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The Image of the Smart City: New Challenges

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Abstract: The image of the Smart City recalls Lynch's "Image of the City" (1960) and the ways in which urban spaces are perceived by the community and users. The categories presented there hold a physical, tangible component, related to the spatial and material aspects of the city. Talking about Smart Cities, a little formulated and tackled question refers to what the image of the Smart City is, and how it is possible to represent it. The debate on the Smart City regards mainly the digital component and technological aspects, often not visible or perceivable, neglecting the more humanistic aspects and implications. We carry on a reflection on the "image of the smart city". We propose some possible evolutions of the concept and research directions, in light of the new challenges posed by COVID-19 and the pandemic, as well as the need for a more human-centric approach to planning and managing urban areas and human settlements.

Keywords: Smart City; city; urban geography; sustainable development; urban sustainability

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1. Introduction

The aim of the paper is a reflection on today's meaning and representation of the Smart City. The starting point is its visualization and representation, for proposing a framework for comparing both the evolution of the concept, and also trying a possible categorization of the different Smart City models so far encountered during nearly two decades of talks, modelling, policies, and applications to the urban environment.

The research aims at categorizing, in time and space, the different stages of evolution of the Smart City. This is put it into a framework of a model capable of meeting the needs of different cities around the world, but allowing, at the same time, to understand if, and what of, the different "models" could be more or less suitable for a certain urban context. In doing so, we also consider an evolutionary approach from a merely technological to a more human and humanistic city.

1.1. Images of the Smart Cities

The image of the city was first introduced by Kevin Lynch in 1960 [1], and referred to the ways in which urban space is perceived by their users, and how these acts are based on mental maps, whose elements can be put into well-defined categories: paths, nodes, edges, districts, and landmarks. Such categories, needed to drive those who live and move into the city, hold a physical and material component, strictly related to the spatiality of the city. The physical form of the city, therefore, could evoke images in citizens and city users, defined as "imageability", allowing the formation of security and intensity in the relations among the people and the city itself [2,3]. The work by Lynch led researchers and scholars to reflect and debate on these categories, and explore their validity and sustainability through time. The theory was widely studied in urban planning and geography, together with other social sciences, with several studies focusing on the different aspects of the methods originally adopted, and on the main elements of classification of the images themselves [4–7].

The digital revolution, particularly the more recent one coming out from the widespread development of ICT-affected urban environments, contributed to new suggestions and opportunities for a change in the images of the city, and on the ways to evaluate and interpret it, thanks to the widespread use of social networks and media, as well as mobile phones and related apps. That also opened a wide set of applications of methods for analyzing the image of the city, as well as identifying its constituting elements [8–11].

Talking about the Smart City, an often underestimated question could be: what is the image of the city, and how can we represent it? Research on a popular search engine (Google) on the "images" of the Smart City gave a set of results where a real, tangible city cannot be seen. The search provides, as results, images of all kinds. There is generally a city, made of tall skyscrapers and wide road avenues, with several icons, symbols, and signs added, as well as Wi-Fi symbols, lines connecting dots to recall wires, connections between different digital nodes on communication networks (Figure 1).

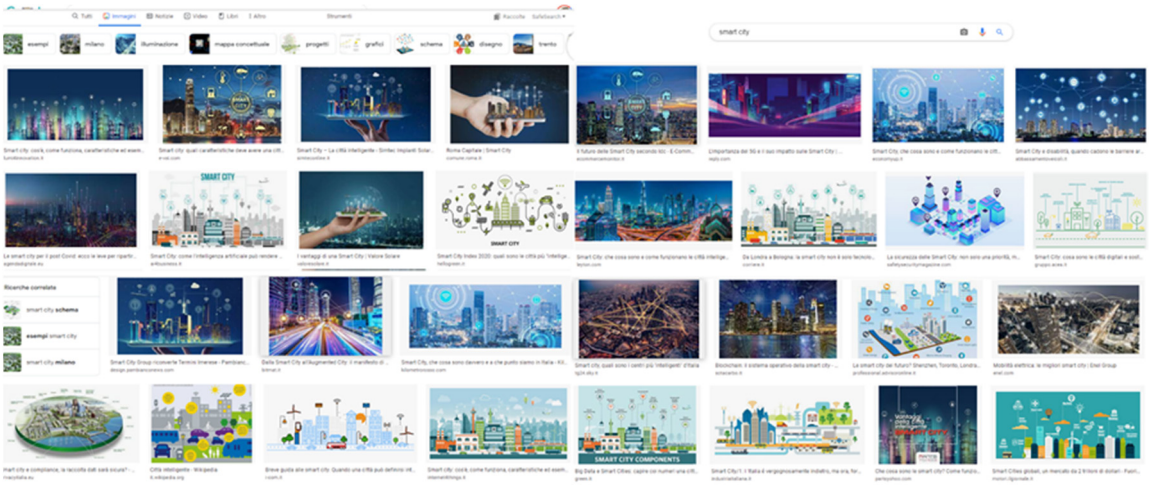

Figure 1. The "images" of a Smart City. Source: Google, accessed on 8 January 2022.

Such an apparently trivial consideration is central in interpreting and understanding the complexity of the Smart City, given the difficulty in visualizing and representing it. There is not a way to see and properly represent it. A building and a street can be visualized, walked, touched, and crossed, which is impossible for the "smartness" of a building or of a road. The Ideal City of the Renaissance was visible, although idealized, and could be imagined, represented, planned, partly built, and lived in. The Smart City today is immaterial; it recalls the ICT (Information and Communication Technologies) that are generally very small or hidden, and visible only in their more technical aspects, such as the mobile phone and Wi-Fi network receivers, routers, or antennas, and the smart devices (smartphones and tablets). Also, and maybe mainly, from the political point of view, it is something that cannot be easily proposed and "sold" to the population and electors, if not in terms of the physical, network infrastructure hardware or in the soft component software. It is in fact particularly difficult to communicate something "smart", as there is generally very little to communicate or inaugurate. According to various observers, the Smart City is essentially the last utopia of the 21st century [12,13]. Furthermore, it is evident that the Smart City is not a well-defined concept, as it can be associated with a large number of different interpretations, ideas, visions, and projects [14].

Also, for this reason, the Smart City is difficult to interpret for a political decision-maker. Furthermore, the main technological aspects proposed by Smart City hardware (optical fiber, Wi-Fi, 5G, smartphones, apps) shift the attention towards intangible components of the city characterized by rapid obsolescence.

The Smart City therefore seems to be turning in this direction, effectively excluding a part of the population that does not have access to such technologies: a digital divide, even during the pandemic [15–17]. In other words, although the term Smart City is widely used

today [18–20], still no full light has been shed on its full meaning, and different research contributions were realized on the topic [21–23]. We can certainly state that the Smart City is the outcome of an evolution of the thought and reasoning of the city with reference to sustainability, civic participation, and the rapid evolution of technology (Digital City, Computable City and Virtual City) [24,25], whereas recently, the debate moved towards more humanistic and naturalistic views [22,26].

The Smart City, at present, should be a city that tackles the needs of its citizens and city-users, without focusing on their technological skills or devices. It should provide solutions through technological infrastructure and devices, such as smartphones and apps, now widely used, but the true change consists of putting the ICT-related procedure "under the bonnet" and embedded into the processes, and therefore not necessarily visible and detectable by the single citizen. The term therefore evolved in time from more purely digital aspects to wider ones (Table 1).

Table 1. Evolution of the concept of Smart City. Authors: Borruso G. and Balletto G., 2021. Source: Original elaboration by authors, inspired by ABB and TEH—Ambrosetti, 2012 [27].

Years	Concept of Smart City	Focus
Early 2000	Digital City	Hardware
Mid 2000	Socially Inclusive City	Software
2010	Quality of Living City	Hardware/Software
From 2020	Health and Sustainability City	Orgware

1.2. Building Blocks of the Smart Cities

This is the result of the New Economy's short-term memory and separation from the administrative processes, focused, instead, on the uses and applications. The New Economy has been using, from the beginning, new technologies, but not always resulting from real needs and potentials. This accelerates the aging of new technologies, which already present such character. Furthermore, the New Economy accelerated the process of internationalization of economic systems up to configuring the well-known globalization, reducing distances and times of the production, economic, and social processes [28].

In such a framework, the organization of the city, and, in particular, that of metropolitan cities and their related production systems, are reorganized in the direction of new long- and short-range networks and hierarchies of nodes, towards the extreme configuration of the City–State completion [29]. Furthermore, the knowledge and availability of information represent the raw materials from which the urban and its territorial renewals are formed. If, in the past, the raw materials were from mines and quarries [30], today, the raw materials derive from data mines, favoring the creation of economic opportunities such as the circular economy [31]; and help solve complex public problems, improve governance, and empower citizens [32,33]. In this synthetic framework, the goal is conceptual understanding through a comparative synthesis of the Smart City and its image through the main typologies and geographical contexts to evaluate future trends.

The rest of the paper is organized as follows. Section 2 presents the Materials and Methods, organized in subsections dealing with *Smart City and Smart Cities; Blueprint-Greenfield City; Brownfield City; and Blueprint-Brownfield City.* Section 3 describes the Italian Smart Cities: A Problem of Definition. Section 4 describes Smart Cities and Emergencies; Some Reflections; and Research Suggestions. Discussions: Challenges and Proposals are tackled in Section 5; whereas Section 6 contains the Conclusions.

2. Materials and Methods

In this section, our aim is the systematization of different "images" and "models" of the Smart City, envisioning the different characteristics that, in time and space, developed with reference to the different evolutions of the concept. After the observation in the previous paragraph on the evolutions of the Smart City from the technological, towards the

human and humanistic point of view, we propose a framework for categorizing the different ongoing processes involving the transformation of the cities towards a "Smart" framework.

2.1. Smart City and Smart Cities

The Smart City cannot be a unique concept, as there is not a single Smart City model, but several Smart Cities, with these considering different flavors of the same inspiring idea, that of an ICT city meeting the users' needs, respecting environmental issues.

The most recent evolutions of the Smart City concept [34] have highlighted the importance of the soft components, as well as the hard components of the city, that is the connections between citizens, and between citizens and the city itself. The Smart City is indeed a technological city, but it is a city offering services and solutions to its citizens and users [35]. In other words, the Smart City arises from the need to govern the progress of urbanization processes, which will grow differently in different countries.

In particular, Western cities have longer processes of adaptation and growth. Eastern cities, newly industrialized, are those where changes are expected to be faster and more radical [36], as well as needing the most important and striking investments and interventions. This also translates into different interpretations and applications of the concept of Smart City in the different territorial contexts worldwide, connected to different ways of planning and financing initiatives, interventions in decision-making processes, and political systems. Current Western cities, in fact, are the outcome of a long process of growth with different moments of acceleration, i.e., the industrial revolutions or the post-war reconstruction periods generally face growth in terms of population and built infrastructure buildings and utilities. On the other side, among the issues related to a rapid urbanization, as Southeastern Asian, South American, and African cities have been experimenting in the recent decades, there is that of an urban growth, in terms of population and buildings, not always coupled with the necessary set of utilities, the latter of which including ICT ones.

2.2. The Smart City Models According to the Urban Transformations: A Proposal

It is possible to summarize different models of the Smart City according to the different characters of the project itself, rather than considering the different lands where a Smart City is developed and implemented. In doing so, there is a need to define, preliminarily, some basic ideas behind the proposed scheme of classification.

Smart Cities are often developed as a blueprint, as projects coming from private or private–public partnership for either brand new development of urban land, or from the conversion of already existing land previously dedicated to other uses, such as industrial or manufacturing activities, or services, such as retail and logistics.

In some cases, "smart" cities are not based on blueprints, but from bottom-up approaches, such as tactical urbanism or other user-generated initiatives, not necessarily implying a structured and highly funded project behind.

With reference to the quality of land involved, greenfield areas can be considered. In this case, a free area is used to realize a brand-new project from the beginning, without previous use. This is the easier and often less expensive solution, although the more land-taking one.

More frequently, a Smart City project implies the conversion of a previously used set of parcels of land for industrial or services usage. In the former case, the term brownfield is used, whereas in the latter, less frequently considered up to the present time, but with a high probability of growing, this is considered as greyfield. Some possible combinations of land can be considered for the implementation of Smart City projects.

Furthermore, with the Smart city, mainly in Europe, thanks to ICT, transparency in the dynamics of governance has begun, as well as in the quality of public and social services, and citizen participation in the decision-making phase (participation in public life: from top down to top down/bottom up) [17]. (Table 2).

Table 2. Synthetic comparison of the Smart City concepts (Authors: Borruso G. and Balletto G, 2021).

Smart City	Blueprint-Greenfield	Brownfield	Blueprint-Brownfield
Characteristics	City was born from a real estate project, often on a private initiative, with strong support from the central/local government. ICT infrastructures, new materials, and energy are designed right from the construction of new cities	City of old origin, with an ancient urban layout and with few possibilities for new infrastructures. Smart interventions concern the creation of ICT infrastructures and services. There are often initiatives of local Smart Communities for urban reuse, even temporary and low cost	It can involve new cities or cities with an old system, through the construction of new neighborhoods, or through the massive redevelopment of existing, "smart", project-based neighborhoods, with heavy investments by private initiatives, and in concert with the local government
Participation	Top Down	Top Down/Bottom Up	Top Down/Bottom Up
Geographical contexts	Newly industrialized countries (e.g., Saudi Arabia, United Arab Emirates, South Korea)	Industrialized countries (e.g., USA, Europe)	Industrialized countries (e.g., Canada, USA, Europe)
Examples	Neom (Saudi Arabia), Masdar (United Arab Emirates), Songdo	London (UK), Amsterdam (Netherlands), Copenhagen (Denmark), Milan (Italy)	Toronto—Quayside (Canada), Milan—City Life (Italy)

In general terms, before going into the details of the different models, there is the need to clarify the role of participation. Planning, in its more recent flavors, implies, generally, the public participation during the different stages of its evolution.

However, the overall push given by ICT, particularly in implementing social networks, allowed a wide majority of people to interact and take part in the social, economic, and planning life of cities, which also implies a different way of perceiving and fostering the projects involving cities and their transformation.

The different models observed, of course, imply different ways of participation, from the top-down, generally typical of grand investment projects, to the bottom up, in which local communities are promoters, or at least widely involved, in local projects, implying an important transformation of their local urban environment.

2.2.1. Blueprint-Greenfield City

The city of Neom (Saudi Arabia) [37] is probably the symbol of this kind of Smart City [38]. The storytelling of this city is quite interesting. It moved from an impressive image of an empty shore on the Red Sea, the to-be location of future Neom, a city not yet existing, to its transformation into "The Line", a linear city that stretches for 170 km, to represent a set of planned settlements linked together crossing Saudi Arabia towards the Red Sea. Environmental sustainability, energy saving, quality of life, and business appear to be the keywords of what the Arab Emirates plan to build on the Red Sea. A big investment to move from an economy based on fossil fuels to one based on renewable energies, they have decided to design a new city from scratch, a Smart City, which will make use of advanced technologies, with the idea of being Smart, starting with its design. The process is similar to the initiatives of private property developers who sell "climate houses", or home automation, designed from the outset to be "Smart", to be ecologically compatible. "The Line" is the latest example of other cities following the same principle: public initiative and strong private investment (e.g., Ordos (Mongolia), Songdo City (Incheon Soul, South Korea), Masdar (United Arab Emirates). They are the disruptive (and overbearing) proposals that derive from those countries, from those forces that have the desire, the economic power, and political-decision-making will to realize them. The citizen is missing here. Cities are not only made up of buildings and infrastructure, but also of individuals, relationships, interactions between individuals, and between individuals and cities. However, the Smart City thus considered is a city that can represent the "grandeur" of a country. As is often the case, the "blueprint" projects start having in mind the latest technologies of the moment,

which rapidly grow old. Songdo (South Korea) is an example, with buildings planned with smart-card access in mind, without foreseeing the disruptive impact of smartphones in managing most of the ICT functions [39].

2.2.2. Brownfield City

A second category is that of the Brownfield City, an area in a town or city that has been used in the past for factories or offices, and that could now be used for new building development. With reference to European cities, examples are: Amsterdam, Copenhagen, London, and Milan. Projects related to "intelligence" can be dedicated to solutions to solve real and effective problems of cities, such as those of urban sustainability. The issue is that such cities are older, and we are not facing a "blank sheet" or a beach from which to start building a city from scratch. There are infrastructural and physical constraints of an existing productive and population fabric that must be considered, and major investments on new areas are difficult to implement.

Here, ICT technologies, in some cases, have made possible some solutions that, until recently, were unthinkable, i.e., Uber, Flixbus, and AirBnB would not have been possible without ICT evolutions, and "smart" solutions have been realized with infrastructural investments, i.e., city Wi-Fi and more traditional policies. As a matter of example, London and Milan congestion charges allowed the development of car and bike sharing that has no equal in other Italian cities, and even these initiatives were made possible by the technological revolution of apps and of smartphones. A Brownfield City can be considered as a stage of further evolutions towards the Blueprint-Brownfield city, where portions of the city can be regenerated from scratch.

2.2.3. Blueprint-Brownfield City

A third category is that of the Blueprint-Brownfield City, where an existing, well-established city is regenerated in new areas thanks to the deep reconversion of previously industrial (or retail) locations as new areas of "smart" redevelopment. Such areas become "cities within cities". They present a consolidated urban layout, in which urban redevelopment or construction of new neighborhoods are designed in a "smart" logic, with large investments in technology and innovative solutions, e.g., Milan-Citylife, and Toronto-Sidewalk, the Alphabet-Google project to create a "Smart" neighborhood in Toronto.The latter project is emblematic of the clash between top of private and public initiative down, and bottom up of citizens' initiative approaches [40]. Currently, the Sidewalk project has been frozen due to the contrary pressure coming from the citizens of Toronto. An important element refers to the cities and the emergencies they are called to face.

The element that makes this reflection more relevant than ever is the recent COVID-19 pandemic [41–45].

From the brief description of the three categories emerges the continuous need for an "ideal city" according to the ancient model of Leonardo Da Vinci [46], where the most advanced technologies of the time were used to solve the problems of water separation and mobility. The issues of the supply of goods, mobility, water supply for domestic use, and that of waste water management are topical. Always about water in response to shock (climate change and catastrophic events), the architects of the Bjarke Ingels Group speak with the Humanhattan 2050 (Figure 2).

Furthermore, after Hurricane Sandy, which brought New York City to its knees, the reflection is on the containment and resilience of the city towards climate change. In this context, the project envisages the construction of "drowned" barriers in urban leisure structures parks, gardens, public spaces combined with a soft, coastal, tree-lined, and floodable part of the city, with a dual purpose. In normal situations, the spaces are open to the use of citizens, increasing the usability of the city; in emergency situations, the barriers intervene and temporarily sacrifice green areas, those most capable, at the end of the crisis, of being restored.

Figure 2. Left: Humanhattan 2050, by Bjarke Ingels Group, photo: Borruso G, "Biennale", Venezia, 2018. **Right**: Leonardo, mockup of a "Città ideale" (Ideal City), photo: Borruso G, Trieste, 2019.

3. Italian Smart Cities: A Problem of Definition

What is the situation of Smart Cities in Italy? What are the cities we can define as "Smart"? This question is certainly not easy to answer, even if, in this paragraph, we will try to provide some ideas. Scholars put the attention on different aspects of the city, from their representation and image [47,48], to the critical aspects raised by the Smart City itself [49,50], to the issues of planning [51,52]. With the historical conformation of the Italian urban texture, it is difficult to think of "dream" cities born from the Blueprint project, and the infrastructural heritage of the built environment and spaces of the existing cities need to be considered [53,54]. Rather, it is easier to encounter a Brownfield context or a mixed Blueprint-Brownfield context from a Smart perspective, or to intervene from scratch in new neighborhoods, born from the project or from the conversion of areas previously intended for different functions. Such projects and initiatives often suffer from a very strong influence of the private component at the level of investments, and therefore of "orientation" in the political–urban planning choices of the city towards technological solutions [23,24]. Furthermore, public–private partnerships linked to Smart Cities are often closely linked to technological components, and poorly integrated with urban policies [25,26]. From the point of view of the denomination, there are many cities that refer to the "Smart City" label within their organization, and with reference to the projects explicitly funded on this item. Furthermore, as often happens, different rankings attribute different weights to different indicators. Among the rankings, the ANCI "Urban Agenda" portal provided updated information on Smart Cities and related projects in Italian cities (the portal has no longer been operational since 2019). In 2021, for the ICity Rank of ForumPA [55], Florence was confirmed as the most digital capital of Italy for the second consecutive year, followed by Milan (in second place) and Bologna (in third), with Roma Capital City, Modena, Bergamo (on a par with fourth place), Turin, Trento, Cagliari, and Parma to close the top ten. Other rankings, such as that of Ernst and Young [56], place Trento at the top of the Smart Cities, and the cities of Turin, Bologna, Mantua, Milan, and Bolzano (respectively, in 2nd, 3rd, 4th, and 5th place) according to the related Smart City Index. Without going into the details of the different rankings, we can identify some elements that recur and unite these cities: belonging to a metropolitan dimension, or, usually, an average urban dimension and a location in the North or Center-North, part of the old or better, new industrial triangle. In urban contexts, economic development seems to be combined with the "technological" sustainability demands of the Smart City, and in the various aspects of the six dimensions of "smartness" [57–60]. In particular, the metropolitan dimensions, not only administrative, but functional, of some urban contexts can allow governance and development actions of new solutions and real markets linked to innovative aspects. The urban reconversion of "Citylife"-type areas, as far as it concerns large conversion projects, as well as the development of services based on technological innovation, find an adequate scope of application.

4. Smart Cities and Emergencies: Some Reflections and Research Suggestions

The health emergency that emerged with COVID-19 has highlighted how the Smart City model refers to constant growth scenarios. The shock, or rather the stop, imposed by the international health emergency exposed urban vulnerability in many of its primary services: health, education, and mobility. COVID-19 has, in fact, imposed two different speeds on citizens, businesses, and public administrations. If, in the personal sphere, it forced us to follow a slower pace, making us give up part of the hectic activities we were used to, in the social and collective sphere, on the contrary, it pushed the accelerator of digital transformation processes and the adoption of new technologies and IoT devices (Internet of Things). There has been a push forward towards safe, efficient, sustainable city models, but it is still unclear whether they are citizen-friendly. In particular, starting from the six Smart dimensions of the Smart City [61], the economy (Smart Economy) is, increasingly, centered on technological innovation in order to restart. Smart People are increasingly involved in the choices of the community thanks to new communication tools. In addition, the Administration (Smart Governance) pushes to improve remote and digital services; more intelligent and sustainable mobility (Smart Mobility) (in the post-COVID-19 phase, with electric mobility and the use of bicycles); the environment and sustainable development (Smart Environment). In this framework, the material part of the city intersects: that of the consolidated historical city and the suburbs; and that of the regulatory instruments, referring to a past time, and where there is no flexibility necessary for the post-pandemic city. For example, how should a city respond to the conflicting objectives of regulating the use of scooters and services such as Uber and Lyft? Hence, there is a frantic search for real-time data to encourage flexibility and mobility emerging in a new regulatory framework between user needs and safety, not just health. The legislative process of the many emerging forms of mobility is long and inherently slow.

Many innovative solutions bring unknown advantages and risks; therefore, writing legislative rules is already a task full of pitfalls, which clashes with a previous and complex regulatory system that, in recent years, has been amplified by as many and numerous European directives. Without the infrastructures (in this case, telecommunications), various activities could not have been established, such as: online shopping, call conferences, smart working, remote lessons, telemedicine, etc., which respond to the need for flexibility of work, no longer distinct as an activity limited in time and space. It is not clear whether this is the cause or effect of the limited welfare policies, which change significantly from country to country, helping to give a more or less complete meaning to the suffix Smart placed in front of "work".

The techno-digital revolution, similar to the electric revolution, has led to a wide availability of devices, data connections, and the opportunity to connect them together, developing applications with high added value: able, on the one hand, to improve the quality of urban life, but also to interfere in privacy and personal spaces. In fact, with the increase in life expectancy, especially that in Italian metropolitan cities, there has not been an equally increasing individual and collective quality of life. Will the new technologies save the cities of the future? Also, it is worth mentioning 5G and artificial intelligence founded by Big-Data. In this sense, Big-Data emerges as a great contribution towards sustainability: they are necessary, but not sufficient for the cities of the future, which are now designed as large hyper-connected ecosystems, equipped with sensors and other devices capable of collecting and processing large amounts of data.

5. Discussions: Challenges and Proposals

What is the post-pandemic Smart City, and what are its challenges? The pandemic crisis from COVID-19 proceeds in successive waves, and there has been a use of drastic actions to limit mobility and life and social interactions, especially urban ones. During the so-called "lockdown", the scientific, as well as journalistic, debate on the Smart City has almost disappeared, replaced, instead referring to the city, to the challenges posed in terms of "survival of the city", in a hypothesized world made of teleworking, and/or

smart working, reduction of social interactions, and, therefore, a possible "return to the countryside" [62].

With the debate on the Smart City, attention has shifted to the "hard" elements (infrastructural, such as the network, hot-spots, etc.) and "soft" (social networks, apps, etc.), and the same "apps" were seen as the way to solve the problems of cities. Trust in apps shifted attention to the tool, without reflecting on the series of processes downstream of the same IT applications. At present, some technological solutions have undoubtedly made life easier for citizens, thanks to the use of technologies related to ICT, hard and soft. These span from apps to platforms for e-commerce, which have represented the main methods of connection, as well as access to information, and methods of educational, work, and cultural interaction, from March 2020, the starting period of the pandemic-related restriction policies and actions. This represents the positive and sparkling aspect of "smartness" and the Smart City combined with the apparent positive effect of reducing pollution [63], restocking vegetable and animal life in cities, and a slower lifestyle. What are the challenges? Which elements of the Smart City, or rather, of the city, should be investigated in this key in the most immediate future? Connection is a metaphor for division mending. In terms of the Digital Divide, e-learning and smart working have highlighted the need for a network, public or private, reliable and fast. Townsend [64] highlighted how different cities, in the US' case, had opted for public city Wi-Fi or private mobile phone operator investments. In the current Smart City, this element should be rethought and evaluated. Furthermore, it is also evident that there is a difference between center-periphery characterized by different access speeds. Another aspect is related to connection and social characteristics [64].

The Digital Divide is a metaphor for access and social divide. In a world where access to technologies is "equal for all" (reduced connection costs), however, the transition to the virtual world remains a luxury for the benefit of a few, more than for access to technology itself, for cultural and economic possibilities on the part of some to dedicate time and resources to these tools. As an example, e-learning, where it works, required a large organizational effort from families, not always possible for all workers. Another important aspect is related to commercial distribution at the urban level. Here too, the use of suppliers that, without the development of ICT, would not have been successful, i.e., Amazon, JustEat, Deliveroo, etc., especially during the lockdown period, has accentuated the mobility of goods, of various sizes, but, above all, small ones, in a widespread way in the cities. The challenge of urban logistics is very strongly linked to the need to think about urban spaces precisely linked to the different ways of experiencing mobility, of people, but also of goods. Among the primary challenges of the Smart City, are the real networking and system of support modalities for the health sector based on ICT. Where possible, "at home" care and support systems can be implemented starting from existing situations, effectively developing the apparently hidden application of the Smart City to support the quality of life of the citizens. Thus, there is the double advantage of reducing the stress of health structures, with consequent reduction of the risk of crowding, as well as that of spending a period of hospitalization in a family structure, such as one's own home.

6. Conclusions

Main findings: The Smart City question is open, and probably, at present, it has reached a turning point in which a reflection on the city, more generally, is required. The recent pandemic, in fact, has almost eliminated the debate and reflection on the Smart City. That was the case particularly during the most striking and exceptional period of the lockdowns implemented in most of the countries of the world, during the first half of the year 2020. In such a period, "true" Smart City solutions could have helped in tackling many aspects of the pandemic, i.e., tracking and tracing of positive cases, better geo-localized services for isolated people, etc.

Comparison with previous studies and existing literature: Still, the debate restarted in more recent times, particularly on the more technological aspects, and related to the influence of ICT, although there is a convergence in the belief that cities will be able to

go out and resist this epochal event [42,59,62–68]. In fact, in the governance of the Smart City, precisely because of its prevalent techno-digital component, the tools often make a leap of species, and become objectives per se, fueling a distorted approach to urban processes focusing more on tools and indicators rather than on the issues they are intended to tackle and monitor. Furthermore, Smart Governance was the major absentee during the epidemic, and shows no particular momentum in this current phase. The simplification and streamlining of procedures are not enough; it is in fact necessary to seriously review the government of territories and their programs, the mechanisms of the projects and related processes, and to evolve towards new forms of partnership. In this sense, the epidemic is an important reminder in respecting and adopting the objectives of the 2030 agenda, and, despite the economic concerns, the dynamic spirit of the city is reflected in the development of creative ideas, the ecological engine of the necessary change towards resilient cities [67].

Implications and recommendations: A holistic vision of urban processes and phenomena based on interdisciplinary reciprocity relationships is therefore necessary and, given the complexity to be governed, the multiple images of the Smart City [12,13] "without a place" will be able to evolve towards places for prosperous coexistence [68].

Study limitations: The research we hereby propose is still ongoing, and there is the need to integrate the analysis with further research on the applications from the political, technological, and research points of view to the different urban cases around the world, also considering the "pandemic break" that actually slowed down many projects and reflections on Smart Cities. There will be the need to investigate how, and in which terms, the Smart City will coexist with other emerging concepts, such as the 15-min City, the Post-pandemic City, and the Augmented City [69], and, furthermore, if a model capable of incorporating these latter evolutions could be proposed.

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