Chapter 1
Looking at Smart Cities with an Historical Perspective

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1.1   Smart or Dumb, What Is a City?

The concept of "smart city" is often used implying that the reader has a clear and common notion of what it means. However, in the current literature it is very hard to find a precise definition. What is even more interesting, it is not so easy to find a precise definition of what a city is.

In France, the French National Institute for Statistics and Economic Research (INSEE) uses as a criterion the number of inhabitants: a City is an agglomeration of 2000 or more people. As all arbitrary numbers, this one is not exempt by critics, as just a growing number of inhabitants allow to pass from rural to urban zone, while they are clearly two different realities. Furthermore, every country has different limits: while in Denmark, for instance, an agglomeration of 250 people is enough, in Egypt we need 11,000 people, while in Japan 30,000. In the United States the number set is 2500. The United Kingdom has a different way to define a settlement in a city: only the King (or Queen) has this power, and the appellation is given without a specific criterion, although usually it matches the diocesan cathedrals.

In some cases a different concept is used. The definition of urban unity is based on the habitat continuum, not more than 200 m between 2 constructions and at least 2000 inhabitants.

The definition of Urban or Industrial Zones respond to a deeper concept that takes into consideration the level of daily migration between workplace and home, the percentage of the population not involved in agricultural work and the number and size of industrial, commercial, and administrative buildings. The dynamics of these spaces is linked to the proximity of one or more urban areas.

It is possible to notice, therefore, that the notion of city itself does not have a unique administrative definition. Furthermore, the concept of city goes beyond its

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mere administrative domains, and evokes a way of living which is typical of a certain amount of population living in close proximity. We would then use the adjective *urban* rather than the word *city* in order to avoid the administrative definitions and rather concentrate on the lifestyle and way of living typical of a large number of people living in proximity. In this context, urban refers not only to the mere administrative facts but, more important, to a specific culture and mentality.

1.1.1 City Growth

The urban population is growing constantly. Looking at simple numbers [1], it's easy to get convinced and to understand the amplitude of the phenomenon. In 1960, the population living in cities was around 1 billion; in 1986, it doubled, and in 2005 was 3.2 billions. The increment of urban population is growing constantly, and constantly quicker. Following this pattern, our planet will see in 2030 5 billion urban people, leaving rural areas more and more inhabited, as the world population growth is estimated around 1 % per year, while the urban population is growing at a rate of 1.8 %.

According to UN data, the percentage of population living in urban environments cross the 50 % in 2007. It is interesting to notice that the strongest part in this evolution will happen in the regions of the world which are currently underdeveloped. Within these zones, in 1975 there were 815 urban areas, while in 2005 the number grew to 2252. In the same time period, in the more developed areas, the growth has been limited (from 701 to 898). In percentage, we have 2.2 yearly for the first ones and 0.5 for the second one.

1.1.2 European Trends

In Europe, the urbanization trend is very important: more than 75 % of the global population lives in towns, using 80 % of resources and contributing 85 % to the European GDP. Demographically speaking, when we refer to Europe as the old continent, we can see that the expression is rather correct: in 2009, the median age of the population was 40.6 years, and forecasts show that it should reach 47.9 in 2060.

From a macro-economic point of view, the EU 28 region is the world first economic power. The GDP of EU countries generated more than 16 Trillions USD in 2008, with an average GDP per person above 30,000 USD. However, these indicators hide huge disparities. The GDP can vary by one order of magnitude, between Estonia and Germany for instance. Differences between EU countries can be found at any level of economic dimensions, from unemployment rate to public deficit or inflation rate.

Growth of the European population (in the EU 27 countries) grew by 100 million, from 400 to 500 million, between 1960 until 2009. Until the eighties, the demographic growth was mainly due to the rate of natural increase. However, the ratio is constantly decreasing since the 1960s, and the lowering birth rate and increasing life expectancy will directly translate into a sensible increase of the average age of the population. It is possible to observe, though, that starting from the nineties, international migrations became the main cause of population growth. This factor can be a solution against the average aging, with particular regards to issues related to the workforce, as most migrants are young adults. In 2010, 9.4 % of the population living in the EU was born outside Europe, and by 2060 it is expected that at least one third of the EU population will have an ancestor born outside Europe, while an even bigger percentage will constitute the active part of the society. While the 2015 migrant crisis showed that the EU countries are still struggling to integrate important migratory trends, demographic shows that the smooth integration into the workforce is likely to be the only viable solution to keep a certain level of prosperity and social benefits.

1.2 Different Theories on Smart Cities

> The European cities are all different; but they are facing similar challenges and are looking for shared solutions [2].

A domain where the research is particularly active during this past few years is at the crossing between technology and society. The current world situation calls for a progressive but radical change. This evolution has been smoothen by the policies of the European Union, but today we see a quick acceleration of tis trend because of economical and environmental concerns. Therefore, the future of our towns is dependent to the way we will manage to work out the economical, social, and environmental developments in synergy.

Within this context, it seems interesting to state the ambitions of the EU for the coming decade. The strategy called "Europe 2020 [3]" aims to revive the economy and is the development of a smart, sustainable and inclusive growth. These priorities, which are mutually reinforcing, must allow to the Union and its Member States to ensure high levels of employment, productivity and social cohesion. This should happen by relying on greater coordination between national and european policies. In other words, each Member State will be required to follow the European directives and support the common objectives through an harmonization of local legislation. Given the growing euro-skepticism, the adoption of common policies by member states might not be obvious.

The main actions are the following:

- Smart growth, developing an economy based on knowledge and innovation. Between now and 2020, an estimated 16 million more jobs will need a high level

of qualification, while the low-skilled asset demand is expected to fall by 12 million. The improvement of the initial training is paramount—as well as the means to acquire and develop new skills during a career.

- Sustainable growth, which promotes a better efficiency energetics as well as a greener and more competitive economy.
- Inclusive growth, which supports high employment rate and a strong social and territorial cohesion.

  The targets for 2020 are

- Three quarters (75 %) of the population between 20 and 64 years should be employed, (the average of the EU 27 is now 69 %).
- Reduce the poverty rate of 25 %, which means 20 million people out of poverty.
- Reduce to less than 10 % the population between 18 and 24 years leaving school without a diploma, and raise to at least 40 % the percentage of the population between 30 and 34 year with an higher degree.
- 3 % of European GDP invested in Research and Development, combining private and public sectors, which is a point higher than the current rate (compared to 2.6 % of GDP invested in R&D in the USA and 3.4 % in Japan).
- objective "20/20/20" climate change, a 20 % reduction of greenhouse gas emissions, compared to 1990 levels, raising 20 % the energy efficiency and reach 20 % of energy production through renewable sources.

  All these measures should allow the creation of 1 million jobs in Europe. These objectives are linked and, at least theoretically, they are reinforcing each other. Progress in education matters will improve the capabilities of the labor pool, reducing the risk of impoverishment. On top of it, the increase in the average skill level will fuel the growth of a knowledge economy based on innovation, research and development. The European economy will have the chance of improving its competitiveness, creating wealth and jobs, closing a virtuous circle—at least, on paper. Furthermore, all these improvements will bring the opportunity to develop a fully "green economy," making our societies more environmental-friendly, and therefore more profitable, as the side effects of a development not following environmentally sustainable practices are likely to result in very expensive containment measures.

  One of the themes which is common to all these dimensions is technology. Much of the progress made in the recent past in the field of Information Technology and Communication (ICT) allow an holistic design for the city of the future, which is often linked to the concept of Smart City. Within the huge number of essays on this topic a few elements are recurring. They will serve as a basis for identifying key concepts of urban form of the future.

  In general way, the conceptualization of Smart Cities follows from what we explained earlier on. The economic and technological changes that relate to globalization constitute the fabric of this domain. Cities find themselves facing the need to combine economic competitiveness and urban development, in a sustainable manner and style, preserving—or by creating—an outstanding quality of life. The concept of Smart City brings together all major current concerns.
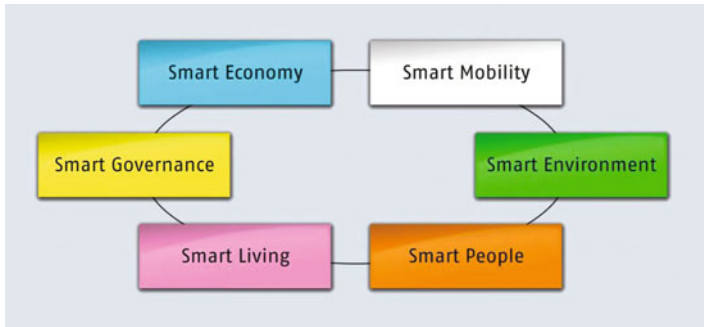
Fig. 1.1 The 6 characteristics of a smart city (*Source* european smartcities)

However, there is a specific issue while studying this theme. The literature on this new city concept comes for the most part from engineers or urbanists. In general, for humanities and social sciences this theme does not seem to resonate, and it is not yet a common object of research. As a matter of example, the diagram in Fig. 1.1, quite popular, is from the website "European Smart Cities." The research team was constituted by members of the Regional Centre of Science of the Vienna University of Technology, the Institute for Research on housing and urban mobility of the Technical University of Delft and the Department of Geography of the University of Ljubljana.

The basic model, found in many publications, promote a taxonomy with 6 domains, 31 sub-groups, and 74 indicators.

The result is a rather technocratic vision of the city, which is -at best- hard to apply. While it can represent an idealtypen, it is hard if not impossible to apply in the real world. It is a holistic approach that pretends to understand everything and explain and master everything through a mathematical formula. However, understand and manage are two very different things: although knowledge and reason are the foundation of the modern world since the eighteenth century, this taxonomy goes too far in the direction of the Reason.

Science and its applications are supposed to give The Answer to everything. This assumption might not be fundamentally wrong if science was replaced by knowledge and wisdom; however, it is impossible not to notice the return of a positivist conception with regards to analysis of the world aspects. The point is not to contest the importance that scientific observation and factual analysis can bring; but one thing is to base the reasoning on the facts, one is to develop a research as a disciple of A Comte (1798–1857). It seems like the "hard science," where everything can be quantified, and that define social laws as immutable, is taken as the cornerstone of every discussion and possible development. In this vision, the smart city concept goes between Supreme Theory and Abstracted Empiricism, two derivatives that CW Mills attributed to the sociology of the 1950s. The Supreme theory claims that purely formal studies can provide an analytical framework to the study of society. The abstract empiricism suggests that knowledge production is not based on a

solid methodological basis, but on statistical results or surveys. This conceptual atrophy leads to forget or underestimate fundamental reflections that are sometimes the very essence of the studied object.

A similar density is missing from the concept of smart city itself. The basic model lies on a theoretical vision of the society and its relationships. The characteristics that constitute the smart city essence, according to the model above, are the reflection of what is considered the best in all different domains. However, this vision is clearly biased. In a constructivist paradigm, all social activity—including, obviously, sciences—are elaborated in a particular historical and cultural context. The scientific domain is not a collection of data on real world, which can be applied at any time and anywhere. Rather, it is a discussion built on a certain number of actors (the "scientific community") in a precise historical, technical, political, social, economical moment.

As a consequence, while the scientific origin of a concept is a socially valid assumption, it needs to be put into perspective. We cannot agree more that an absolute relativism, that postulates that all knowledge, scientific or not, has the same level of importance and truth, is truly negative, but we sustain an approach that can keep a different perspective on the same objective data. While the notion itself of smart city is the result of ICT research, based on certain economic assumptions, nothing is stopping from considering human and social sciences to bring a strong contribution to this subject and feed it with a different set of considerations. Understanding the cities of the future with a socio-historical approach will definitely help in fixing some epistemological shortening. This allows, from one side, to define the borders of the current urban shape, on which the future cities will be built. On the other one, to draw attention on the social and logic relationships that are characteristic of the urban way of living. Without the full understanding of these perspective, any theoretical and practical construction in this domain is bound to fail, as it would be a mere exercise of style.

1.3   A Step Back: Urban Sociology

any town is a socio-economic product

Le Corbusier, probably the most influential urbanist and architect in our era, had a very precise mantra. It stated that "the city must allow people to live, to work, to move, and to have fun." While it may sound logical, this urban utopia helped a technocratic vision of the city: very often, the urban space is conceived as a functional organization in which different sectors have specific and complementary functionalities (areas focused on residential, touristic, commerce, industrial …). However, this "clearly defined zone" politics, such as separation between living and working activities, is not always—if not, seldom—a success.

In other words, the peripheral and residential areas of towns are de facto on the outskirts of the economical and social dynamics of cities. What media usually call

"urban violence" has roots in these areas. A good number of social problems are, first of all, spatial problems. Ideally, it would be better to avoid building such areas, that tend to be segregated from the rest. Social integration of a town has to go through a mix of activities and spaces, and therefore be the opposite of Corbusier's functional town. The zoning and independence of areas should be replaced by a more organic vision of quarters where different spaces would be inter-dependent and multifaceted. As Jacques Donzelot [4] says, "that social problems are concentrated in certain parts of the urban fabric prove that there is a problem in the town but not of the town."

In any case, the vision of the "urban issue" as explained above is not new, as the heart of that analysis is based on the wrongdoings of the functional urbanism. Urban issues are linked with the loss of quality life following the submission of the urban fabric to the logic of production.

1.3.1 The Heritage of the Urban Issue

In general, social issues in town are perduring even in our post-industrial economy, not based any longer on production of goods. We have therefore to upgrade the classical urban social issues, linked to the industrial town context. It is though very important to refresh this classical conception before moving beyond it.

Both process of industrialisation and urbanization are to be considered. Western towns are developed around an administrative and commercial center. Max Weber conceptualised in a very clear way the genesis of the urban shape in the western world. According to this german sociologist, the emergence of the urban phenomenon goes hand in hand with the advent of legal rational power, based on a bureaucratic apparel. His taxonomy of towns is based on five factors of urban cohesion.

The first and foremost of these factors is the economy: the heart of towns is the marketplace. A town does not exist if there is not any regular exchange of goods, and those are an essential part of the habitants existence. Weber distinguishes the towns where the production or the usage of goods is paramount; respectively, they base their income on industry on one side, and on services and commercial activities on the other. This distinction today seem anachronistic, as the European economy is mostly post-industrial, and the highest part of the value creation is on activities linked to the tertiary sector and not any longer to the production of goods.

The second factor is the security. Any town, as a marketplace, would be insignificant if it could not assure protection. The ideal kind of transformation of the western town is the "fortress town." This unified continuum of a safe, secure and commercial place guarantees both the commercial and the military peace, which are necessary conditions for the long-lasting of this organizational form.

A third factor is freedom. Weber also believes that the city air makes people free. This freedom is first of all applicable to properties.

The forth point is the brotherhood. Any city inherits from the city state ideal. This has five characteristics: fortifications, market place, a tribunal, specific laws

and associations, allowing an independent administration. Therefore, any citizen is a member of a brotherhood: of place, of right, and of goods.

As a counterpart, the citizen must be able to defend himself from the city, which induced a interdependency between the social layers constituting an urban continuum. This relationship drives a fifth and last factor: the legitimacy conflicts. As the interdependency relation is a necessity for the functioning of the different parts of a city, it can also be a theater for social fights and conflicts, having as a main focus the legitimacy of the power and of the possession of the resources. The management of a city is usually the business of a very small number of elected people. Furthermore, corporations try to claim the legitimacy of their work according to some rationale, more often than not economic.

This is often linked to the fact that the industrialisation process is often the cause of urbanization. The development of large industrial areas brings as a necessity the expansion of the urban population, draining a huge number of the population from rural areas. This massive population increase brought a development of the urban shape, both regarding the density and the space.

The social consequences of this development are a piling up of heterogeneous populations.

The appearance of social issue is natural within this context. The once administrative and market centers became industrial and popular. At the same time, conflicts linked to work conditions and survival are brought into the cities. Social issues became urban issues. Working classes became dangerous classes, and the original urban population, once upon a time composed only by the noble and middle-class, is afraid of this heterogeneity and all the problems they bring. The undesirable effects of this concentration of people started to be perceived; hygiene worries became closely linked to cities. Therefore, the trend at that time was to isolate the working sections of town from the administrative ones and put the workers under the direct control of the patronage.

The transformation of Paris made by Haussmann is a clear example of the above-described trends. The new laying out of the center of Paris bring a specific social, political, hygienic and aesthetic perspective. The objective is to unlock the town and to make it a safer place, through the creation of large boulevards and pushing certain classes outside the center; this is also functional of making the city more monumental, showing a clear representation of the running power.

This logic of moving the working class away from the center of cities had been followed for a long time. After World War 2, the necessity to re-construct cities in Europe fast, in large quantities and in a modern way, in order to have an economy of scale, was paramount. The developments of that era were not only the result of a necessity—the need of housing—with a strong constraint—a fragile economy: they were presented as modern jewels, and meant to unify different social classes. Besides, these new housing were extremely comfortable (in terms of bathrooms, central heating, lifts, ...) in comparison to old buildings.

Yet, very soon it became evident that these kind of habitat had several problems. In 1973, for instance, France stopped all construction of large housing sets, as they were considered far from the expectations of the inhabitants and promoting an active segregation, as this housing complex were build in the outskirts of large towns.

Several researches showed that a relatively heterogeneous population changed within a few years, reducing to a mainly low-income one. This is mainly due to the distance from the urban center and the difficulty of getting there: whoever could, left the suburbia for relocating in a more convenient place, and the low cost of housing drove the ones that could not afford to be in a more central location. When the first issues with unemployment rose, these areas were the worst hit, as the population was composed almost exclusively by low-qualified workers.

Therefore, the majority of urban issues in the western world are linked to this historical trend to separate the different classes, and a fortiori of the segregation that follows.

The concept of "civil society," bearing its own power separated from the state, rises from social movements which are the effect of the tensions due to the separation. The process of industrialization and urbanization led to the creation of "urban society" which, according to H. Lefebvre, draws its essence from key elements of the historic city: the centrality, the public space, the street. Praxis—or practice of the city—that is an effect of it, cannot be assimilated to other perspectives. On the contrary, it takes all these different viewpoints and transforms them all. Through this and the "right to the city," Lefebvre argues that urban society can survive and reverse the industrial era that created it. According to his work, urban planning hides the capitalist strategy in which the user of a city disappears in favor of its market value; the user is therefore marginalized vis-a-vis of a consumer. The mercantile vision, though, would necessarily lead to the extinction of sociability in favor of market exchanges. This eminently political perspective is clear from this text: "[...] We had to denounce urban planning both as a mask and as instrument: mask for the State and political action, instrument of interests hidden in a precise strategy. Urbanism does not seek to shape the space as a work of art, neither for technical reasons. Urbanism shapes a political space" [5].

From a larger perspective, the urban problems covers not only what happens in a city but "a set of actions and situations typical from everyday's life strictly the progress and characteristics of which are depending by the general social organization" [6].

In other words, certain life or social conditions are intrinsically urban. As well, social practices such as the culture or the consumer habits are at least in part explainable by the social position of a person.

Now, how these problems have an impact on the development of new technologies, or, conversely, how the technological development can help in mitigating the outstanding issues that the urbanization is developing since centuries?

1.3.2   Spatial Distances Reflecting Social Differences

The phenomenon described beforehand is not new and even less unheard of. If we go back to feudal times, social and spatial separations are flagrant. The political, economic, administrative, and military kernel is concentrated in the fortress. Around it, there are the market towns which, in exchange for a relative military and merchant peace, can grow and prosper. While this example may seem too distant to be useful, things did not really change in our era. During the industrial revolution, housing estates were carefully built on the margins of bourgeois cities, as mentioned earlier. Today, popular residential areas follow the same spatial logic. Whether we look at ghettos in the US, banlieues in France, favelas in Brazil or periferie in Italy, all countries are facing these social and spatial relegation.

But if the phenomenon is historically and geographically recurrent since centuries, why there is a problem today? The answer is not in the forms of housing in itself, but in the global society in which these forms are realized. Indeed, the polarization of urban housing highlights a first problem of poverty and social exclusion. To avoid getting lost in the maze of a comparative approach that would not bring much to the analysis, we will develop briefly the French case. As already mentioned above, in France urban problems are often related to the theme of the banlieues. These habitat areas usually cover suburban complex and multifaceted realities. We will not focus on the "typical" and recurrent trends, as the goal here is not to make a case study. But in order to draw a general picture, without distorting reality, we need to identify the elements that make these neighborhoods particular spaces. First of all, these are areas of spatial concentration of social inequalities. This goes back to what we have already mentioned on the polarization. Yet, other variables must be added. Apart of the lower income, compared to other neighborhoods, banlieues concentrate a younger than average population. In addition, there are more employees and workers than elsewhere. Finally, the unemployment rate is often higher than the national average. As an added statistical fact, there is a higher presence of immigrants, or people that are culturally and/or by birth foreigners to the perceived French "orthodox values." This series of factors combined are leading to a delicate situation that the French state is struggling to manage. Indeed, it is an aggregation of structural, social, immigration, and urban planning problems, to the point that it became hard to say if it is more a people's problem or a spatial one. Anyway, it is a fact, sadly: the situation is deteriorating. The concentration of social unrest in these places make the ones who can, to leave these neighborhoods, weakening the diversity and its inherent dynamics. According to Pierre Bourdieu, there is a close link between places and social position. "The structure of social space is shown in the most diverse contexts, in the form of spatial oppositions, the living space (or appropriate) working as a kind of spontaneous symbolization of social space" [7].

In any case, this covering by the social to the spatial domain is more or less blurred by an effect of naturalization. In other words, historical and social phenomena can be understood as implicit in the very nature of things. Yet, this physical show of social logics contributes to objectify these struggles among different social groups.

As well, conflicts are often linked to specific places, as different kind of profits are associated with them. These can be about the location (close to scarce goods such as cultural infrastructure, health, education …); position or rank (prestigious address …); occupancy (size of the owned space). The social dimension permeates the relationship with the space. Indeed, possession of capital—economic, cultural, social, or symbolic—determines the ability to dominate and own space, either physically or symbolically.

Moreover, the stakes in terms of location is part of a twofold logic of being close and moving far away. On one side, the search for proximity to rare and desirable goods and services; and secondly with the distancing—or exclusion—of people and unwanted things. Constitution of homogeneous groups based on spatial difference became the norm, helped by the state and its politics.

This segregation is strengthened by a particular phenomenon, that J. Donzelot call "affinity urbanism." First of all, it is possible to observe an increasingly widespread suburbanization. This implies that the city grows outside its historical functional limitations. Second, as individual mobility increases, the link between a territory and a population gets more loose. The weight of the neighborhood decreases and the residence becomes selective. The places where people choose to live are not functionally related and prescribed as in the old industrial city. This process is gearing towards a phenomenon, where the distance is chosen and selective, based on considerations relating to lifestyle, entertainment or security. Clear examples of this trend are the gated communities, where individuals benefiting from certain economic and social resources choose to live in a "among-pairs-group" away from the global society, often in a spatially separated area. For instance, in some countries, such as Brasil or South Africa, it is common to see estates protected by concrete walls and security at the entrance.

Without getting to this extreme point, the current problem of cities is to be split between these antagonist ghettos logic. The result is a double polarization: towards the "low-end," where new forms of marginalization and inequalities take place, and towards the "high-end," where the cultural, economical and political powers tend to unify and separate from the larger population.

1.4 Towards New Trends

The usage of digital technologies to enhance the quality and attractiveness of the city, to provide services to the inhabitants and tourists and to improve operational costs became a mainstream trend in this decade. In the recent past, there has not been a single city that did not use the word "smart" for labeling some of their initiatives. However, how can the use of digitalisation impact the life of citizens, given the sociological and historical perspective illustrated above?

In any given city there we can distinguish three distinct factors:

1. Aspects that do not change, or evolve with a speed which is by far slower than human life. It is the case of history, for instance, or geography, or climate. The Coliseum is in Rome; the Statue of Liberty in New York. The average rainfall in Tokyo in November is 100 mm; Marseille is on the sea, Stockholm is on an archipelago, and Paris is on the Seine river. Now, while in course of centuries this can change (Pisa, when founded, was on the sea, while today it is around 10 Km from the coast because of sediments brought by rivers), the pace is extremely slow and we can consider these parameters are "stable."
2. Aspects that change slowly, and require a lot of effort and commitment. Cultural aspects, for instance, or major urban modifications. Jordaan district in Amsterdam, for instance, was a few decades ago a working-class neighborhood; nowadays is arguably the most expensive area in Netherlands. Detroit population dropped by 60 % since 1950, and 25 % since 2000. Always in Amsterdam, the construction of the north-south underground line started in 2002, and it is supposed to be finished not before 2018. Therefore, while these characteristics are often slow to move, specific trends can have a strong impact on those, in particular social and economic trends tend to draw a different picture depending on the historical period.
3. Aspects that can be changed easily. These aspects, which are often "cosmetic," may nevertheless have an impact on the quality of life in a specific town. Use of NFC payments for public transport, for instance, or specific traffic restrictions, or else laws allowing (or disallowing) specific behaviors like smoking in public places. However, these hardly modify the structure of society and the spatial issues as described above.

As discussed earlier, any city is a economical and social product. Urban spaces are often conceived as a functional organization in which different areas have specific functions (residential areas, commercial ones, industries, …). This politic, however, does not necessarily lead to good results. The city peripheries (hinterlands) are often de facto on the margins of the city social and economical dynamics.

It is important to notice is that Smart City projects as they are often advertised are addressing only the third category. A common example is a service which seems to be widely used to indicate the smartness of a city: parking sensors with a dedicated app showing the available space at real time. While the usefulness of such developments can be debated, and even positively argued, it does not tackle any of the city issues at its roots, but rather promote a further digital divide exacerbating the existing separation between different realities within the same city.

On the same line, some advertisement of these smart city projects are even clearly showing their beliefs and their intentions. When we read headlines like this

Our Cities are rapidly becoming both more populated and more complex. Because of this, people's security needs are constantly changing. That's why Hitachi is developing solutions to keep people safe in their communities [8].

It is flagrant that—at least—some of these planned solution for smart cities do not address the trend to ghettification, trying to solve historical problems, but rather promote an even stronger segregation of inhabitants, keeping them safe *in their communities*, not beyond …

In our opinion, digital technologies are extremely powerful as they virtualise the notion of space. This can clearly overcome the spatial separation developed for centuries, and allow a "brand new start" as the digital space add another dimension, which is still mostly unchartered.

Furthermore, not all is lost. New trends in urban planning are focused on environmental-friendly cities which are eco-sustainable, and several experiments are sprouting, such as the vertical gardens or agricultural spaces within the city limits. These urban utopias, fully belonging to the Smart Cities phenomenon, conceptualize certain strong elements that could be the building blocks of the cities of tomorrow. For instance, a breakage of spatial barriers: mixing agricultural spaces within the urban territory will allow a different symbiosis between nature and urban society. Relevant work in this area has been already made (by C.J. Lim, for instance).

Therefore, with a little imagination and hope, it is possible to consider this current trends in a positive way. We briefly discussed about the fragmentation of society, that transforms a city creating "self-segregation" zones based on attraction/repulsion process. However, some current development allow people with a different logic, to coexist and to share the same space. We are talking here about the eco-neighborhoods that reconcile economy and ecology, and often also social links. This type of habitat was very marginal and rural rather than urban until a short time ago. The passage from the countryside to the city is due to an evolution of mentalities and legislations favoring a more environmentally friendly living, This trend can therefore be seen as extremely positive as it tackles not only the cosmetic aspects of cities, but leverages technological advances developing a sustainable vision for future generations, on both social and economical level.

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