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DOI
10.1080/10630732.2021.1963647

Publication date
2021

Document Version
Final published version

Published in
Journal of Urban Technology

Citation (APA)
Engelbert, J., Ersoy, A., van Bueren, E., & van Zoonen, L. (2021). Capitalizing on the "Public Turn": New Possibilities for Citizens and Civil Servants in Smart City- Making. *Journal of Urban Technology*, *29 (2022)*(3), 3-17. https://doi.org/10.1080/10630732.2021.1963647

Routledge
Taylor & Francis Group

Journal of Urban Technology

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/cjut20

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To cite this article: Jiska Engelbert, Aksel Ersoy, Ellen van Bueren & Liesbet van Zoonen (2022) Capitalizing on the "Public Turn": New Possibilities for Citizens and Civil Servants in Smart City-Making, Journal of Urban Technology, 29:3, 3-17, DOI: 10.1080/10630732.2021.1963647

To link to this article: https://doi.org/10.1080/10630732.2021.1963647

Published online: 11 Oct 2021.

JOURNAL OF URBAN TECHNOLOGY
2022, VOL. 29, NO. 3, 3–17
https://doi.org/10.1080/10630732.2021.1963647

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Capitalizing on the "Public Turn": New Possibilities for Citizens and Civil Servants in Smart City-Making

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ABSTRACT

There is a sharp contrast between the public value discourse that typifies smart city-making on the one hand and its democratic deficit on the other. In this article we explore this contrast in more detail and assess that the paradigm and practices of networked government, which dominates smart city making, positions citizens as "audiences" of smart city makers and civil servants as "shepherds" of their public values. In these positions, both citizens and civil servants participate in a wide array of smart city experiments and engagements. However, an active, autonomous agenda setting role by citizens or democratically legitimated advocacy of civil servants is rare and does not easily fit within the paradigm of networked government. We draw on the work of Dewey and Marres to envision such different roles and make them concrete by highlighting experiences of Dutch citizens and civil servants with urban data and technology. These show, first, that the desires and goals of citizens may differ markedly from those of the smart city, and—second—that civil servants struggle with legitimate ways to advocate for socially and economically balanced smart city solutions. We conclude, in the final section, that the smart city can only be developed further through representative democratic means of engagement, among which local elections that express the collective desires of citizens and frame the mandate of civil servants.

KEYWORDS

smart city-making; local government; democratic deficit; public involvement

Introduction

With a promise to solve the unprecedented challenges of contemporary and future cities, the concept of smart city points to the importance of the exploration of modern technologies as well as the possibility of new kinds of joined-up approaches, breaking down silos and data driven, real-time control (Coletta et al., 2019; Ersoy, 2017a). As a relatively novel urban phenomenon, city residents will have varying awareness of what a smart city is and whether they live in one, depending on specific global contexts. Our paper was written from a Dutch perspective where it appears that many citizens do not know what "smart city" refers to, a lack of awareness that has also been observed in other European

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countries (e.g., IET, 2016). Moreover, residents may not fully grasp the urban realities in which local municipalities procure, use, and permit urban digital technologies that monitor how city dwellers move physically, socially, and economically as well as how they socialize with others and spend money. This lack of public familiarity may lie in the fact that the sensors, cameras, and monitors that make up the smart city are typically difficult to discern or notice in public spaces. Or it may be connected to what critical geography scholars problematize as the equally opaque corporate interests behind seamless smart technologies. Consequently, public involvement in smart city-making would by default be what Sherry Arnstein (1969) terms "tokenistic," as it works to secure the a-political premises of neoliberal, corporate urbanization (cf. Cardullo and Kitchin, 2019).

This article, however, considers an additional dimension of the limited public involvement in smart city-making: the fact that civil servants in local government tasked with developing and promoting the smart city typically lack a public mandate, or, what Nesti and Graziano (2020) call "democratic anchorage." The work of Norris (2011: 5) about a "democratic deficit" is particularly relevant in this respect and defines the divergence between "public aspirations" and "performances" of democracy. She notes and contests the lack of citizens' agency and ability to influence decision-making about their livelihoods and environments in typically complex governance settings, such as world politics, the European Union (Moravcsik, 2004; Follesdal and Hix, 2006) or—by extension—the smart city. Hence, a diagnosis of underperforming democracy seems particularly astute and timely in the context of how local governments make (decisions about) smart cities.

Traditionally, civil servants who work in the complex infrastructure of municipal departments and directorates most directly represent a public mandate when they execute the policy and vision of governments that have been voted in through local elections. However, most examples of smart city-making, particularly in the European context are, despite some notable exceptions (Nesti and Graziano, 2019), hardly the result of election manifestos of local political parties (cf., Van Zoonen, 2017).

Yet, even though the "making" of smart cities in and through local government is fundamentally devoid of public involvement or democratic underpinning, "the public" is increasingly mentioned or invoked in local governments' smart city discourses and practices. In fact, it now seems commonplace, among public smart city officers and commercial technology firms alike, to argue that smart urban technologies cannot conflict with "public values," and that smart city projects should "involve" the public.

There is, thus, a sharp contrast between the democratic deficit in smart city-making on the one hand, and public value and participation discourse that is an integral and conducive part of it, on the other. In this article we explore this contrast in more detail by examining which structural constraints should be acknowledged and which opportunities can be seized by civil servants, citizens, or researchers to overcome and accommodate this contrast.

In the first part of the article, we argue that the novel paradigm of public management, that of *networked government*, increasingly shapes and limits of how "public value" and "public involvement" in the smart city can be understood and acted upon—by civil servants, but also by citizens. The second part considers how, within this paradigm of new public management, and particularly in the institutional formats of "co-production" that support it, opportunities for civil servants and citizens in the smart city are limited to

specific kinds of involvement in and engagement; active agency of citizens or advocacy of civil servants is precluded by it, as we will argue. Part three fills in these absences more concretely by reflecting on two examples of engagement that we use in our research center[1]: talking with citizens and walking with civil servants. We do not present these as empirical case studies, but rather wish to consider them as vehicles to further explore the role of citizens as agents and civil servants as advocates. From this combination of theory, reflection, and real-life examples we conclude, in the final section, that the smart city can only be legitimately developed further through representative democratic means of engagement through local elections.

The "Public Turn" in Smart City-Making

Most smart city ambitions of cities and municipalities embody the spirit of what Kitchin et al. (2017) call "the new technocrats," by which they mean a professional class of technology enthusiasts for whom platforms, positions, and administrations are increasingly carved out—often by equally enthusiastic and ambitious mayors—*within* city administrations. The impact of this class is evident in the establishment and budgets for new leading positions and separate government departments of technology development, such as Chief Information Officer, Chief Technology Officer, and Chief Data Officer (cf. Kitchin et al., 2017; Micheluccia et al., 2016) but also in the allocation of public money to events, promotional activities, and networks that exude and catapult a city's "smart" ambitions (cf. Gaffney and Robertson, 2018).

An increasingly pervasive anchoring point for these civil servants in their smart city endeavor is the concept of "public value" (Moore, 1995). While the concept invites associations with the traditional normative ideal of "public service ethos," its current use is to be understood as an update (cf., Alridge and Stoker, 2002) and specific response to the "new public management" paradigm. That is, the current (re-) emergence of public value discourse reflects support for a novel management paradigm, that of "networked governance," which reconfigures new public management's "attitude to democracy, and ideas about the role of public managers" (Stoker, 2006: 43) in a time and context where problems are "wicked" (Van Bueren et al., 2003), and a government's ability for "social steering" (Rethemeyer and Hatmaker, 2008) is increasingly limited.

A key premise of those in support of networked governance is that "[institutional] complexity is not a hypothesis—it is a fact and reality of governance" (Lubell, 2013: 537) driven by the perceived "horizontalization" of relationships and increased interdependencies among government, the market, and civil society (Koppenjan and Klijn, 2004) and the decentralization and improved accessibility of data and information (Castells, 1996). Consequently, the uptake of this paradigm's vision means that the legitimacy of decisions that are made by public government becomes reliant on the range and competencies of different stakeholders *beyond government* that have been brought to bear (cf. Cortés-Cediel et al., 2019). Networked governance, from this perspective, conceives of civil servants as increasingly entering complicated and risky "turf," particularly in those areas of procuring, partnering, and programming where stakes and risks may be high, the needs contradictory, 'in house' expert knowledge scarce, and decisions have far-reaching consequences. Networked governance thus postulates the importance of collective decision-making or joint problem-solving, in which legitimacy and authority are to

be attributed to a wider range of participants (Stoker, 2006). The role of the civil servant, then, is to bring together and coordinate among those stakeholders, and to ensure that resultant decision-making "delivers" public value (cf., Pereira et al., 2017).

Contemporary smart city-making, in this sense, is the epitome of networked governance's hegemonic logic, as the collaborative multi-stakeholder design and use of smart technologies is now commonly understood as crucial to addressing complex and wicked issues in local government, ranging from climate change and social exclusion to government efficiency and cost-saving (cf. De Jong et al., 2015). This consensus, however, is (also) actively construed and upheld by the very global technology companies and consultancy firms that develop or implement urban technologies (Söderström et al., 2014). Moreover, it is cultivated in the manifold promotional exchanges, for instance at global smart city expos and conventions, through which civil servants and representatives from the private sector liaise outside of the public view (Engelbert, 2019). This public–private liaising in the name of public values reflects the new role of civil servants in smart city-making, as network managers and "minders" of public values.

However, being such a minder of public values is very different from being the embodiment of public interest (cf., Bovaird, 2007). That is, the responsibility of a municipal smart city project manager or Chief Technology Officer is primarily to steer towards consensus and agreement, not so much on the issues that are raised, but rather on the public values that are to be secured through the procurement or trial of smart urban technologies. This suggests that the assessment and delineation of public values through smart city solutions is straightforward. However, not only is public value assessment problematic (Meijer et al., 2016); the establishment of shared public values is equally an arena for ideological struggle. Certain public values, for instance, are well-suited for corporate interests and neoliberal agendas (Dahl and Soss, 2014), and oftentimes public values that are propagated as a consensual ethics focus on the individual, consumerist realm. "Privacy," for instance, is commonly evoked as a key public value, whereas collective values, such as "social justice" and "solidarity," hardly feature.

Furthermore, the focus on civil servants in smart city-making as public value shepherds underscores the suggestion that (city) civil servants may not possess technological expertise or competences. Particularly as IT-systems and support have been outsourced for decades and public managers themselves actively engage in what White (2019: 43) terms "silo busting," city civil servants are widely understood, within and beyond local government, to be short of the knowledge and organizational structure needed to oversee the implications of datafication and digitization in their city (cf. Meijer and Rodríguez Bolívar, 2016). The resultant undisputed suggestion of government's incompetence further supports the premise of networked governance that government's role is "merely" to invite and connect different publics and types of knowledge and expertise. To use "networked governance speak," the smart city is to be "co-produced" by multiple stakeholders. Indeed, in the current development of data and digital technologies for urban management, co-production, and collaboration are widely celebrated and adopted (cf. Ersoy, 2017a). Leydesdorff and Deakin (2011), for example, have shown how planned interactions between government, corporations, and universities can generate dynamic spaces within cities where knowledge can be exploited to support regional innovation systems in the context of smart cities and to stimulate new partnerships and collaborative learning.

In efforts to invite other publics, and particularly acknowledge citizens as stakeholders and producers of knowledge and expertise in the smart city, local governments have begun to bring these together in participatory modes of policy making and technology development, of which a popular form is the "living lab." They do so sometimes in collaboration with social scientists, who have long used living labs as sites to develop and experiment with bottom-up smart city applications (Mulder, 2012), as well as with the IT system designers and developers whose services are (to be) procured and tested in small settings. And while their epistemological status is still subject to academic debate, living labs are broadly considered an important mechanism in building critical urban learning capacity for citizens to influence their cities' future direction (Steen and Van Bueren, 2017). Next to the living lab, other popular forms meant to stimulate public involvement are "collaborative creation practices" (Zandbergen, 2017), such as "hackathons" or "GovJams," in which students, professionals, civil servants or other groups come together in short design or analytic "scrums" to explore pressing urban challenges. In fact, the significance of public involvement is widely celebrated. For example, even multinationals like IBM, CISCO, and Oracle are promoting the idea that a smart city cannot flourish without taking its citizens' needs into account (Abbas, 2016); the European Commission funds a wealth of research stimulating the engagement of citizens in smart cities (Engelbert et al., 2019); and critical city makers uphold new technological appropriations and forms of digital culture (De Lange and De Waal, 2013).

However, despite their alleged openness, these participatory practices do not necessarily result in inclusive citizen engagement, nor in *public* smart city-making. With regards to projects that develop highly technological innovations, often pursued in the search for smart and sustainable cities, co-creative design and development have been observed to invite individual competitiveness between participants striving for the most creative, technical, or commercially interesting outcome to a challenge, rather than to look for community purpose, public values, or inclusive solutions (Irani, 2015; Barns, 2016). These observations connect with wider critiques of the very terms of citizen and community engagement (cf. Ersoy, 2017b), which problematize how the "empowerment" of communities, as a process through which unpaid "active citizen-subjects" take responsibility for social provision, has become an important technology of neoliberal governmentality that fails to address the material inequalities that foreground disempowerment. Similarly, smart city discourse and practice predominantly highlight the importance of collaboration without paying (much) attention to power differences and the creation or utilization of knowledge (Van Zoonen and Hirzalla, 2018). Gender exclusion provides the obvious evidence here, as open source, open data and other "open" practices have been shown to actively and discursively exclude women, with male programmers and data scientists performing their individual technical virtuosity to each other and the resulting meritocracy leaving little space for alternative forms of participation (Nafus, 2012).

An even more crucial problem in the context of public involvement, however, is that the "challenges" or "issues" that are to be addressed through these types of participatory practices are *set* beforehand. The question in labs, hackathons, or scrums is typically not if, or under what circumstances, urban technologies need to be used in and for local governments. Rather, it is how a predefined and pre-agreed issue—for example, urban

congestion or pollution—is to be solved through technological applications. The public skills and competencies sought, thus, are the ability to technically solve a technocratic issue.

Arguably, these requirements may still allow for levels of agency, playfulness, and even subversion among participants, or for what Zandbergen and Uitermark (2020) term "variable articulations of smart citizenship." In addition, there are examples of alternative, critical, often small-scale city making efforts of, among others, feminist, post-colonial, critical-race or participatory action researchers and similarly entwined citizens (Hollands, 2015) who are collaborating in living labs, through hackathons, data boot camps, urban scrums and other methods aimed at reclaiming data and digital technologies for public interests and values. However, it is clear that pervasive practices for public involvement neither seek nor acknowledge the public competence to form or settle an issue with regards to either the assumed challenge (e.g., is congestion really a bigger urban challenge than poverty?), or to the proposed technology (e.g., is congestion to be solved through its monitoring, or should we discourage car use altogether?).

In conclusion, the "public turn" in smart city-making, as discernible through the increased orientation towards "public values" and stimulation of "public involvement," does not democratize smart city-making. Neither does it stimulate "publicness," or "public-ization" (Marres, 2007) among either civil servants or citizens with regards to smart city decision-making. Instead, it signals and reinforces the de-politicization, or mere "publicity," of when and how civil servants and citizens may imagine and traverse cities as arenas for urban technical development. Civil servants are relegated to merely checking whether technological solutions are compatible with predefined values; citizens may only participate when they bring technical solutions and forward thinking to the decision-making table, with the opportunity to "opt out" as the democratic alternative.

In the next section, we explore if and how these structural constraints, and the institutional public value discourse and participatory technologies that keep them in place, may be reworked or capitalized as opportunities for public (smart) city-making.

Audience, Agency, or Advocacy?

Key in rethinking public (smart) city-making is to transform the role of civil servants and citizens as mere "audiences" of hegemonic smart city-making to being "publics" in the smart city. Our theoretical starting point for this proposition is the work of the political philosopher John Dewey.

Dewey's political inquiry into public involvement in politics is particularly documented in his 1927 essay "The Public and its Problems" which is often read as an exchange with his contemporary Walter Lippmann. Lippmann's *Public Opinion* (1922) is typically read and used as a warrant for the erection of an expert class in or outside government, and, thus, as a disqualification of political representatives' knowledge and entitlement to autonomously make decisions on public government. After all, Lippmann famously described political representatives in popular government as "… a group of blind men in a vast, unknown world … Since the real effects of most laws are subtle and hidden, they cannot be understood by filtering local experiences through local states of mind" (Lippmann, 1922: 288–289).

Dewey agreed with Lippman that some issues in and of public government were so complex that their settlement was to take place outside of government. However, he postulated that this settlement was not so much to be trusted to a distinct class of experts, as much of smart city expertise is typically delegated to and monopolized by technology companies and consultants, but rather to "the public." As Dewey wrote:

> The man who wears the shoes knows best that it pinches and where it pinches, even if the expert shoemaker is the best judge of how the trouble is to remedied … A class of experts is inevitably so removed from common interests as to become a class with private interests and private knowledge, which in social matters is not knowledge at all. (Dewey, [1927] 2016: 224)

The question, then, is what and where the smart city "pinches," what "intelligence" it entails, and thus, what a smart city's "public" is. That is a very different question from the one typically asked, in which, as explained earlier, both the issues and solutions in cities are predefined, and in which civil servants and citizens are merely to traverse within that discursive space. Starting with the last part of the question, Dewey ([1927] 2016: 69) defines the public consisting of "all those who are affected by the indirect consequences of transactions to such an extent that it is deemed necessary to have those consequences systematically catered for. Officials are those who look out for and take care of the interests thus affected." While some would argue that the prevalent orientation to securing "public values" is doing just that, the "problem," speaking with Dewey ([1927] 2016: 225) is that "methods and conditions of debate, discussion, and persuasion" are missing, as a consequence of which civil servants have and display "the ability to judge of the bearing of the knowledge supplied by others upon common concerns". This means that civil servants are to be able to reflect critically on the expertise provided by others, such as by alleged smart city experts. But it also means that they are to accommodate the provision of knowledge, or, what Dewey would call *intelligence*, as shared and brought up by those who will be most affected by the consequences of "transactions."

Dewey's conceptualization of "the public," and of the methods and conditions of debate needed for publics to be formed, is very different from the representative democratic idea(l) or possibility of "the" public's opinion or "the" public's interest, a premise that very much underpins the discourse of public values. Indeed, Dewey argues for a form of participatory democracy in which publics get the opportunity to emerge rather than being neutralized by the logic of a people's majority.

Nearly 80 years after Dewey's first writing on public involvement, hope is still invested in participatory practices that allow citizens to define the issue. This theoretical claim, and its credit to Dewey's legacy, has been specifically advanced by Noortje Marres (2005, 2007), who argues that "the issue sparks a public into being" (2005). Marres pleas not so much for more, but particularly for better public involvement. She understands participatory practices as practices of issues formation (2007: 763), but also as democratic practices in themselves. Such thinking reflects Dewey's ideal of participatory rather than representative democracy. That is, when the knowledge production of those citizens who are (most) affected by *transactions* is properly accommodated through participatory practices, and when this knowledge is acknowledged as *intelligence*, public involvement is no longer a rehearsal for "real" democracy, or a platform that is merely meant to bring citizens up to speed before they vote for popular representation; these

practices *are* participation in democratic politics. However, such a conception of participation as an expression of democracy also entails the risk of undemocratic and imbalanced advocacy as it may bypass the formal institutions of the states, which is one of the essential critiques of networked governance (Sørensen and Törfing, 2018). Both citizens and civil servants need to assume different roles than traditionally perceived; they also have to find new modes of interaction and mutual appreciation that contribute to public value creation and not frustrate this process by falling back on traditional behavior, or, for example, by considering these processes to be too time-consuming and expensive, too exclusive or in conflict with accountability principles.

This means that both citizens and civil servants are to be transformed from, respectively, audiences of issues formed by others (citizens) or shepherds of public interest that match an agenda set by others (civil servants) into respectively, agents of public issues (citizens), and advocates of affected interests (civil servants). To further explore and examine these two alternative conceptions of the role of citizens as agents and civil servants as advocates in the smart city, we draw from two sets of participatory practices, *talking and walking*, that we have developed in our research center. These concern talks with citizens about the city's (of Rotterdam) use of their personal data and walks with civil servants (from various cities in The Netherlands) about the presence of digital technologies in public space. These reflections are not meant as empirical case studies but rather as vehicles to further discuss and understand the necessity for agency and advocacy of, respectively, citizens and civil servants in the smart city.

Talking with Citizens

The first example we consider is what it means to understand citizens as agents in the smart city, i.e., as agenda-setting actors, comes from a research project that we conducted in collaboration with the City of Rotterdam about the question whether it is possible and feasible to use advanced data analytics to develop personalized strategies to find paid work for people on social benefits. As benefits are one of the key and largest posts on the municipal budget, cities have vested interests in helping people leave the benefit system and "re-integrate" into paid work. The data used for this project came from the Dutch Central Bureau of Statistics, which has a wide range of micro data from various national registrations, and from benefit registries of the city of Rotterdam. Through pseudonymized linking of these different data sets and advanced analytics, we tried to construct detailed personal profiles of successful reintegration from which predictions for bespoke trajectories for other people can be made.

A key issue in the research were the opinions and sentiments of the "data-subjects," who are the people who are on benefits. We, therefore, organized a series of "data dialogues" with benefit clients, following a method designed in the United Kingdom by the Office of National Statistics and the Economics and Social Research Council, to probe public views about linking administrative data for research purposes (Cameron et al., 2013). The method was adjusted to the goals we wanted to reach with our participants, namely informing them about our research, finding out their knowledge, opinions, and sensitivities about the use of their personal data in the benefit context, and learning from their experience to both improve our research and advise the benefit institutions; approaching them, in other words, as agents. We

discussed our initial ideas about the dialogues with the Dutch national "client council" representing people on benefits, and then worked with the councils of the four largest cities in the Netherlands to organize the dialogues. Each dialogue took a short day in which about 15 people worked in different formats on our questions and goals. The three main ingredients of the day were a set of short and intermittent explanations the project, big data, and ethical issues, in particular the new General Data Protection Regulation of the EU; a "data-base game" in which the practices of pseudonymization, data linking, and analytics were learned in a playful, hands-on way; and a set of group discussions about privacy, transparency, and control.

Many of the conversations centered around the way our participants felt treated by the benefits institutions; our participants shared stories about problematic interactions with case managers, and many of them had at times felt humiliated and denigrated by the benefit system and its administrators. This is the key context against which they formed their opinions about our research and the prospect of linking data for better services. Our participants said they enjoyed the data-base game and felt it helped them understand pseudonymization, data linking, and analytics. They also recognized the possibility of moving from analytics to machine learning and expressed serious concerns about the latter. More importantly, the discussions showed that it was entirely unclear to our participants who had access to their data, why certain data are needed at all, and why data are not better used, as they also felt that they had to tell their story over and over again once they got a new case manager. Our data dialogues, in this case, show that it is, in the first place, entirely possible to have constructive conversations about data and analytics with the people who are directly affected by them, and in the second place, to take lessons from them to improve services and servicing. In the third place, it is also clear that new data strategies of public institutions do not take place in isolation but in a policy and operational context that will already have a tradition and reputation among its clients, users, or other stakeholders. The experiences of our participants showed they do not trust the benefit institutions and are, therefore, unlikely to trust possible new data strategies, however transparent or ethical these can be designed. The overall outcome of our research, therefore, may be that it is analytically possible to design bespoke reintegration profiles for clients but that this will only work (apart from the finances involved) if the system as a whole is better integrated, and able to provide transparency and trust.

More radically, however, in terms of seeing citizens as agents of public issues, the dialogues show us that in terms of data-interventions and strategies, the desires and goals of citizens differ markedly from those of the benefit system and the civil servants executing them. If the data strategies of municipalities would follow the agenda of benefit clients, they would have to cover the quality of basic data collection, exchange, and curation; construct reliable and GDPR compliant personal client data files; and invest in trustworthy personal contact between clients and their case managers. In Habermasian terms, it is clear that the lifeworld of the benefit clients produces a set of different demands for data-innovations than the system world of the municipality, which out of budget concerns focuses on linking massive and diverse data sets, running various advanced statistical analysis on them, and devising algorithms to explore their predictive powers.

Walking with Civil Servants

Our second example concerns an examination of civil servants as advocates for specific interests, rather than as shepherds of general pubic values. We did so by taking a small group of municipal civil servants on a walk through a random part of their own city. While walking, we raised four questions during our ambulant dialogue: where do you see data collecting technologies; who owns it and what happens with it: and what kind of democratic responsibility and accountability is at stake, if any? The purpose of the walks is twofold: to find out what civil servants know about the datafication and digitization in their own city, and to inspire and strengthen their critical interrogative attitude towards these technologies. Our walks were inspired by the "data-walkshops" developed by Alison Powell.[2] However, while Powell's walkshops are aimed at the empowerment of ordinary citizens and the radical rethinking of what big data are, our intention with the walks was to empower civil servants, as they are in all understandings of public administration—the executors of the political will of the local citizenry. In networked governance, moreover, it is imperative that they know what is going on in the datafication and digitization of their city, and that they are able to clearly identify and interrogate the situated interests among which they are operating and take their role as *advocates* for the particular groups and interests who are left behind.

The walks took about an hour and were guided by members of the research team. They take a role as moderator rather than as tour guide, enabling an active interrogative and talkative mode among civil servants instead of a more passive listening and learning one. Our walks showed that many of the civil servants, regardless of their professional role and interest in the city, did not grasp the full extent of digital and data technologies in their city. They overlooked cameras, traffic counters, Wi-Fi-trackers, and the like. They also rarely made a connection between the different kinds of data and technologies they work with themselves and the data they ran into while walking through the city. The conversations in the walking groups helped them to make data visible and acquire more insight about the ubiquitous presence of digital and data technologies in the city. It stimulated their thinking about the presence of data and digital technologies. The questions about data-usage, ownership and accountability, in particular, raised intense discussions. Few civil servants knew who owned particular city data, what happens with it, and who is responsible for the whole assemblage of data and digital technologies. A key desire coming out of the walks was enlarged transparency, although our participants agreed that transparency may be difficult to achieve in everyday city situation of, for instance, working, shopping, or going out. Moreover, the question of what to do with such information sometimes led to a somewhat defeatist surrender that knowledge would not make much difference for administrative advocacy as many forms of data capture in the city seem hard to escape.

It is particularly such defeatism that enables an intervention to explore the possible advocacy role of civil servants, as it raises questions of power (of the multinational platforms, tech corporations, or the state) and possible counter-forces. While often conducted in general terms, and with reference to far away situations rather than to their own municipality (the social credit system in China is a favorite negative reference), after a series of citizen protests against the quick out roll of 5G in the Netherlands, the reflection on the role and responsibilities of civil servants in smart city-making has

suddenly become professionally close and acute. Civil servants, but also political representatives, are caught between the economic ambitions of the Dutch state to have strong, encompassing 5G networks and increasing concerns of local residents about possible radiation. In one Dutch municipality, this has already led to the deferral of installing 5G networks, but similar delays have been reported from the United Kingdom, the United States, and Australia.

The issue at stake here for civil servants and political representatives is not whether or not the claims about radiation are right or wrong, as most telecom vendors would like to frame it, but how to manage and reconcile the technological, economic, and emotional needs and investments of different municipal stakeholders. There is no neutral position here of minding public values that would offer an escape and a solution for civil servants currently paralyzed between contending claims as one of our participants expressed it.[3] Every choice and every action is clear to be one of advocacy; for the industry and local business in those municipalities where the 5G vendors have been enabled to set-up experimental test beds; for the local citizenry where 5G has been put on hold.

Conclusion: Capitalizing on the Public Turn

As we argued, the current public turn in smart city discourse produces pre-set modes of participation and engagement for citizens and limited roles for civil servants as mere shepherds of public values. Our encounters with the ideas and desires citizens have with respect to data, and with the actual knowledge and dilemmas civil servants have in smart city policy and operations, strongly illustrate and concretize our reflections that there is a wide gap between smart city discourse of public engagement and public values, and the actual networked assessment of the issues that need to be solved, the urgency to do so, and the means that have to be deployed (with or without digital and data technology).

Nevertheless, the public turn in smart city discourse and actual concerns and protests in society, in concert, make it possible to further think about Marres' calls for "better public involvement," and the democratic legitimacy of inserting data and digital technologies in urban policy and management. Not in a way that makes participation an act of complicity, as we argued is currently mostly the case, but in a way that respects differences, oppositions, and contestations, and that entails appropriate and legitimate ways of dealing with them. This is a challenge, we argue in this last section, which cannot be tackled by models of participatory democracy and co-production alone, given the selective character of these models. It needs to be accompanied by representative means of public consultation, and by legitimized, consensual delegation of expertise and executive responsibilities. In other words, it needs to be accommodated and institutionalized by the means of the electoral model of democracy.

This may seem paradoxical as, clearly, for different kinds of civic actors, the electoral system of including citizens and communities in the plans and prospects for their city has not been sufficient. However, the almost complete absence of digital and data technologies that typify smart city development as salient issues of contention in municipal elections (Van Zoonen, 2017) is exactly what has led and will lead to public outrage, not only in the case of 5G, but also, in a wider known case, after Google acquired the rights to redevelop the Toronto water front without any kind of consultation by the city council, the

mayor, or another representative of the Toronto citizenry (Wylie, 2018). Google's decision to withdraw from the redevelopment was also made without any kind of public discussion.

It should be clear from our preceding analysis that the absence of a representative democratic underpinning of smart city development has meant that classic roles for citizens as agenda-setters have not been part of it, and that civil servants have taken advocacy roles often for corporate interests, without having a legitimized public mandate. Nevertheless, the public turn in smart city discourse and the current popularity of concepts like "public values" and "public engagement" make it possible to reclaim and reinstall these roles and responsibilities; not as a replacement for the currently well-established participatory practices, but as a necessary addition and improvement that fills the "public void" (Hajer, 2003) in which the smart city currently develops. There are already some signs of such re-instalment: the 2014 local elections in Barcelona, for instance, have been framed as a contest between a city ruled by professional smart technologies, against a city governed by the collective intelligence of the people (Baird, 2016). The four big cities in the Netherlands currently have alder(wo)men who have "smart city" as part of their responsibility, thus taking policy formation and decisions out of the operational into the political realm. For critical smart city scholars this enforces a responsibility to think beyond the current hegemony of participatory models and connect to the in-depth debates that are so common in political and social theory, about the pros and cons of different ideals of democracy and citizenship. It also implies a different research agenda that asks questions about issue formation, agenda setting and electoral politics in and about smart cities. Asdal and Hobaek (2020: 1) recently called for a similar research direction in their discussion of the limited political theories in science and technology studies, and their resulting question if we can "really afford to disregard the workings of traditional sites of politics?" The answer, evidently, is no and for the smart city to deliver its promises, it crucially needs to be articulated in and with these sites.

Notes

1. The Leiden-Delft-Erasmus Centre for BOLD Cities: www.boldcities.nl
2. Powell, in her turn, was inspired by the walkshops organized by urban theorist Adam Greenfield (2011, as cited in Powell, 2018).
3. The alderman of a Dutch municipality, personal communication with the authors, September 26, 2019.

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