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Abstract

A certain frenzy is still felt around the idea of what a Smart City is: for some, it is a concern, for others it is an open field of huge possibilities. Stemmed from the ubiquitousness of immersive computing in urban environments, and implemented by the coalescence between several media, a Smart City seems to promise aggregated efficiency among equipment, structures and individuals. On the flip side, a Smart City simultaneously appears to limit citizenship to a series of pre-established, induced or monitored movements, announcing a kind of voluntary surveillance. Inspired by some works, this paper attempts to provide a reflection upon the complex apparatus that a Smart City can be. Making use of an archaeological

exercise, it addresses the community and its engagement in placemaking. As a network of people, architectures, tools and programmes a city has always been an informational field and the susceptible environment for commands, therefore of control. A Smart City might not be an invention, but rather the transformation of the old structures with new means and materialities. It is emerging as a result of the diffusion of digital technology in the physical space. Hence the question does not relay on the technology deployed, but rather in the programmatic character of the systems it installs. After all, in technology may lie the way to raise a politically active and sensitive community.

Keywords: Smart Cities, media archaeology, functional transformation, archive, digital curation.

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A Cidade Inteligente como Ambiente Participativo: Um Exercício Arqueológico Sobre como Construir uma Comunidade Política

Resumo

Existe ainda uma certa agitação em torno da ideia do que é uma Cidade Inteligente: para alguns, é uma preocupação, para outros é um campo aberto de enormes possibilidades. Originada na ubiquidade da computação imersiva em ambientes urbanos e implementada pela convergência entre vários meios de comunicação, uma Cidade Inteligente parece prometer eficiência agregada entre equipamentos, estruturas e indivíduos. Por outro lado, uma Cidade Inteligente parece simultaneamente limitar a cidadania a uma série de movimentos pré-estabelecidos, induzidos ou monitorados, anunciando uma espécie de vigilância voluntária. Inspirado em alguns trabalhos, este artigo tenta fornecer uma reflexão sobre o complexo dispositivo que uma Cidade Inteligente pode ser. Utilizando um exercício arqueológico, aborda a comunidade e o seu envolvimento na criação de lugares. Como uma rede de pessoas, arquiteturas, ferramentas e programas, uma cidade sempre foi um campo informativo e um ambiente suscetível a comandos, portanto de controle. Uma Cidade Inteligente pode não ser uma nova invenção, mas sim transformação de estruturas antigas com novos meios e materialidades, emergindo como resultado da difusão da tecnologia digital no espaço físico. Portanto, a questão não se baseia na tecnologia implantada, mas sim no caráter programático dos sistemas que ela instala. Afinal, na tecnologia pode residir o caminho para criar uma comunidade politicamente ativa e sensível.

Palavras-chave: Cidades inteligentes, arqueologia dos media, transformação funcional, arquivo, curadoria digital.

1. INTRODUCTION

The most shared meaning of a «Smart City» sketches out an urban environment where the use of information and communication technologies (ICT) help the promotion of the quality and cost-effectiveness of services, material supplies and energy resources, as defined by the EC (n.d.). The increasing commodification and privatization of economic activities, the management of information flows and the sustainability of the natural and social environment are key contemporary issues, in urban development and placemaking – understood here as the engagement of citizens

in the production of their own environment (Toomey et al., 2020; Smaniotto et al., 2023). Moreover, the apparent dissolution of the buffer mechanisms of the welfare state makes it urgent to emphasize the relevance of the cities for the future. Cities play a major role for building networks, both of information (e.g. postal system, radio or telephone, and more recently internet) and of energy (as the case of water supply, power, or even roads and highways, which enable the circulation of people and goods, providing thus the energy of a state apparatus. In a Smart City no less is expected. Ideally, it grants a technology-driven response to governance, fostering the harmonization of the most competitive industry with local communities in a decision-making process where citizens are expected to be better informed. The social practices that have stemmed from digital tools, especially with the rise of mobile and ubiquitous technologies that have penetrated every single aspect of our lives, seem to promise something new (Smaniotto et al., 2019). But how effective is this? Does a smart city go beyond the application of media technology? How to understand the transformation of the city out of the linear perspective of history, which is based on continuity and homogeneity of its technical evolution? Therefore one should start from the beginning, where an ontogenetic question must be solved: what is a city?

Thus, this paper is an attempt, backed by modern authors' views, to provide a reflection on the usefulness of the concept of smart cities to enhance the connections between citizens, places and heritage.

2. THE APPROACH OF THIS STUDY

As the main goal of this paper is to reflect on the notion of a Smart City from a humanistic standpoint, a literature review was designed to address engagement in placemaking and heritage communication. It does not seek to carry out an in-depth revision of literature, but it focuses on publications on which the debate about media, urban development and participatory processes, are meant to improve a kind of "urban smartness". The literature review is thus, narrative and confined to few relevant authors who in our opinion provided reflections and evidences to reason and to give foundation to the archaeological exercise that is in the core of our research. Despite being complex, this embedded design allows a richer understanding of the technology and media in the debate of the digital urban future.

3. METHOD: AN ARCHAEOLOGICAL EXERCISE

According to Kittler (1996), «the city is a medium», and it always has been. The method for understanding the historic traces and their impact on the present is media archaeology, and this hermeneutic enterprise is the methodology we follow. Parikka recognizes the centrality of Michel Foucault and of Friedrich Kittler for the widening of archaeology to media archaeology (Parrika, 2012, p.6). Made evident in Foucault's Discipline and Punishment (1975) is a governmentality that reveals an apparatus producing its subjects in order to function, i.e., its subjectivation process – here disclosed with Agamben's approach to Foucault's dispositive, thus stating that

The term 'apparatus' designates that in which, and through which, one realizes a pure activity of governance devoid of any foundation in being. This is the reason why apparatuses must always imply a process of subjectivation, that is to say, they must produce their subject. (Agamben, 2009, p. 11)

Rodriguez (2019), while tracing a political genealogy to the communicational, recognises the centrality of Foucauldian archaeology in the analysis of cybernetics - and this paper will not deviate from that. Nevertheless, our archaeological exercise is centred on Friedrich Kittler's «The city is a Medium» (1996, pp. 717-729) which, with the materialism that characterises his approach to media, gives another consistency to the analysis of the material traces of cities. For a start, and entailing a cybernetic analogy, Kittler grants the capital (Hauptstadt) its centrality as the head of a State (Kittler, 1996, p. 717). However «we have forgotten that a City, as an event or data, once existed on its own apart from the state» (Kittler, 1996, p 723). The author distils from the city its seven components: (1) the technological networks, which can be an information and materialized in infrastructures, or as the information that circulates on networks; (2) the graphical systems that depict the networks as pure translation of topology, visible in the way maps from their very origin covered the network of rivers, or roads; (3) the supply networks such as the aqueducts or the postal system; (4) the intersection points or nodules of a web that converted, or better, rendered a city into a state (the case of the Roman Empire is paradigmatic); (5) data and its formatting perceived as unit of memory, such as addresses, as information terminal which further permit other data to emerge; (6) commands as instruments of governance; and (7) media, such as coins and the vowel alphabet, which are granted by Kittler (1996, p. 720) as the oldest form of media.

All these media are still effective: some remain visible in cities, as the importance of the aqueducts in the case of Lisbon, now made more accessible via its digital twin (Gorgoglione et al., 2023), other are replaced, and yet others have incorporated into new materialities and new visibility regimes. The Roman Empire' medial archaeology reveals well how it depended on these *media landscapes*, from mapping to reterritorialization («all roads lead to Rome»), in the aqueducts or roads that irrigated the State with energy and resources, or furthermore in the legal system of ancient Rome that are the basis for the *jus commune*.

The city is still the origin of the «political structure of civilization into which we were thrown» about 6000 years ago (Flusser, 2002, p. 173), claims Flusser, to whom the role of architecture in the organisation of labour force is crucial for this assumption, and it runs in an underlying cybernetic principle because its operational structure was largely, if not totally, determined by the architectures to be built:

Geometers (intellectuals) stand in the marketplace, to formulate the commands, and the 'Big Man' on the hill evolves from a guard into legislator, king, high priest, and finally God. This is the political structure of civilization into which we were throw. (Flusser, 2002, pp. 173)

This is how, both in architecture and in the settling of cities, *«human society became the chief consumer of humans, through violence or through work»* (Leroi-Gourhan, 2005, pp. 184-185). An analysis based on this work, along with Flusser's understanding of technics, allows a deeper consideration on the nature of the environment that has been fostered with the implementation of commands, and therefore of control and governance upon people, environments, tools and machine-architectures, which are the concrete constituents of a city.

With the dawn of architecture, the mobilization of the labour force into collective constructions, that embodied the glory of gods, pharaohs, emperors or kings, suspended the Palaeolithic magic. As a visible consequence, with the arrival of the Neolithic Period, the quality of the Palaeolithic painting is dissolved, both in its technical quality and aesthetical language – and this is precisely coincident with the formation of the civilization structure Flusser criticizes. It was too in a moment of medial transformation, on the threshold of a media change made evident in Walter Benjamin's Arcades project, that photography and cinema would come to inflict on art and on the world a generative wound, that would lay the aesthetic experience of the city consummated collectively, in a state of *distraction* – and the play of novelty in such a state of distraction:

The circumstance of the new is perhaps nowhere better illuminated than in the figure of the flâneur: His thirst for the new is quenched by the crowd, which appears self-impelled and endowed with a soul of its own. (Benjamin, 2002, p. 345)

A medial reason is intertwined in the city. Genealogically, we noticed how the city has already been event and information, already granting the source to computation concepts such as gates, ports, circuits:

Circuit's own pre-history, presuppose (no less municipal here) a built-in memory. When the World War II mathematician John von Neumann laid down the principles for sequential working-off computation for almost all present day computer 'architectures,' he bestowed the fitting name 'bus' on the parallel channels between hard drive, gate and memory, and thus extended the Biedermeier tradition of metropolitan traffic. (Kittler, 1996, p. 720)

Long after the *mnemotechnics* that built and organized the first cities – with its theorems, simple machines like levers, laws and networks, whose traces can still be found in the contemporary cities – the emergence *mnemotechnologies* that materialize the audio-visual industry (photography and phonography, cinema and radio, television) would strike subjectivation processes. Basically, the individuation of *mnemotechnics* into *mnemotechnologies* has exposed a «symbolic misery» – Bernard Stiegler's thesis of an aesthetic emptiness as a symptom of marketing and of the commodification of every aspect of life, which compromises enacting a community of affects through «*the loss of participation in the production of symbols*» (Stigler, 2014, p. 10). It seems that Smart Cities have fallen into the fetishism of commodities, innovating discursive structures. As we will see next, the question concerning marketing follows largely strategies of re-newing old technologies into novelty.

4. DISCUSSING THE NATURE OF SMART CITIES: FIRST AN UNCANNINESS, THEN A TRANSPARENT UTILITY

A Smart City is an eruption of novelty, but it is basically a modified continuation of the medial event that emerged into the actual city. In «Re-newing old technologies: astonishment second nature and the uncanny in technology from the previous turn of the century», Tom Gunning shows how astonishment renders possible the renovation of commodity fetishism. First uncanniness, the strangeness of a dazzling appearance of novelty as an event, then a *transparent utility*, where novelty ceases to be and through habit becomes a «second nature». Indeed, this process deals with a certain instability, which prompts a discursive historical treatment, because «History deals not only with events but, primarily, and some would claim exclusively, with the discourses they generate and which record them» (Gunning, 2003, p. 39). The author shows how the discourse of Modernity *«is not only one of innovation, but precisely one of novelty, maximizing the dazzling experience of the new»* (Gunning, 2003, p. 43).

These ingredients have entered the composition of the dazzlement for Smart Cities. Gunning further argues that the discourse on futurity is present in the Universal Expos in the transition of the nineteenth to the twentieth century, and how rhetoric tropes and visual displays are agents of innovation, or influencers to take a recent concept of digital marketing. Some lines and vectors were thus established - and they have not only produced modern commodities, but also created new subjectivities. Disney's Epcot Center, a post-modern Luna Park that in its time presented alluring possibilities of medial experiences, such as screen-based practices, has exalted a future of high-medial cities too. The entertainment industry, as astonishment, is «inherently an unstable and temporary experience» (Gunning, 2003, p. 41) and, as in the case of Smart Cities, despite the «consistent scenario» of novelty, once an accustomed familiarity arises, a «second nature» is at play through governance and business. Maybe when novelty discourse is worn out, the «second nature» of a Smart City will reveal the «iron cage» (Stahlhartes Gehäuser), as Weber (2005) warned. Resulting from the rationalization and secularization of knowledge, or how by the logics of production, work and consumption led to a psycho-politics of habituation - or domestication of individuals in a teleological system installed by the discourse of efficiency.

Herein what Flusser (2002) identified in the short essay called «Designing cities» is that both «village and city are factories for the masks with which people identify themselves. In the village, the masks are still material. In the city, they become in-

creasingly immaterial and thus increasingly numerous» (Flusser, 2002, p. 178). So it is with Smart Cities, whose immateriality is underlined. As a relational field, if utterly consummated collectively in a state of distraction, there are no citizens but spectres. Flusser claims that the only concrete thing that remains

[...] is to be seen as a network of relations, and the threads of this network become tangled without connecting anything concrete. The only concrete thing is the relations themselves, whereas everything related or in relation (all objects and subjects of relations) are abstractions. (Flusser, 2002, p. 174)

From Flusser's perspective, culture and civilization are violent techniques to connect intersubjectiveness in a relational field. All cCulture is indeed characterized by the will to control the passages between the possible and the actual, hence installing strategies for production, storage, and distribution of information that accommodate intrahuman relationships. Hence the importance of Virilio, who emphasizes how state control still *confuses social relations with traffic control*:

The State's political power, therefore, is only secondarily 'power organized by one class to oppress another.' More materially, it is the polis, the police, in other words highway surveillance, insofar as, since the dawn of the bourgeois revolution, the political discourse has been no more than a series of more or less conscious repetitions of the old communal poliorcetics, confusing social order with the control of traffic (of people, of goods), and revolution, revolt, with traffic jams, illegal parking, multiple crashes, collisions. (Virilio, 2006, p. 39)

In a Smart City these issues are clearly aggravated, all more because each individual seems to be a node in a network to where signals converge and, consequently, at stake are not only the surveillance of movements but also the control of actions. Reminiscences of the regimes of exclusion experienced with the *Ausweiss* conditions of the cities under *siege* of military security. But if such control happens it is because the streets are still the *locus* of protest.

5. OLD, NEW AND TO COME: THE CITY AS A PROMISE OF POLITICS

So far, we have undertaken an archaeological exercise that brought the «old» to the present. We realize how the city is a palimpsest of networks, some dormant, others still effective, and some others being the same networks but with new consistencies. We have also understood how discourses concerning the «new» is a strategy of *re-mediation* through an industry of astonishment which seeks to invoke a futurity into the present.

As the site of revolution, but also of the maintenance of powers and systems, the city is still one of the most fetishized media – made evident in the rhetoric of Smart Cities strategies. The original *arché* of cities shows, genetically, the anthropological need for organizing the collective through both the division of labour and in keeping records of events, property and exchange. It is by doing an archaeological exercise that Hannah Arendt recognizes how politics begins with the elementary, pre-political fact of biological necessity, and politics will remain the ultimate end of human destiny (Arendt, 2005, p. 83). Acknowledging that the order of survival and of social attachment are Gift and Debt – as shown in the anthropology of Marcel Mauss' *Essay sur le don: Forme et raison de l'échange dans les sociétés archaïques* (1924) or in David Graeber's *Debt: The Fist 5000 Years* (2011), we can state that both gift and debt are basic constituents of collective organization, and hence both the origin and the destiny of a political community.

The discussion about what politics can do has been historically centred at a very particular centre: on the public space, which is born from the agora of the polis, from the will of free men debating their common destiny:

This city, which offers a permanent abode for mortal men and their transient deeds and words, is the polis; it is political and therefore different from other settlements (for which the Greeks had a different word: *asté*), because it is purposefully built around its public space, the agora, where free men could meet as peers on any occasion. (Arendt, 2005, p. 123)

With the so-called post-modernity, cities have become fragmented. Edward Soja perceives it in L.A.; in the multiplicity of its centres that disperses identity. This loss of centrality in the postmodern city looms in Smart Cities because it is the structure beneath it. As informational thin film, or *pellicula*, Smart Cities adhere to the physi-

cal structures of the postmodern cities without ever annulling them. As a method of returning to the centre, the seminal model of the agora should be held. It is decisive that political action is indeed a spatial construct. Through the objective relations built by previous struggles for recognition amongst classes and groups, the city is still the place of transformation of public and collective life, that is, the space of the «game» where action and speech are at play:

Just as there exists no human being as such, but only men and women who in their absolute distinctness are the same, that is, human, so this shared human sameness is the equality that in turn manifests itself only in the absolute distinction of one equal from another [...]. If, therefore, action and speech are the two outstanding political activities, distinctness and equality are the two constituent elements of bodies politic. (Arendt, 2005, p. 61-62)

Action and speech become the material sources of further individuations, thus the process of subjectivation within an apparatus. Subjectivation means also leading others to participate as players of the city. Human freedom and dignity can only be attained by a plural project of human beings acting politically. For a Smart City to be such a promise, one must return to the city *arché*, to the *polis*.

In an attempt to clarify the meaning of the political as a collective experience, freedom of choice plays a basic principle in the citizens' ability to judge. Hence, if *«Politics is the art of securing the unity of the state in its desire for a common future»*, as Stiegler puts it, *«we need to return to the question of aesthetics, particularly regarding its connection with the question of politics, in an appeal to the art-world to recover a political understanding of its role» (Stigler, 2014, pp. 101-102). By way of conclusion, we shall now see how participation can be stimulated.*

6. BE AN INDIVIDUAL AND DIY: USER'S GUIDE ON HOW TO BUILD A POLITICAL COMMUNITY

In a brief essay written shortly after the First World War, Walter Benjamin realizes that technics embraces the way to a planetary relationship (Benjamin, 1979). However, war has betrayed all promises, and technics, thus involved in the conflicts, can do nothing about it, nor be blamed for it, because war requires human decisions, and it

is ultimately the continuation of politics by other means a political – as in Clausewitz aphorism. The means used for destruction are, as they always have been, made in the resemblance of the means of production. So the technical tools of every age include both the promise and the treat. In our time there are exceptional technical conditions to fulfil the essential promises of what a city, as a political field, can be. A failed relationship with technics will however lead to the failure of those promises. Hence, one can only appeal to the effectiveness of citizens' political decision-making. Essential is also the place for citizens as participants of the city building. This implies, as we will see, in taking a position within technics. For our argumentative purposes, we shall now inquire about a seminal essay that calls for the intervention and activism of artists and poets in order to activate new networks. Walter Benjamin in «The Author as Producer», an essay written in 1934, delivers the framework:

An author who teaches writers nothing teaches no one. What matters, therefore, is the exemplary character of production, which is able, first, to induce other producers to produce, and second, to put an improved apparatus at their disposal. And this apparatus is better, the more consumers it is able to turn into producers – that is, readers or spectators into collaborators. (Benjamin, 2005, p. 777)

It is decisive that the production attains a model character and not a character of a work centered in individual experiences. The works capable of being models, i.e., capable of both driving others into production while improving the production device, are able to liberate of the means of production and build a political community. Besides proposing a radical «politicization» of arts and literary activities, Benjamin detects in the medial character of technics the possibility of transforming the conditions of production. To the censoring and controlling machines, Benjamin counterposes the revolutionary character of the reproduction: each reproduction (either of a work of art, of a book, or of any industrial product) is not only a copy, but furthermore it is a new object introduced on the constant flow of information. It is the reproduction's generative expansion that is revolutionary. Technologies are still central, it is by means of the technical procedures, such as cutting, editing, reproduction and reassembling imagery, text, and sound, that the discourse of controlling machines is undermined. This means that more than a production character, Benjamin calls for a production-to-connect pro-gram. At stake is the constitution of an ideal fraternal future community, inseparable from action and speech, the bestowed components of the polis. For this community to be made, Benjamin uses an important concept introduced by Bertold Brecht – that of «functional transformation»:

To signify the transformation of the forms and instruments of production in the way desired by a progressive intelligentsia – that is, one interested in freeing the means of production and serving the class struggle – Brecht coined the term *Umfunktionierung* [functional transformation]. (Benjamin, 2005, pp. 773-774)

Brecht was interested in the liberation of the means of production, and thus for him, an engaged citizen is someone who plays a larger and effective role in the improvement of cities, more than merely rehashing or replicating those who wander lost in the haze of virtual stimuli. Just as Benjamin had presented the Brechtian strategies of «functional transformation», today we have technological tools that create unprecedented opportunities to share, to cooperate, and to transform collective action. Given that the transformation of the city happens through the materialization of human practices in technical procedures, as we have seen with Kittler's archaeological exercise, can smart cities go beyond the application of media technology and actually become the participatory environment we embrace? Changing the quality of civic participation might be the key. It is an operation that throws back the political: hence understanding that politics is the field of intersubjective recognition and the place where plurality of cooperation towards a common goal is lived. This brings us to politics, and to an understanding that it is the field of intersubjective recognition and the place where plurality of cooperation towards a common goal is lived.

The intrahuman relationships, which are for Flusser (2002) the promise of the cities to come, are to be fostered in the complex tangle of the new technical relationships between humans and their built environments. This could lead to the participatory environment of a Smart City, as it should embody a model character for designing cities:

The city to be designed would be a result of the following connection plan for intrahuman relationships: All humans are to be connected in such a way that the currently available information must be subsumed in more and more new fields and entered into the computations. (Flusser, 2002, p. 178)

Coming back to Flusser's proposal, that understands the transformation of the city outside of the linear perspective of history, and rather in the nature of the intrarelations generated therein. It is the complexity of cities that require a larger-scale political project in which all citizens can be active networked elements of an open and accessible city. If at an increasing pace, cities tend, like any other system, toward entropy, the answer for its design has to ensure conditions and a new meaning to the «connection plan for intrahuman relationships». In short, one should understand theory no longer as the discovery of truth, but as the projection of meaning. From Flusser's perspective, this provides a theoretical space, where information is simultaneously and completely accessible at every place in the network, to every builder of cities, where science (and its technology) is the starting point.

This network is a political promise of an open city, born out of the desire to engage in and with creativity, for all. What could be this «theoretical space»? Where can it be located? Crucial for Hannah Arendt was the specific meaning of an event, which as happened in the past and could remain potentially active in the reproductive imagination. Media archaeology, as a relational methodology, activates the past in the present. A city is such a legacy, and

By means of its storage facilities (buildings, vaults, archives, monuments, tablets, books), the city became capable of transmitting a complex culture from generation to generation, for it marshaled together not only the physical means but the human agents needed to pass on and enlarge heritage. That remains the greatest of the city's gifts. (Mumford, 2005, p. 569)

Such a structure of inheritance and transmission is the very ground of the archive. Hence to build a political community entails a «functional transformation» of the archive. For it is the archive, an open archive, that sets the foundations of the political promise of an open city. As de Certeau puts it

The archive substitutes our product to a received past. It gradually makes us forget what it is supposed to represent. It erases the genealogical interrogation from which it was born, to become the tool of a production. In the system that generalizes this metamorphosis, the archive is an operator that perverts time and turns it into a space to be constructed. This machine has a first role on our theatres of operations. (Certeau, 1986, p. 5)

Thus, as an element to respond to the proposed exercise, which was to trace a solution for a Smart City as a participatory environment, we propose that the archive should be the place to be made anew. The solution might be to leave the archive open, to give the contributors the possibility to get the material ground – from technical knowledge to philosophical and ethical considerations – for the collective constructions to come. From a much-needed renewal of the encyclopaedic revolution, an emancipated and conscious citizen will emerge, superseding the oppositions between stake-holders – as users, industries and police makers. Imagine the immense possibilities of DIY as «Each individual capable of reading and of understanding possessess the voult of the world and society» – claimed Simondon (2017, p. 112), underlying the significance of a technical encyclopedism as a new force for social dynamism.

7. CONCLUSION

Despite a long-standing prominence in the discourse, achieving a Smart City remains as elusive as ever. The lure of Smart Cities in the eyes of their citizens, our main audience, depends on effective collaboration and communication, also to legitimate policy implementation. Evidently, as with other issues of urban/global importance (i.e. sustainability, inclusiveness, etc), smartness in urban development depends on the disciplinary perspective and its goals. From the social, cultural and humanistic standpoints, Smart Cities are empty shells, if citizens, those who practise meaningmaking of smartness values, are not the prime beneficiary of our measures. Collaborative ventures, as pledged here, create agile and sustainable communities able to address societal challenges.

The arguments here are based on a literature review on different issues that brings the concept of a Smart Cities back to networks (of people, architectures, tools and programmes). It is a contribution to the debate on building a political community – one able to take the stake towards a digital-driven society. We conclude that an essential and indispensable agent to trace a solution for Smart Cities as a participatory environment will be the *archontes* of the archive, i.e., its digital curators. Digital curators will transform the archive from inside, from analog to digital, operating combinatory possibilities of media, assuring its inter-operability, and leading others to participate in the construction and dissemination of the archive – and hence of the cities to come. The basis of shifts and formulation of material solutions in DIY

is the re-reading of the common heritage – human, technical and natural. It is an aesthetic affection that underlies the consummation of collective identity and common memory. And as Smaniotto et al. (2019) pose, in urban development, engaging citizens, particularly in the production of public open spaces, play an important role for urban sustainability and resilience. Improving public participation in planning and decision-making practices, encourages citizen's stewardship.

A Smart City is not a radical new idea since it builds on long established planning principles. New could be if it uses these principles to promote and achieve a bottomup, inclusive and participatory framework. It could propose an alternative way to think about networks and resources allocation, embedded in a space-community interplay.

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