

GUY BAETEN- Jennifer Clark raises interesting points about the complexity of managing growth and change in a globalised context. Global competition has made the task of governing a city harder, indeed.

Bianca Wylie, one of the leading voices in the resistance against the Sidewalk Labs project in Toronto, underlines the paradox of supporting the tech industry as a strategy for economic development and the opening of public services for marketisation. She calls it a “snake eating its tail” problem, where, quoting Bianca Wylie: “Governments continually conflate growing the tech sector with being consumed by it”.

Let's see what she means by this.

BIANCA WYLIE - The pressure to be a nation or a city that has a growing and burgeoning technology sector is happening at all jurisdictions. It's happening at the city level, provincial, regional, national. I call some of this like a ‘snake eating its tail’ problem, which is, if the goal is to be dominating in technology or artificial intelligence, and the input is data, from a supply side you are pushing to be collecting data as input to this economy. Which I think is a very shallow understanding of technology, but something that's happening. At the local level one of the pieces that we've seen that also came up in the Toronto project, is how do we support the local technology sector? How do we as a city, through our economic development policy, support the growth of our local businesses or start-ups?

This is a very old story, this has not only to do with technology. But when you consider the intersection of wanting to feed that industrial desire, with what can the city do to support that, you've seen this sort of perverse incentive, which is to let to, for example, collect a whole bunch of data, or open up different public service elements to commercialisation, or support any kind of product development realm.

And I think that pressure for cities to be seen as leaders in technology, innovation spaces, ways to fuel the economy, is leading to some of the really difficult and very human incentives for managers in IT in a city government, to be seen as people who are showing up on industry panels that know how to walk the talk about privacy and security, they're seen as savvy professionals who come from corporate context, and they know it: "Toronto is going to be a leading place, because look at all this technology going on here" - I'm giving you my local version of the story.

That is a very different characterisation of leadership than something that is public sector driven technology leadership, which to my mind looks very different. In some cases, it's very quiet. It's not something that you go out and talk about all the time. And a lot of good public leadership and technology would require use of technologies from the 90s. It's not necessarily anything to do with the novelty of the start-up and all of this sort of pressure to be seen as a leader in what is known in some circles, as commercial technology and innovation.

I think what is really difficult in that context- and this gets right into human resources and organisations in cities- if IT leadership is being tasked with making the city look innovative

“I call some of this like a ‘snake eating its tail’ problem, which is, if the goal is to be dominating in technology or artificial intelligence, and the input is data, from a supply side you are pushing to be collecting data as input to this economy.”



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and forward thinking and spend their time with companies and start-ups and be out in the world doing that work, of course, you're going to have a different approach to it internally.

So, cities need to pick a path here, they really do. And they need to understand you should have savvy people working in economic development that will support a burgeoning technology industry in so far as that makes sense. But that's a different role than how the city itself uses technology and thinks about data collection and thinks about public service. That's a different thing. And so, how do you hold on to those two things? Because you're not going to ask a city to pick one, but you cannot conflate them in the role of what local leadership is supposed to be in charge of. And you can't blame the human, who is being perversely incentivised, because that doesn't make sense either. So, I understand why all of these things are happening. But you have to have some leadership that's able to detangle these things and put them in their appropriate places.

CHIARA VALLI- Bianca Wylie raised a central point here, of a very powerful tension between “feeding the industrial desire”, and the use of public driven technology. And we also know there is a notorious contrast between the public services that municipalities provide (care, education, security - that in the case of Sweden for example, represents around 80% of the municipal budget) and the attention to innovation and smart technologies. We asked Rob Kitchin about his thoughts on the sharp contrast between the attention that the smart cities get, and what cities actually do.

ROB KITCHIN - The smart city would tell you that those technologies will do that care work. That what they are about, they're about managing the delivery of services across all of those different groups and across the different domains, whether it's how government itself works, whether it's the emergency services, whether it's the economy, whether it's transport, mobility, whether it's environment and waste, and sustainability. But they will tell you that they have a technical solution for all of those things, that will help them and make them more efficient and competitive and productive and safer and secure, and so on. They will tell you that there's no inherent contradiction between those things, that they will let you do more with less.

You can push back against that in lots of different ways we have already talked about, and in terms of meaningful engagement with citizens around issues that they face and recognising that things are quite contested, and messy, and complex. And a lot of these things are not easy to deal with in real context, as opposed to this kind of abstract instrumental context.

So, it does differ in different places. Dublin the smart city is on the 100% about delivery of city services. And it's also about opening those city services up to companies to deliver. So they run a lot of these challenges, so they kind of say, “look, we have a problem of x”. And they run a competition called procurement competition, for startups to offer solutions, which is also about economic development. “We have an issue around old age and around whatever to do with old age. Are there any companies out there have any solutions?” And it is called procurement by challenge, and a whole series of these procurement challenges that run them in relation to cycling, they run them in relation to wastewater drainage, there's a whole bunch of them that they've run.

But ultimately, the smart city is about economic development, it's about job creation, it's about facilitating startup companies and facilitating foreign direct investment. So one of the ways that Dublin has done this, is with five testbed districts. So you know, a company coming in, has access to a real live environment where they can test their technology in the world. One of the attractions of these tech companies coming here and locating here, is that the city authority will try to facilitate them around developing their tech. And they will also help them to run schemes to become a challenge, for example, to help seed those innovation funding. That's part of the thing.

That can be different in different places. So if you go to Medellin in Colombia, they also have an innovation district, although in reality doesn't really exist. If you go there and wander around, it's quite difficult to find. But they have within their ethos, within their ethos, this notion of social urbanism. And this notion that technology has to serve existing citizens. So the technology can't gentrify and push out people who already lived there, has to serve the people who are already there. So that notion of how you try to control for maybe some of the ways in which the technology might create inequality or widen divisions, or create these socio spatial processes, like gentrification, that would displace people.

Barcelona is interesting in that they're a city who swapped from one side to the other. So they had a right wing government, they were very much a neoliberal smart city, they were working with big companies like Cisco, Microsoft, and so on. Then they have a change of government in 2015 to a left leaning government, and they make the decision not to stop the smart city program, but to completely reorientate it, and to reorientate it around this notion of what they call "technological sovereignty", which is this notion that technology has to serve citizens first, not states or corporations. And that they would move to openness. So, they're trying to do open data. They're trying to do open-source software. They're trying to get rid of all that proprietary software, like getting rid of Microsoft and bringing in Libre and other open platforms that have an open infrastructure. They are trying to re-buy some of their infrastructure, buying back stuff that they privatised. They are embedding into things like their procurement's conditions around the data. So they've made a condition that any of the data derived by these companies in terms of producing the services belongs to the city and not the company, and that they have to give it back to the city. Because, they're saying, "look, we're not going to pay for it twice, we're not going to pay you for the service delivery, and then pay you for the data". The data is citizen data, and it belongs to the belongs to the state. So they have been thinking about things like procurements, and it is an area that has been neglected around.

And that was one of the early kind of casualties, when we were talking earlier about this 2009 to 2013 period. But like cities really didn't go through the contracts and their procurement, and they lost control of their data, and they lost control of their systems. And they locked themselves into particular platforms. You get technological lock ins.

Dublin lost control of its bike data, for example, when it signed the contract. They didn't realise that it was privatising the data. When they asked the company, can we have the data, so you can produce an app or whatever, the company just said, no, we're not giving it to you. And because it's really valuable data to that company. So the city only got access to the data when the scheme was extended, to when they when they put out the

securement for the scheme to be extended, they then wrote into the securement “you have to give us the data.” I don't think they own the data, still, they just have access to the data.

And a lot of these companies are making their money. Their big secondary product is the data, like Big Belly Bins. Obviously, the prime thing is the bin and the waste management and compacting and so on. But the second thing is the data that comes of those bins, because you can put sensor arrays on the top, and you can put wherever else possible the waste management itself, so they sell the data back to the city as secondary products. And some cities are a bit wiser around that. But there is this inherent tension between this kind of marketisation, privatisation of city services and delivering a public good, and these serving citizens, improving quality of life. There is a tension there, and it definitely does promote neoliberal citizenship. It does change the view of what citizens are entitled to and what their rights are. So, a stealth changing of expectations around what the city does. And in some countries, that's gone quite far.

There are some local authorities in the UK, that are effectively contract managers. The city is itself doesn't provide the services, companies provide the services and the local authority just manages the contracts, and that's called a prop that solves a problem. I had a conversation with Dan Byers, they actually had a minister for smart cities at one point in the UK, and he was the minister, and we were talking about open data. And he was gonna say, “Well, one of our problems around open data in London, is we privatised it all. Like we don't have access to the school's data, we don't have access to the hospital data, we don't have it for the transport. Transports is run by French, government hospitals run by a Chinese company, the lighteners run by a Norwegian company. We have privatised all this data; we don't necessarily have access to it.

CHIARA VALLI- So Rob Kitchin also thinks that the smart project has been mainly about economic development and attracting investment. But then he also gives us examples of cities that are making attempts to stop the marketisation of city services, such as Barcelona Open data platform and Medellin social urbanism program.

Jennifer Clark touches upon this topic too. She believes that companies and municipalities are not really talking the same language, and that in public-private partnerships the actors are not starting from the same place. Let's see what she means.

JENNIFER CLARK - There is this question around what cities are doing in the smart cities project. What is the function of cities in the smart cities project?. And in some ways, cities are both administrative actors, but they are also organising geographies for the smart city project. One of the things that happens pretty typically, is that we see a lot of industry driven projects. So it's not that it being industry driven is particularly odd, right? if you think about just in terms of infrastructure investment, if we look back into the mid 20th century period, people will say it was the auto industry that was driving the investments we saw in infrastructure and cities. Maybe we could say that it was the cement and rubber industry driving the changes.

So to see that the tech sector is driving investment, that's not the most unusual issue, the most unusual issue about it is that the tech sector makes different products in very different kinds of ways. You don't see the same level of hard investment from the tech

sector into places, as you might see when you build highways or bridges. It's a very different kind of industry lead investment.

Firms and industries have predilections, norms and values that they develop within their own practices and production processes. So we shouldn't be surprised that the tech sector designs for users, not for citizens. They think we hear them say "user community", and we think, oh, they're doing community driven investment or community driven product design. No, users, they mean the person who's buys. They mean something very different than when we say community. They are talking about something different.

So, one of the things that's really important from the side of municipalities, localities, places, when they're interacting with the tech sector, is to understand that their language is other. We are not always saying the same thing when we are using the same words. And so we have to understand that translation of what those priorities are, and what those interests are. So if you think about it in terms of a market making perspective, when you're looking at developing for user communities, you're really looking to segment the market. You are looking at how different user communities can be segmented. You're not designing for the purpose to provide 100% of a service or 100% of your product to everybody within a jurisdiction. That's the municipalities real priority, that's not the tech sectors priority. That's not what they're trying to do.

So it is a really different sense of what the purpose of the product design, and the production process for smart cities, services and products and systems really is. It's not that it can't be managed. An it's not that a partnership can't exist, one that is productive between the tech sector and localities to cities and regions. It's that it has to be understood that from the beginning, you're not starting from the same place. You're just simply not starting from the same place.

And so, one of my motivations for writing the book was to just say this to people: this assumption, that we're having the same conversation just isn't the case. You know, we could get there. But we haven't. And where is the leverage to making that conversation happen. That is part of the second premise of the argument of the book, this idea that cities serve as sites of subsidy and risk reduction for smart cities product and service development, by which I mean, firms need the city, the tech sector needs the city in order to develop this industry. If that's the case, then that means that cities can ask the tech sector do things in a way that actually benefits citizens. And that's the conversation that we can have in the next decade of the smart cities project. The first decade was a little different, the next decade really can be a better understanding of the power that localities have to ask for what they need and ask for the services and products to be tailored for their communities.

GUY BAETEN- In her Uneven Development book, Jennifer Clark problematizes the project, exposing the way that it perpetrates, rather than disrupts existing inequalities, based on gender, income, class, and even between regions. This is because, as she

“The tech sector needs the city in order to develop this industry. If that's the case, then that means that cities can ask the tech sector do things in a way that actually benefits citizens. And that's the conversation that we can have in the next decade of the Smart Cities project.”

describes it, smart cities are industry-driven projects. So, they are simply not meant to mitigate inequalities: they are meant to capitalise on them.

However, she believes that local governments have the power to transit from sites of subsidy and risk reduction for smart cities products and services, to define how to use technology as a public good.

Andrew Karvonen also brought up the role of local authorities as protector of the public good in the smart city. He framed this in terms of legitimacy.

ANDREW KARVONEN - There's the question about what the role of the local authority in the smart city is. And one of the roles is for them to simply be a supporter. So if you get a private company that comes in, the local authority can say, "go crazy if you want to, try to change our transportation system, we give you the authorisation to do that." The opposite end of the spectrum is that the local authority says, we are going to drive this new transportation initiative that uses the smart technologies. And we're going to pull in Google and we're going to pull in IBM, and we're going to get them to help us. That would be more of a traditional project that the local authority engages in.

And then that's on a spectrum. One is that a local authority is a very passive actor that just allows different actors to come in and do innovation. And then the other one is that the local authority is driving the whole process. And usually, we see a mix of things in between those two ends of the spectrum. And I think it's really important for local authorities and practitioners to think about, what is their specific role within a smart city project or a smart city agenda.

And one of the strongest things that that we're emphasising right now, and the research we're doing is about *legitimacy*. And legitimacy means protecting the public good. And the public authority is the guarantor, is the protector of citizens.

And they have a really strong responsibility, really huge responsibility to ensure that any changes the city, whether it's digital or non digital, doesn't have significantly negative impacts at anybody, and that helps out the citizenry overall. There is always going to be winners and losers. But if they think about themselves as the legitimacy actor that has been elected by the citizens, then they need to be there to protect them

Who's protecting democracy? It is the local authorities that need to do that in the first instance. It's not going to be the private companies, it's also not going to be the academic actors, and it's also not going to be the civil society actors. There is a very special role that public authorities need to play. And I think public authorities know this, so I'm not saying they're naive, but I think they need to really emphasise that in these triple and quadruple helix partnerships, so whether it's public, private, and academia, or public, private academia and civil society, they're the protector of public values. And to make sure that is their role in any smart city agenda, I think that's really important.

“In these triple and quadruple helix partnerships, so whether it's public, private, and academia, or public, private academia and civil society, they're the protector of public values. And to make sure that is their role in any smart city agenda, I think that's really important.”

When they have a separate smart city office or department, they're isolated, and they're doing their fun little experiment or their fun little project. But if the smart city group is located within urban planning, as opposed to business development, you're going to get a very different approach to the smart city. Organisationally, it's really important to think about, where are the smart city actors? where are they acting? And how are they integrating with other departments? Because a lot of times, they'll be doing these smart cities projects, and they are not talking to the planners, or they're not talking to the economic development officers, or they're not talking to public safety, or they're not talking to the infrastructure providers. And this is another example of where the smart cities are not gathering momentum, because they're not really integrating it into the larger governance structure. I think there's something really interesting there. And it's always interesting to hear that if you've got a gender equality officer within planning, they're going to be influencing their urban development dynamics in a very different way, as if they're just a separate gender equity office. And it is the same thing with. So thinking about organisationally, where they're situated, I think is really important.

One of the complaints that I hear from practitioners, is that to be a smart cities planner, or practitioner requires a significant level of technological expertise. And do you want that expertise to be located in the smart cities unit of your municipality? Or do you want that technological expertise to be spread across all the people that work on the city? So then it's a matter of up skilling, training, all of your urban planners. They don't need to understand how the technology works, and how to program and that kind of thing, but they do need to understand what these technologies are and what they do. So it could be that there's a need for kind of a crash course, and try to up skill, all kinds of different urban practitioners. And that would be a way to avoid the technical department that just knows everything about smart cities, and everybody else says, "I don't know anything about technology, I can't help you with that."

But, you know, I mean, the advantage of that approach, though, is they can get things done. And they can create their little start-up incubator. But it's not integrated into the rest of the city. If we think about that the smart city is this digitalisation layer that it's going to infect the whole city in multiple different ways, that model doesn't work. Then the digitalisation agenda needs to stretch across all the different services of the city, all the different departments of the city. And figuring out how to do that is a real challenge. But it's but I think that's, you know, that isolated department or unit, that's a good way to at least get started. But ultimately, the whole city structure needs to be on board.

CHIARA VALLI - Very interesting points raised by Andrew Karvonen. The importance of legitimacy, but also the impact on the narratives and actions of the smart city strategy in relation to where in the municipality structure it is located.

“Local governments are key. And they are key because they are the translators of the Smart City policy.”

The topics of the power of narratives has been influential in the social sciences conversation. We asked Ola Söderström what the role of the city government should be in restructuring the agenda into an alternative smart urbanism, one that can work for justice. For Ola Söderström, the smart city is not a policy, it's primarily a *narrative* that local governments should translate in the best way to address the challenges they face.

OLA SÖDERSTÖM - I think it's very important that this course is done with city officials, because local governments have a crucial role to play. If you look at those studies about smart cities, I'm thinking of the book Inside the Smart Cities by Andrew Karvonen and others, or our own work in India and South Africa, shows that local governments are key. And they are key because they are the translators of the smart city policy. And it becomes clear that the smart city is not a policy, it's primarily a narrative, it can become a policy, but generally is a rather loose idea. So, in that sense, the local governments have a crucial role to play in translating it, in making it adequate for the specific purposes of the local conditions in place. It's a very malleable policy, and I think it's very important for city officials to have a knowledge of that malleability, which means having a knowledge of experiments, successes and failures. And be able to have that array of possibilities not only to be trapped by the packaged solutions that some companies or governments try to promote. So I think it's absolutely central.

There's no advice I would specifically give, other than just look at all the possibilities. And look at specific cities, and interventions that may make sense for you in Malmö (or wherever), which may or may not be relevant to the local context.

GUY BAETEN- Ola Söderström emphasises again the power that the local governments have to design policies of smart cities that really respond to the citizen's needs.

Bianca Wylie also has a lot to say about the power of narratives from her experience in Toronto. She suggests that the narratives being used by the smart city proponents are redrawing the role of the local governments and the role of the companies when communicating with citizens. Let's listen to what Bianca Wylie has to say about the power of narratives.

BIANCA WYLIE - One of the lessons from Toronto, was the power of narrative and the power of skipping over the administration and going straight to the public. When people ask me what could a company do better to consult with the public? It's like, companies don't consult with the public. That is called focus groups, that is called marketing. This is not the same thing. The way that governments have historically carried out their mandate is very different.

This gets us back to how cultural some of this is, because governments don't go to conferences and promote their activities that they have to do by law. It is not part of the culture of what a government is in a democracy. But then, we have at this really bad moment in time for trust in government, and frustration in governments after decades of austerity, where you look at governments and many people have super defensible claims against government saying "This is not serving me. I don't like the way this works. I don't like the inefficiency. I can't do this on my cell phone. I don't like the way it is. The government doesn't feel very modern. The government this, the government that." Which is not to say those things are untrue, but it creates this entryway for companies. And this is what was particularly problematic in Toronto. If the company has a lot of money to spend on narrative, they can show up and put on a show that makes people think, "wouldn't it be nice if this is how the government did things?". They offer big public meetings, lots of fun, lots of events, lots of whimsy, lots of glitz. The companies are using the words of

government, but they are saying “the government isn't really doing so well, so maybe you should give us a shot.” It’s basically what the narrative is here.

And the problem is, because technology has been understood as a commercial function, the consumer version of technology, selling that last little piece of how it shows up on your phone, or how it shows up in the world as a resident sees it, that's so different than infrastructural technologies, and systems, and software, and hardware. None of which are particularly exciting to talk about in that same way.

The historical problem here is that cities have been cash poor and they are facing issues of trust - at least in North America. And now we got the pandemic that adds another layer of trouble. From the three levels of government, local governments do have the most trust from residents. But there's still a lot of critique of cities. In Toronto, the people who are very critical of the government, don't have just one critique. Everything is wrong. So companies have all these different places to say, “the government is not doing this well, we can step in and we can do this better.”

And there is the magical thinking around technology being the thing that's going to resolve the climate crisis, the transportation, lack of public infrastructure for public transit, etc. And this is really difficult, because it's such a psychological marketing thing. Its difficult to bust some of these myths, because it's so compelling for a politician to take the myth that a corporation is selling, and use it as a political moment to say, “Hey, we're being a savvy, innovative tech forward city, we're going to bring in these solutions, they're going to help us, they're going to cut down on energy use, they're going to speed up your commute, they're going to do X, Y, Z.” And the reality is none of this has really proven out either. Because no one's following this around and questioning what these technologies are actually doing. And I think that's part of the “zombie” element of this narrative. If all of this stuff was working so well, we would have a different set of case studies from cities. So, there's just so much power in rhetoric and narrative.

I just want to share this anecdote because it really surprised me. When journalism started to fall apart from a funding perspective, the first people to be let go from newspapers were the photographers. And this is interesting, because what has been happening over time is that technology companies are able to just submit their press materials and their marketing right into the stream of what should be holding governments accountable, which is journalism. And there is anything there to create a friction to disbelieve these stories. In Toronto - I just want to share this because I think it was really interesting - even when a critical piece was run in the newspaper, it was run with an image from Thomas Heatherwick Studios with a beautiful idyllic neighbourhood on the lake. And I hit this point where I thought that this was happening because there's no public photography of what was already happening on the lakefront. There was nothing else to run. I remember stopping

It's just so deep, the capture of narrative and the rhetoric around what a beautiful future looks like. And we can't just think that that power is sitting with the government. That power is happening through a lot of other public areas of discourse. So how do we counteract that from a municipal perspective? What are the stories?”

and thinking, even if you run a critical piece, 100 more people than the one who reads it are going to see this beautiful image.

And that's not an unknown feature on how all of this is being pitched. It's just so deep, the capture of narrative and the rhetoric around what a beautiful future looks like. And we can't just think that that power is sitting with the government. That power is happening through a lot of other public areas of discourse. So how do we counteract that from a municipal perspective? What are the stories? Is it possible to tell the local story to try to build up the truth of what is going well? These are open questions. But I think being aware of the fact that the public is being sold directly by the corporations in some of these circumstances. Cities need to think about that. Because that is power. When corporations are able to define governance narratives independent of the government, is just raw power. That's what this sector has created. And that is a very difficult thing to contend with.

CHIARA VALLI- So, how are smart city projects and narratives changing the role of city public officials? Municipalities are facing new challenges for becoming "smart", including powerful narratives that make it hard to resist the appeal of technology as the privileged solution to ever more complex urban issues, but also the need for constantly updating and upgrading their services and ways of thinking, accelerated by technological development.

How can cities gain back and exercise more power to regulate and stir technology at the service of their actual needs, instead of falling into technological solutionism?

The underlying message here, I think, is that beyond all the pressures that the digitalisation of our cities entail, local governments should always hold strongly on their role as protector of the public good, on their priority of representation, democracy, accountability and legitimacy, and remember that the power as well as the responsibility for urban change is in their hands.

GUY BAETEN- In the next module, we will continue talking about the role of city officials. We asked our scholars and experts if they could propose some reflections and suggestions for city officials on how they could work on making smart cities more just, inclusive and equal. Thank you for watching and listening, we hope you enjoyed the discussion today and we hope to see you in the next module.

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