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PLAY AND THE CITY

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ZUSAMMENFASSUNG

Der Artikel wirft einen kritischen Blick auf die Beziehung zwischen Spiel und urbanen Räumen und fokussiert auf den Bereich der sogenannten *smart cities*. Er möchte DesignerInnen und WissenschaftlerInnen dazu anregen, über Möglichkeiten der Transformation von Städten durch Spiel zu reflektieren. Der Text überträgt einen romantisch geprägten Spielbegriff auf das Informationszeitalter und argumentiert, dass Städte zu Datenproduktionsstätten werden, in denen die Daten der BürgerInnen mit unklaren Zielen erhoben und ausgewertet werden. Die resultierenden Daten-Netzwerke gelten als Motor der Entwicklung von *smart cities*. Jedoch sind Zugang und Nutzung der Daten häufig Firmen und Regierungsinstitutionen vorbehalten, oder es stehen im Falle einer Veröffentlichung als *open data* kaum nutzbare Interfaces für den Umgang mit dem Material zur Verfügung. Spielelemente bzw. spielerische Interaktion (*playful interaction*), so die These, kann als ein solches Interface fungieren und dazu beitragen, die Informationsdichte in *smart cities* für Menschen erfahrbar zu machen. Der Artikel präsentiert keinen spezifischen Lösungsansatz, sondern zeigt vielmehr eine Möglichkeit für DesignerInnen und WissenschaftlerInnen, spielerisch über *smart cities* nachzudenken.

ABSTRACT

This article is a critical reflection on the relation between play and urban environments, with a particular focus on so-called *smart cities*. It is also intended as a provocation for designers and scholars to think about the possibilities of transforming cities through play. Based on a romantic theory of play adapted to the information age, this article argues that cities are becoming data production centers in which citizens are datamined for unclear purposes. The resulting data networks are supposedly meant to fuel the development of smart cities. However, access to and use of this data are often either exclusive for corporations and opaque governments or published directly as open data with few useful interfaces to experiment or engage with. This article argues that play, via playful interactions, can become a useful interface and design practice to turn smart cities into human-scaled experiences of information-heavy urban environments. This article does not propose any specific solution but more of a perspective that, if successful, should inspire designers and scholars to think playfully about *smart cities*.

1. INTRODUCTION

Cities are a focal point in our narratives about history. We define cultures and civilizations by their capacity to accumulate wealth and population in limited geographical spaces. Culture and economy thrive in these human dwellings, and so we look at cities to see where history is taking us, from the ruins of the first Babylonian metropolis to the crowded challenges to western-centric globalization that Lagos or Mexico DF pose. As much as we might dream of pastoral romantic communities, it seems that the future of mankind is somehow connected to cities.

Urban planning, then, is more than a discipline of design and architecture: It is a way of addressing current problems and shaping the future. Even though planners have been historically interested and aware of the implications of their work,[1] developing a nuanced vocabulary and methodology to engage with these problems,[2] their challenges keep on growing as culture, society, and technology evolve.[3] One of the most recent challenges for urban planning is that of the augmentation of urban environments through computation.[4]

Cities are not just cities anymore. With the increasingly cheaper price of computation and the technology required to deploy it, we have seen a surge of digitized citizen services. Cities have always produced and stored data in the form of educational, economic, and political infrastructures. However, the scale of data production afforded by cheap, networked computation has turned cities into massive data producing hubs, scaling from institutions to the individual citizen as contributors to this data production. To live in a modern city in the western world is to engage with different instances of government and services via computerized systems, as well as engaging with an urban environment that is increasingly designed to gather data from the portable computing devices we carry around. From open, citywide wireless networks to experiments with the Internet of Things and the digitalization of archives and services, cities are now complex assemblages of humans, architectural infrastructures, and networked databases.[5]

However, these assemblages[6] are seldom transparent for citizens. Occasionally, we will hear talk about *smart cities*, a rhetorical transformation of the city into the equivalent of an app: a city that is immediately tailored to its citizens' uses, easy to interface with, and that solves all problems by effectively deploying cus-

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1 Rittel/Webber: »Dilemmas in a General Theory of Planning.«

2 Alexander: *Pattern Language*.

3 Andersen/Polk: »FCJ-133 the Scripted Spaces of Urban Ubiquitous Computing.«

4 Dirks/Keeling: »A Vision of Smarter Cities«; Caragliu/Del Bo/Nijkamp: »Smart Cities in Europe.«

5 Gaspar/Glaeser: »Information Technology and the Future of Cities«; Harrison/Donnelly: »A Theory of Smart Cities.«

6 Latour: *We Have Never Been Modern*; Latour: »Where Are the Missing Masses?«; Latour: »A Cautious Prometheus?.«

tom-made, »user-driven« technical solutions.[7] But cities are old, dumb beasts, and they seem to be refusing to become smarter.

In this article, I want to grapple with this refusal and reflect on how we can engage with the technocultural assemblage that cities are in order to make cities, if not smarter, then at least more playful, and therefore more human. My argument is simple: The data produced and used in smart cities should not necessarily be presented as a utility for citizens. It should be presented as a prop for play, as games but also as the source for toys and playgrounds. Data-rich cities can become playable cities, and, by becoming such, they can become more human, more inclusive spaces.

Of course, this requires first a theory of play that allows for this rhetoric to be meaningful. Thus, I will extend my own theory of play[8] and adapt it to the specific challenges that modern urban environments present. Second, I will trace a brief and partial history of play in the city in order to substantiate the argument that playful engagement with urban environments has been a constant mode of resistance to, and appropriation of, cities for their citizens.

This article does not want to provide definite, finished arguments but a reflection that will hopefully provoke digital designers and urban planners to think about urban spaces and their technologies as places where playful engagement can have a humanizing effect. Play will not solve the problems of cities, as much as technology won't. But it can be one of many different patterns or solutions that can be applied to think about urban problems in order to help us challenge assumptions or effectively use new technological developments for the creation of pleasurable, meaningful experiences in the city.

2.   A RHETORIC OF PLAY

Before we can understand the relation between play and cities, I need to explain what I mean by play and playfulness and why it is a relevant concept to invoke when facing the challenge of rethinking urban spaces and urban planning. The concept of play in which I will anchor my reflections is based on my own work, which should be read in this case as a rhetoric of play in the romantic tradition of Kant and Schiller, but also in the tradition of Sutton-Smith and Hendricks.[9]

Play is almost as difficult to conceptualize as the city. Both a human and an animal activity, play can be used to explain and understand developmental stages, learning processes, psychological patterns, cultural phenomena, emotional states, and objects of affection. Such is the complexity of this concept that the most important play theory work of the 20th Century, Brian Sutton-Smith's *The Ambiguity*

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7   Giffinger et al.: »Smart Cities«; Batty et al.: »Smart Cities of the Future.«

8   Sicart: *Play Matters*.

9   Kant: »Critique of Judgement«; Schiller: *On the Aesthetic Education of Man*; Sutton-Smith: *The Ambiguity of Play*; Henricks: *Play Reconsidered*.

of Play, proposes not to define what play *is* but to present a number of different rhetorics that can be used to explain play without making strong ontological claims. In this sense, my own theory of play is also a particular rhetoric of play, and, as such, it needs to be defined as an epistemology with a series of characteristics that allow us to use »play« as a concept for cultural, social, and technical analysis.

This rhetoric of play understands play as a human mode of being in the world, a particular phenomenological stance toward the world.[10] In this sense, this rhetoric of play is exclusively human and discards animal play. The play mode of being in the world is appropriative, expressive, personal, and autotelic. Play is appropriative in the sense that it wants to take over the world in order to manipulate it. This manipulation is expressive, that is, conducive to the creation of new things, actions, or behaviors. These are of a personal nature since playing is first and foremost an individual expression that can be collectively cohesive by mutually binding yet flexible agreements, materialized in games, toys, playgrounds, or other playful props. Finally, play is autotelic in that it has its own purpose, a purpose defined by the very activity of play but in constant negotiation while this mode of being in the world is dominant.

Play has two other important characteristics. First, it is carnivalesque in that it can harness its appropriative capacities to identify and subvert sociocultural structures. Bakhtin's concept of the carnivalesque[11] represents a foreshadowing of secular, anthropocentric modernity, and so carnivalesque play can be similarly understood as a force of resistance toward authorities and structures. Second, play is always in precarious balance between creation and destruction – play has a compulsion for disorder that is closely related to its capacity to create order.[12] To play is to keep a balance between the sublime creation of order and pleasurable destruction. These ongoing temptations structure the activity of play and often can be identified as the source of play's expressive and creative capacities.

This compact, flexible rhetoric of play also allows us to make a critical distinction between play and playfulness, a distinction that is extremely relevant for understanding the potential of play in urban environments. Basically, play is activity *in the world*, while playfulness is an attitude *toward the world*. That is, play takes over the world with a purpose of its own (and hence it is an autotelic activity), but playfulness is an attitude that takes over a particular situation, context, or material yet still respects its purposes and intentions. In other words, it does not have an autotelic nature. Play often occurs with objects or contexts designed specifically for it, like arenas, playgrounds, games, and toys. Playfulness is often the playfication of objects or situations to allow for appropriative, personal expression, even if the purpose of the activity is respected.

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10   Sicart: *Play Matters*.

11   Bakhtin: *Rabelais and His World*.

12   Henricks: »Orderly and Disorderly Play.«

This distinction is crucial because it allows us to articulate two different ways of thinking about play in the urban environment. One is the design of play spaces and situations, that is, the creation of objects and locations that afford engagement in the activity of play; playfulness, in turn, opens up the possibility of designing spaces for appropriation without necessarily conforming to traditional methods for designing the play activity. In that sense, playfulness allows us to think about the activity of play in the city beyond parks and recreation.

This rhetoric of play will allow an analysis of the challenges of creating play and playfulness in urban environments, particularly when I focus on the information revolution in urbanism. Before I turn to this issue, I need to give a brief overview of some of the work done on the intersection of play and the city and reflect on it in order to then think about play in the informational city.

3. WE HAVE ALWAYS PLAYED IN THE CITY

From the early dwellings of Babylonia to the cradles of modernity in the Renaissance, cities have always been fascinating, attracting poets, revolutionaries, and dictators. The city perhaps best embodies the fundamental role that technological development played in modern culture. The big urban centers were perfect sources of cheap labor, as they were also instruments of control that allowed the industrial revolution to take place. Cities were also glimpses of the future, the center of universal exhibitions and experiments in urbanism that wanted to reconcile massive populations with high quality standards of living. Cities were the *locus* of the bright future, either as the compact, upward looking metropolis or as sprawling environments structured around private transportation. Cities are, to a certain extent, the psychogeographical testimony of how we think as a culture, as a society.

Cities also attracted the attention of poets and revolutionaries. Baudelaire's *flâneur*, who strolls the city in awe of its new kind of sublime, articulates the soul of the new cities. The flâneur could be seen as a dark player[13] who aimlessly wanders and wonders about the city, without the purpose of all those other citizens immersed in commerce and the strife of urban life. Benjamin quickly certifies the demise of the flâneur due to the development of commercial capitalism,[14] a new stage in urban and social development in which the city becomes not a place to walk, discuss, and contemplate, but a place to trade and do commerce with goods that flock to the city.

Yet cities were also places of art and resistance to the establishment. Cities allowed minorities to gather and be stronger in number. Cities allowed artists to meet, collaborate, and become mainstream. Cities pampered the mainstream arts while feeding the underground. Cities were places of student revolt, of citizen re-

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13 Schechner, *Performance Theory*.

14 Benjamin: *Illuminations*.

volt, of theaters of the oppressed[15] and oppression of the dissidents. Europe still lives, and is ruled by, the revolting students of 1968 and their oppressors. We still think that all art comes from New York and audiovisual culture is a thing from Los Angeles. Berlin is both our conscience and our subconsciousness. And we are fascinated by new models of cities, from Dubai to Singapore, built on material wealth posed against hostile nature. We are the cities we live in. Our *bildungsroman* always takes place in the move from the idyllic countryside to the cities where we belong. Those are also the cities that define us.

We live in the cities, but are we *alive* in them? Are cities open for more than just commerce and industry? From architects to playground designers and artists, the dilemma of how to make the city *livable* has troubled many urbanist programs and aesthetics.[16] Precisely because of this playful aspect, it is interesting to consider play in the city. Urban planners and well-meaning architects would probably think about the development of playgrounds, sports arenas, and other organized, regulated spaces for play. However, there are two different ways of playing in the city that I would like to invoke here to help us think about the challenges of play in the informational city.

First, street sports like skateboarding and parkour show how the activity of play, and particularly the appropriative, expressive type of play I am advocating in this article, can serve as urban appropriation activities that draw new spaces of play in the city beyond those designed and determined by urban planners.[17] Despite the success of city and state-sponsored skate parks, a big element of skateboarding's identity relies on the possibility of performing anywhere in the city. The parks are not places apart from the rhythm of the city, but training locations. Similarly, parkour sees the city as a place for performance of acrobatic movement in constant motion. Both show how play can operate a kinaesthetic, performance-based appropriation of the world that radically changes its identity and structure to become more playful and expressive.

A second way of playing in the city that illustrates the possibilities of play for challenging and rethinking urban development is the Situationists' urban dérive.[18] Situationism revolted against the commercial, capitalist spaces of cities, and one of its instruments was the dérive. Wandering in the city just by being driven by its geography helped develop intimate, authentic experiences. While these experiences were hardly »play« in the canonical sense of the Situationist International, they were an aesthetically-driven, ideologically meaningful playful rejection of the city and an appropriation of it for a different purpose. Rather than just accepting

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15   Boal: *Theatre of the Oppressed*.

16   Christopher/Ishikawa/Silverstein: *Pattern Language*; Debord/Wolman: »Directions for the Use of Détournement.«

17   Dumas/Lafores: »Intergenerational Conflict«; Geyh: »Urban Free Flow.«

18   Knabb: *Situationist International Anthology*; Debord/Wolman; Wark: *The Beach Beneath the Street*.

or mindlessly living in these urban structures, the dérive allows practitioners to discover a new city, to make a space that is not supposed to be personal but a new environment for expression and collective and individual identity.

These two forms of playful appropriation of the cities are clearly inspirational, but they remain confined to the material architecture of urban environments. Both forms playfully take over the spaces created to massively inhabit cities that define the 20th century. However present and inspirational these two forms of appropriation can be, they are limited when it comes to playing in smart cities, as the computational layer of these geographies presents new challenges and opportunities.[19]

Nonetheless, it is still worth recalling that cities have always been spaces for play. Not only because they can host different forms of play spaces, from playgrounds to arenas, but also because, as particularly ordered spaces, as architectures, they can lead to expressive appropriation. Thus, we can see a new challenge emerge: Cities are no longer merely conglomerates of people and materials. Cities are now also computational centers, locations of production and consumption of computer-created, computer-processed data. Parkour and skateboarding, dérive and the arts, they all still understand playful appropriation as happening in an exclusively physical, material space. However, contemporary cities are more than just that. In order to understand how play can happen in cities, we first need to understand what these cities are.

4.   SMART AND DUMB: ON INFORMATIONAL CITIES

Thus far, I have been using the concept of *smart cities*[20] to focus my interest on play in modern urban environments. However, I will now use the concept of *informational cities* instead, for two reasons. First, it allows me to invoke a series of relevant intellectual traditions, from information theory to the philosophy of information, that can contribute to a deeper understanding of these new urban environments. Second, I am unconvinced by the unabashedly positive sound of »smart« cities. It seems that computation makes »dumb« cities »smarter« and that this is a mark of progress. I doubt that this is the case, at least not without a reflection on which technologies, infrastructures, and activities make cities »smart.« On that view, »informational cities« seems a more neutral starting point for the kind of reflection I am proposing in this article.

What is an *informational city*? More importantly, why do we need to give such importance to the impact of computer technology in urban environments? Computers have changed society, and, for some, we are living in a revolutionary moment when knowledge, culture, society, and science will forever change who we are and how we live. But they have also changed the arguments we make about

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19   Psarras: »Emotive Terrains.«

20   Chourabi et al.: »Understanding Smart Cities.«

the world. Everything seems new, relevant, important, different because of computers. Claiming that cities are different because we live in a digital era, because we are witnessing the fourth revolution,[21] might be just an empty claim, another sensationalist argument for hyping an argument.

This might be true, but I think there are abundant examples suggesting that cities are no longer merely architectonic, spatial organizations of human dwellings, but that they are also informational environments, or infospheres,[22] on their own. The most significant of these examples is perhaps the abundance of open data that anybody can access from many cities around the world. There is data about population, air quality, traffic, income, education levels, etc.; almost anything one can imagine has been neatly packaged and released as open data. Of course, this amount of data only makes sense in the era of *big data*, that is, in an era of writing algorithms that can quickly enough make any sense of all that data. But the crucial thing is not to make sense of it, but to acknowledge its existence. Cities produce data.[23]

Another example, partially derived from the previous one, is the infrastructure of distributed surveillance that has become an unavoidable characteristic of modern cities.[24] CCTV cameras are everywhere, but now more advanced systems of surveillance operate, again, on the massive amounts of data that are generated and transmitted in an urban setting.[25] Surveillance is no longer the task of those placed in a space to observe, or even of those looking at image feeds on a monitor: Surveillance is now the (attempted) processing of some of the data produced in a city.

A third and last example that takes us back to the beginning of this section is the current trend of imagining the future of cities as smart cities. Even though one could argue that, since the 18th century, the dream of all urban planners has been to create smart cities, this concept has been developed as an ideal to leverage the data production that happens in cities with the optimization of services and infrastructures. Smart cities are those in which the data produced greases the machines for living: cities that enjoy their wealth of data to make life more bearable, less confined to obsolete structures and arrangements. Smart cities are the technical solutions to the human problems of urbanism.

All these examples have two things in common: First, they are understandable only if we look at how cities are data producers; second, they see this data as an instrument for making urban planning decisions, powered by computational

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21   Floridi: *The Philosophy of Information*.

22   Floridi: »On the Intrinsic Value of Information Objects and the Infosphere«; Floridi: »A Defence of Constructionism.«

23   Pan: »Trace Analysis and Mining for Smart Cities.«

24   Côté-Boucher: »The Diffuse Border«; Albrechtslund/Lauritsen: »Spaces of Everyday Surveillance«; Klauser/Albrechtslund: »From Self-Tracking to Smart Urban Infrastructures.«

25   On legal aspects concerning this issue, see Valverde: »Seeing Like a City.«

models and processing of this massive amount of information. Informational cities are, then, hybrid constructs of data and physical environments, informationally rich environments of exceptional depth.[26] An informational city is an infosphere generated by an urban environment – and by this I am referring to the data produced, but also to the systems and infrastructures needed, to produce data, process it, store it, and manipulate it.[27]

So why is it so important to look at informational cities from a play perspective? There are many ways of dealing with data-rich environments. Some involve the design of usable systems that ease the access and manipulation of information. Others involve the automatization of data processing and its location in the background of life experiences, so that nothing changes for users/ citizens even though everything has changed.[28] Fundamentally, the problem is that we don't know what to do with all this data. Releasing open data is a great initiative, but it leads nowhere, as big data is overwhelming. Furthermore, even if we make this amount of data visible and understandable, what is our motivation, as inhabitants of a city, to engage with the informational aspect of it? Why should we care? We should care because we can play with it and, by doing so, can change the nature and relation of the information we are producing, and consuming, as part of the city. In short, play can be an interface[29] with the data produced by and in informational cities.

5. PLAY AS A CITY INTERFACE

To live in a city no longer means to occupy a space in an urban environment, to engage in urban dwelling, to enjoy the multiple pleasures and suffer the inevitable pains of cohabitation. Cities have ceased to be machines for massive living. Cities are now data producers. We all supposedly enjoy the ideal easiness of online transactions, the casual engagement with services and government through apps and websites – even though those interactions are often painful due to the poor design of those interfaces. But the key is that those interfaces are a consequence of the massive amounts of data produced and broadcast by inhabitants that cities can gather.

Cities have become contexts for data production – data about how we live, where we live, and what we do. But this data does not have a human scale. The problem is that this data is encapsulated from the world, processed by algorithms

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26   Thrift/French: »The Automatic Production of Space«; Miller/Goodchild, »Data-Driven Geography.«

27   See also Kitchin/Dodge: *Code/Space*; Kitchin/Lauriault: »Small Data in the Era of Big Data.«

28   Graham: »Beyond the ›Dazzling Light‹«; Borning/Kahn: »Designing for Human Values in an Urban Simulation System«; Bell/Dourish: »Getting Out of the City«; Brewer/Dourish: »Imaging and Imagining the City.«

29   Dourish: »Seeing Like an Interface«; Galloway: *The Interface Effect.*

and presented in API friendly fire hoses that do not necessarily engage with citizens. We all have access to the data produced in cities, but it is presented in such a way that we do not know what we can do with it. It is both a problem of accessibility and presentation: The data is made accessible through interfaces that do little to help users engage with it productively. Much like modern urbanism strove to make citizens engage with their cities, we are facing the challenge of engaging citizens with the data layer of the cities they inhabit. This is an alternative, hidden architecture of unmapped locations, a geography of inaccessible, incomprehensible, inhuman data in search of interfaces to bring it back to where it originated.

For these reasons, I propose to think about play, in this case computational play, as an interface to engage with this data. This is not a radically innovative idea, as it builds on a history of playful appropriations of the city, but it constitutes a suggestion for developers and urban planners to think about the ways in which access to this data can be possible and beneficial.

Play has been seen as a way of making urban environments more human, more open to creative expression and less functional. From playgrounds to playful spaces, urbanists have looked at play as an instrument to bring back the human scale in urban design. Similarly, the Situationists tried to re-engage with the alienating spaces of the city – the problem being the same, the dissonance between the scale of the city and the scale of human life and expression.

A more recent example is the Bristol-located Playable City organization,[30] which annually supports one project that augments a public space through play. These projects need to be creative, playful, illuminating; they need to make the city better and more livable. But they also need to be open for everybody, they need to be accessible, and, if possible, they need to work in places where the city might benefit from them. Playable Cities has an interest in making the city more vibrant by occasionally allowing play to take over its environment.

The challenge I would like to highlight here, however, is different in nature. Even though it is a good thing to make cities more playful, we're still doing it on the old paradigms of physical environments, forgetting how important the informational layer is for the future of cities. The Smart Cities initiatives are all attempts at making this informational layer more human, more useful. But the problems are being solved by adding more technical solutions that produce more data.

What I advocate here is a way of thinking about play as an interface toward the data that constitutes the infrastructure of the city. Take that data and make it playful, allowing citizens to use the data they produce to better engage with their surroundings, with their environments, to have a better understanding of what it means to live in a particular city. This also means: Make them play *with it*. Do not give in to the temptation of making commercial controlling devices in the shape of

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30   http://www.watershed.co.uk/playablecity/.

pre-made games. This is a call not for *gamification* as a form of control, but for playification as a form of living in the city.

Most of the examples I can provide for the use of play as an interface with public open data come from cartography. There are now available at least two different applications that allow users to navigate through the different layers of a city, navigating them in time. Using online services like Google Maps and the data from pictures and other sensors, applications like *What Was There*[31] offer a glimpse of the history of a city, a playful reminder that we live in strata of past lives. Being able to browse the city's history, to observe it change with a swift movement of the mouse, allows for a different engagement with the urban space.

This means that we can imagine a different, bolder take on playable cities. We need to start thinking about these urban spaces as the locations of lives and data, as the crossroads of a new way of being a citizen – a consumer and producer of data.

As citizens, we need to make the open data about us *ours*; we need to be able to see the patterns in the data, the structures that we help build. It is not enough to have access to it – access needs to be meaningful so that meaningful lives can be lived. And what better way to interact with this data than playing with it, than making it pleasurable to access, manipulate, and share? I advocate a playable city in which the re-ontologization process that leads to massive data production is not opaque, but interfaced through play.

A play interface for cities acknowledges that there is no way back, that cities are data production engines. This data should be accessible in such a way that we can appropriate it, that we can play with it. We therefore need to design services that are open for interpretation, that allow for the curious investigation of the user. We need to realize that citizens need more than information. They need involvement, they need to be able to use the data they produce, and they need to set it in the contexts and uses they find appropriate.

In this way, playable cities are not smart cities. They are not designed by remote architects or even by co-design processes. Playable cities should be messy affairs, not necessarily smart, not necessarily official – they should be a consequence of the citizens' acts of appropriating the data layer of the city. Playable cities should be expressive, images of their users, places in common to live together.

Therefore, I call for playable cities to be like modern public spaces, engineered open spaces that nevertheless host the rebellious activities of street artists, skateboarders, traceurs, and other people who see those spaces, those contexts, as spaces for playful expression.

What would these playable cities be like? Imagine a city square, once the space for public gathering and now just another place to stare at our phones. Now imagine a city square that changes depending on the data flow in its location: If many people access the square's wifi hotspot, then the geography of the space

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31   http://www.whatwasthere.com.

will change, the sitting spaces will come closer to each other, forcing people to share physical space, to connect again. And make this process transparent, so that a clever tinkerer can download dozens of torrents from that location, forcing everybody to stay together.

Or imagine a counter, like the one in the main square in my home town of Copenhagen, that measures how many cyclists go through each day. Instead of making it a boring number counter, make it inflate a balloon a bit every time a biker passes by, hopefully creating a nice flock of balloons that, at the end of the day, are set free, so citizens can see what they have done.

Or envision the data for air pollution not to be just an abstract .csv file that only statisticians will admire, but as the nourishment for artificial beings. Let's imagine plant-like statues that will die the more polluted the city is, and then give citizens access to a tool so they can change the variables in air quality conditions in their living quarter – changes that they will be able to see in the dying plants around them. Citizens could be able to affect their environment, but also document the scale of local challenges. Of course, people will abuse the system, people will break it – but if that happens, we should rejoice, for breaking is indeed a sign of play, a sign of engagement. Nobody breaks anything in smart cities.

These examples are mostly combinations of information visualization and visual aesthetics. However, I believe they hold the promise of thinking playfully about cities. Imagine that users could not only *see* the traffic information, but also *engage* with it. For example, a tamagotchi-type physical toy could be linked to a car, and every time the car is driven, that action would have a direct influence on the creature as well as on all the other creatures installed in all other cars in that city. These creatures need not be nice – they may be screeching trolls that enjoy traffic chaos, and so the best way of not feeding them is not driving.

To imagine the future of playable cities, we need to think about the playful attitude as an inherently valuable approach to life. In fact, I would argue that playfulness should be a key element in understanding the citizen who does more than just »live« in a city but inhabits it, who critically contributes to living in it. Playful cities, then, need to foster the playful attitude. They need to nudge and suggest other ways of participating, or inhabiting, of traversing these spaces so that we can start thinking playfully about the environments we live in. This includes making the data we produce easier to appropriate, more open to fostering the playful attitude.

The promise of playable cities is complicated, and I can be accused of being both romantically optimist and designerly naïve, claiming that playful design can tackle the wicked problems of urbanism. I take both accusations as compliments. Cities are not good spaces to live and thrive. They are engines of data production, of commerce, and of disempowerment. Yet they can also be spaces for organization, for collective action, and for play. Playable cities can be instruments to get back our cities and turn away from the incorporated structured dreams of smart cities so that we can make our own spaces livable again.

6. CONCLUSIONS

What is a playable city? In this position paper, I have tried to argue that using play as an interface for engaging with the informational city can help make the data production layer of cities not only visible, but also open for citizen engagement. For doing so, playable cities need to think about informational urbanism through the interface of play, a challenge that this article has only started to address.

I would like to close by reminding the reader that to play has always been a form of collective action that has had a strong effect on how we plan cities and live together. I have focused here on how to think about informational cities through the lens of play, but, ultimately, it is not any technology, gadget, or clever design application that will allow us to do this. To play in the city simply requires a playful attitude, the will to take over the world and express ourselves in it in search of pleasure. We too often forget while living in cities that we can search for pleasure, that life can be more than traversing spaces, that we can play, and that play is precisely what makes the world ours. So don't wait for the app, the service, the cleverly designed instrument: Open the door, get out on the street, and play.

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