

The Urban Planet: The Skin We Live in and the City within the City — Smart Cities

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Abstract: The article is about the city. The objective is to present the dilemmas between the growing urbanization, the creation of new cities, sometimes elevated in the dream of other ideal city without considering the requalification of already existing cities. It presents a historical panorama of the world-wide urbanization. It is about traditional cities and smart cities, focusing on Brazil. The observational and comparative method, through bibliography, films and documents, besides the author's own experience in Brasília-DF and of your knowledge about Fortaleza-CE. It turns out that it could be so much better to make adjustments in our cities, to transform them, but not to the point of becoming unrecognizable, it is not necessary a plastic, complete or even an innovative implant. It is necessary to look at them with new eyes and to perceive what enchants or already enchanted in who lives in her. For, we are all heirs of a culture contextualized and that allows us the feeling of belonging to the place.

Key words: traditional cities, smart cities, urbanization

1. Introduction

The proposed article focuses on one of its dilemmas, established between the preservation of the existing city, of values, culture and memory of its inhabitants or the construction of a new urban nucleus with contemporary ideals that conform demands for innovations. Or it will be better to make only adaptations to the existing one? In general, these dilemmas have been verified due to deficiencies observed in the urban centers with the rise of new emerging values in the contemporaneity that justify reflections and studies on the theme.

Under this aim, the article begins with a brief historical context of world urbanization, going through a debate on the cities, which, in their times, sometimes marked a rupture with the traditions and a change of values disseminated and in others the conservation of these same values and traditions. In this initial

approach of the field, the article unfolds from some of the first proposals of smart cities, which, gradually, have allowed a better understanding of the thought from diverse experiences in Brazil, going through its first criticisms until the increasing alternative proposals to technological, creative and innovative thinking linked to the values and memory of the traditional cities expressed in the field of architecture and urbanism to this day.

In order to better elucidate the existing problematization, a small passage from Santos "Space imposes on each thing a certain beam and relations, because each thing occupies a given place" [1]. According to the author, the place serves to give the value of the man who lives in it, whether its value as consumer, citizen or producer, it will all depend on its territorial location. The group is formed mainly by interests, order of ideas and preoccupations, which at the same time are private, while reflecting the personality of each member, and general, or impersonal to thus maintaining its meaning and importance. For this author, we maintain the mental

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balance because, in part, the objects matter with which we have contact throughout the days change very little and with that, they offer us an image of permanence and stability. In this sense, when an event forces us to change into another material environment it generates in us an uncertainty, an instability, “so much is that the habitual images of the outside world are inseparable from ourself” [2] it, the feeling of being leaving behind our whole personality.

2. Material and Methods

The observational and comparative method, through bibliography, films and documents, besides the author's own living in Brasília-DF and experience in Fortaleza-CE was applied with the observation of reflective images and, often, even science fiction films.

In this sense the Figures 1 and 2 could be far from being similar, since the first refers to the urban plan of the first smart city that will be created in Brazil by Planet Company, according to Planet, “in the context of technology systems, most innovative solutions are related to digital infrastructures created as enabling structures, a prerequisite for the development of intelligent services. institutional areas, a real-time video monitoring system integrated with the PLANET

App — the city's control panel, recharge islands for electric cars, etc. It will be desirable to live in a city with high connectivity and technological services that improve the quality of life”. Having as objectives to be achieved sustainability, safety and quality of life, according to the company, the lives of people in cities or smart neighborhoods would represent more economy, sustainability and quality than in traditional cities and the second concerns the image of the fiction scene of the film *Downsizing*, at the moment when the residents of the traditional city of Omaha will discover the proposal to move to a microcity, called Leisureland, the idea is that people are able to shrink to a tiny version in order to have fewer living expenses in small communities that are scattered around the world and with a quality of life unequaled for their current financial condition. If they chose to go to live in this new city, they would have their expenses reduced and they would be able to enjoy all comfort and quality of life previously impossible to obtain. It would suffice if they reduced the size of their bodies to fit the local life model. And as a city less than 10 times the size of a common city, then it would be more sustainable, fully maintained by the



Fig. 1 Urban plan of Smart City Laguna in Croatian District/CE/Brazil.



Fig. 2 Downsizing movie scene.

advanced technology of the time, economical and non-polluting of the environment, having a small impact on the environment and a large area to expand. But what impact the surroundings would have on the city and the population? Hence, poverty did not cease to exist outside this “bubble”, marginalization and environmental degradation; none of the problems disappeared or was minimized. “The city as a human artefact par excellence, therefore product of design — in the broad sense of the word: desire, design, project — is how the process of a project smarter than it reinvents itself” [3].

What the two Figures have in common is what draws attention. For all of them are ideas of creation a city that uses high technology as a way of solving the problems of the surrounding, of the existing problems with the disorderly growth of cities, destruction of the environment, poverty. Technology can and should be used to improve living conditions on the planet, but will it be, as the new materials after the industrial revolution appeared to be, the “salvation”, or would it be much better to look back to our history in how the buildings and the people’s lives were in harmony with the environment?

Is it still possible to do this: transform our cities, shantytowns and precarious buildings into smart cities? cities, favelas and precarious buildings into smart cities?

3. Results and Discussion

3.1 Urban Planet

In 1957, the first satellite was launched into Earth orbit. This offered us a privileged position from which we could look at ourselves and mark the beginning of a new global consciousness, a dramatic change in our relationship with the planet [4].

We have become more and more an urban planet, according to the figure of the map of world urbanization predicted for 2030 it is possible to perceive megacities with 10 million inhabitants or more, represented by the red dots on the map, will grow considerably. But, is urbanization synonymous of the production of a city? The traditional Brazilian cities were born of a whole historical context that should not and can not be despised. So it is this skin in the form of urban space that we inhabit, it is like the skin that covers all the structures of a body that serves for protection and keeps the memories and marks of the times lived (Fig. 3).

3.2 “City of Dreams”, Traditional Cities, Smart Cities

Culture influences the creation of ways of life and ways of perceiving the world. So we are all inheritors of a contextualized culture that allows us the feeling of belonging to the place [5]. This reference of belonging allows the construction of cultural identity.

However, the constitution of this symbolic space permeates the diversity and multiplicity of the ways of life of each citizen. It is the culture that influences individually and also creates the collective identity representation. This cultural space is dynamic and live,

happens in the daily life of each one and “it is the relation of humans with time and in time” [6]. It is the social relations in the production of spaces that create, based on their culture, the mechanisms of socio-cultural inclusion and exclusion.

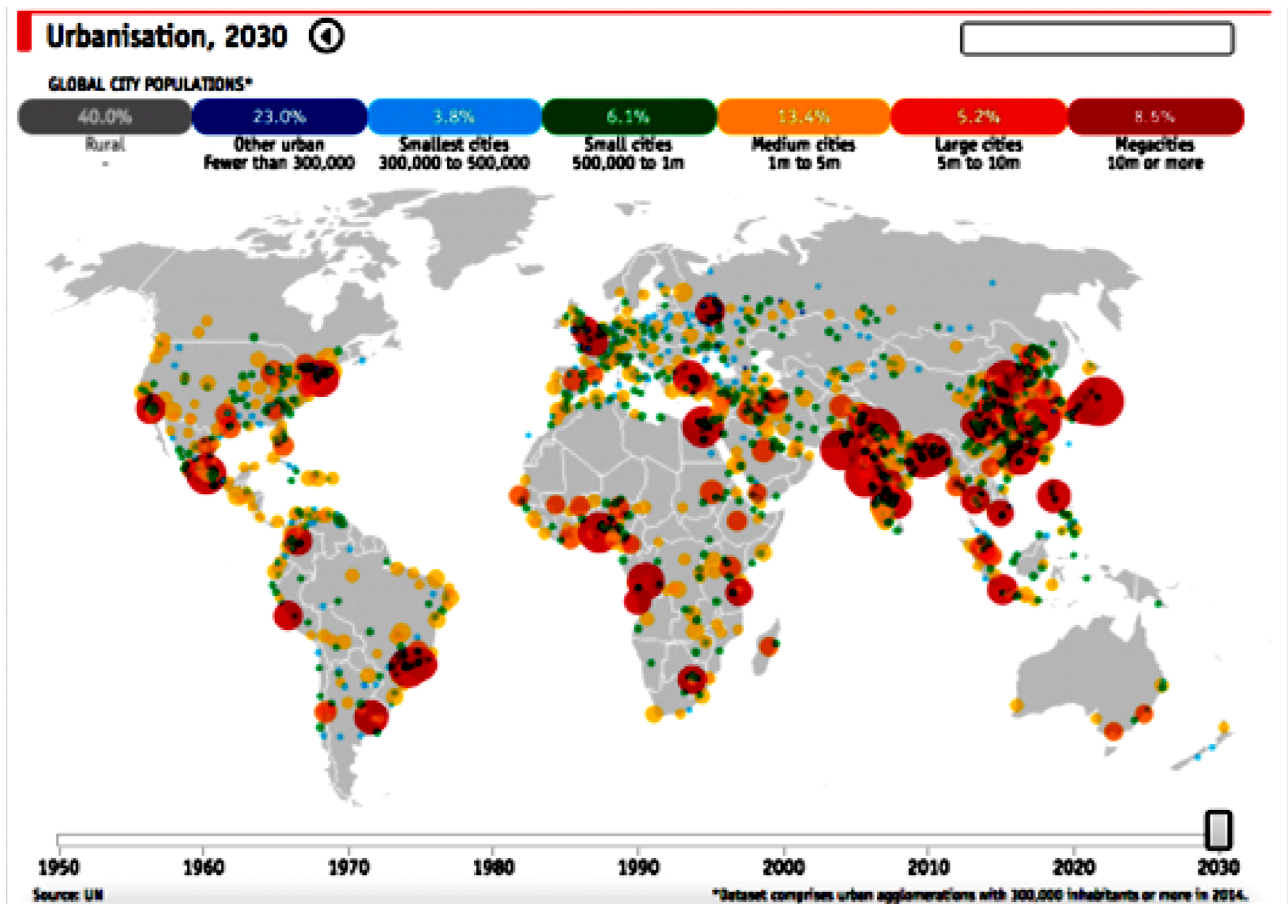


Fig. 3 Map of the urbanization in the world 2030.

Jane Jacobs fought for “urban renewal” in the West Village. Under the Federal Housing Act of 1949, federal funds were made available to the cities for demolition or rehabilitation of destroyed areas, and throughout the 1950s, the Robert Moses Slum Committee had already lived up to its name by destroying entire neighborhoods of New York” [7]. If the houses were torn down, it would be the end of that community, its “small town character, its residential qualities, its local color, its rich heritage and its cultural tones”. Any urban renovation should respect the “village tradition”.

Moses saw himself as the builder of a brave new world, where the poor would be housed in tall, clean and uniform superblocks on the outskirts of cities. The filthy favelas they vacated — “cancerous growths”, in their words — would be overturned to make way for parks, art centers and expressways. If the uprooted tenants did not want to move, or did not like the airy towers they moved into, as the cold negotiator calmly states in the film: “Our biggest problem is the removal of the tenant” [8].

We humans always dream about the ideal city to live. At some moments in history we have found that we have achieved this goal, for example Brasília, a

“monumental” city in the words of Lúcio Costa, where “the purity of the lines would send colonial cities, just as it would allow us to invent the “definitive capital” of the Brazilian future [9]. So many cities planned for the purpose of being suited to the dream, to the needs of its inhabitants. But, “the survival of society has always depended on maintaining a balance between the variables of population, natural resources and the environment” [10]. Is this still the truth today?

So why not take, if at all possible, all this technological wonder created by human intelligence, and take it or bring it to cities and create smart cities? A city within the city or a city that works by itself. Because, perhaps, consider the city as a machine or factory that works all day, every day ceaselessly to produce the goods and services essential to community life and not as an organism from which each element, environment, fauna and flora, beyond what we created as: vehicles, buildings. Be one of the biggest mistakes we may be making.

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community life and not as an organism from which each element, environment, fauna and flora, beyond what we created as: vehicles, buildings. Be one of the biggest mistakes we may be making. Again, we borrow the words of Naisbitt “for many people accustomed to think, genetic technologies are as frightening as the development of nuclear energy [...]” [11]. That is, on the other hand, thinking about the development of these smart cities may at first seem frightening, after all in Brazil there are few parameters for them.

So, we cannot forget Brasília, the modernist city, planned and thought of as a city ahead of its time, but with some wounds still from before its inauguration. At the time of its construction, Lúcio Costa concluded that all the waves of immigrants could not be sheltered, in the Pilot Plan of Brasília, especially those who came to work in the building sites [9]. So nucleuses were created far from the city center like Taguatinga. The failure of the idea of urban planning was apparent in the large number of scattered nucleus that have arisen, increasing and giving a frightening start to social disconnection and exclusion. “The registration and analysis of the housing of workers have never had the necessary highlight, losing memory about the space occupied by the poor” [12]. Source of exclusion and social and urban segregation, the Capital of the Federative Republic of Brazil finds itself as a “closed and finished” nucleus, with almost no possibility of chance of the initial plan of its conception.

With the advent of technology, where the internet connects humans with other beings including the animal and plant kingdom, otherwise, showing their habitat, food, ways of life. With this advancement, it is possible to spend 24 hours connected in another universe, to know cities and civilizations, many of which we will be present only in virtual way. Even the trips that “constitute our number one choice to escape from the stressful machine that is consumer technology” serve to disconnect us from the new universe beyond our urban planet, high-tech

paraphernalia are available for all conceivable needs” [11].

A city to be considered smart needs much more than a broadband that connects all its points, or a intelligent video surveillance, with cameras that identify certain behaviours, as if life tried to repeat the experience of movies screens, like in *Minority Report* — *The New Law* of Steven Spielberg, where it is possible to predict crimes before they happen. It takes much more than the appeal and a whole technological apparatus to turn a city intelligent and innovative but integrate the residents and bring quality of life either through high tech innovations or traditionally rehabilitating old neighbourhoods.

For example, Curitiba, capital of Paraná, would be considered one of the cases, not of the construction of a new city, but of adaptations made to attend the aspects of urban management, such as health, environment and technology, according to news published in a Brasil newspaper performed well in the Connected Smart Cities ranking and was in third place after Rio de Janeiro and São Paulo, the award takes into account nine other aspects [13].

The award evaluates the potential of cities to become intelligent, that is, the capacity of the municipality to produce responses to urban problems. Of making the solutions poles generators of development. “She had not turned smart because she bought a car tracking system. The city is a living organism that seeks to incorporate intelligence, technology to guarantee quality of life and economic sustainability”, explains Thomas Assumpção, president of Urban Systems, a consultancy that developed the ranking in partnership with Sator [14]. The fact is that the idea of smart city is growing, the most current case in Brazil is the smart city Laguna that is being developed in Croatá-Ceará, capital of Fortaleza-Brazil, this is the first case of a smart city, fully created from scratch, so to speak here in the country. Residential lots cost an average about of \$ 28,000, although they seem cheap, but they are not

accessible to all social classes.

Therefore, it is not yet known if this will be another “city of dreams” if, once deployed and properly inhabited, the problems existing in our cities will be so different from those that will be found there. It will be the most technological, but will it be the most sustainable? Will we use our mobile devices more intelligently? Will there be employment and housing for all? Or will your residents still depend on that old skin, that city where you spent most of your life, or just a little while, but where did you bond? It will be that those who choose and have the financial conditions to acquire a plot and build their new home will keep the memories memorable, as many of us, guardian of his hometown and from this brand new and newly created model of life will form memories and not will you feel great desire to adapt the architecture of the place to its origins, traditions and beliefs? Is it only new urban and relations with the city? Or will social relations and architecture change as well, and will everything be different?

The risk is that there is something like the favela of Paraisópolis in the Figure 4 and next to the Morumbi neighborhood. An extreme contrast where some have rights that others do not have. “[...] In the course of little more than a century, there has not been a banal evolution, but a mutation, which masks the permanence of words and toponyms” [6]. It is true that “every generation must reinvent its public institutions and create new ones” [4]. Therefore, it is also correct to say “all societies produce strangers. But each society produces its own kind of strangers [...]” [15]. Generally, cities are defined as the place where strangers meet, remain close without, however, stop being strangers. And to share this urban space with strangers and even live close together, it is “disgusting and impertinent”. The inhabitants of cities tend to regard it as a fate from which they cannot escape, “and it is necessary to find a *modo vivendi* (way of living) that makes cohabitation palatable and life bearable” [15]. With this, “the space imposes on each

thing a certain bundle of relations, because each thing occupies a given place” [1]. The place suits to give the value of the man who lives in it, whether its value as

consumer, citizen or producer, everything will depend on its territorial location (Fig. 4).



Fig. 4 Favela of Paraisópolis and Morumbi: The contradictory neighbourhood-region of São Paulo/Brazil.

It is not enough to think about technology, to begin with, one might perhaps think of the compact city model and reject the monofunctional model. That is, "the issue is to think and plan cities, where communities, think of dribbling, also the "war of places", so brilliantly debated by Rolnik [16], where the commodification of housing has vast field and makes housing, especially social, unworthy for its inhabitants and little by little the right to the city is lost.

[...]

For now out there,
The whole world is an island.
miles, and miles, and miles.

In this land of giants.
Who exchange lives for diamonds.

[...]

(Engenheiros Do Hawaii, Land of Giants, 1987)

One sees why Choay calls the city of divinity two faces, which are castrating mother, for the less favored classes that urban skin that we inhabit with naturality and that we sometimes treat and in others we close our eyes to their wounds is the stage of constant needs, for other more affluent classes there is the possibility of a technological transplant in the form of smart cities.

In this new city option will there be no poverty, favelas, beggars, everyone will be equal and have the same rights? For now they are unknown. It is only possible to say that "cultural reconstruction has limits that no effort could transcend" [15]. Still, in Baumann's [15], they may say, "those were the notorious main points of the notion of culture in the time coined, as well as tacit, but undeniable, presuppositions that endowed it with meaning. As

long as mixofobia is the source of anguish and insecurity, the problems of contemporary cities can not be solved simply by reforming the urban centers themselves, even if a radical reform is made, since the problem is global and local. Before the urban reforms one must proceed to a reform of the conditions of existence, otherwise those reforms will be only placebos. This fact must be considered not to undermine good architecture or adequate urban planning, but to somehow bring a new perspective to the task that includes all the factors that lead to a better choice [15].

4. Conclusion

In short, it would not be much better to make adjustments in our cities, to transform them, but not to the point of becoming unrecognizable, there is no need for a complete plastic. It is necessary to look at them with other eyes and to perceive what enchants or has already enchanted in who lives in it. Keeping cost of social relationships created, often at cost by the residents. For “relations between human bodies in space are what determine their mutual reactions, how they see and hear each other, how they touch or distance each other” [17]. This is the city, we create our relationships with it and as to fall in love again it is necessary to make it a source of inspiration, meetings and rediscovery again, so that it be “dream city”, not of naive dreams, those of creation of a perfect city as in fairy tales. And the city was created and there they were happy ever after and it also rests on all meekness. No! In order to be smart and innovative cities, by bringing to all its inhabitants the conditions of having a good quality of life, whether happy or suffering from time to time, whether the city is happy or suffering from time to time, “it is obvious that first impressions about quiet places and happy people are misleading ... and often preferable. In any case, although false, they instruct us” [17].

We must ask ourselves, do we want to risk excluding people who will be marginalized. This

subject then begins to support a social order, which is compelled and suffers greatly from this process of perverse social exclusion [18].

References

- [1] M. Santos, O espaço da cidadania e outras reflexões, Fundação Ulysses Guimarães, Porto Alegre, RS., 2011.
- [2] M. Halbwachs, A memória coletiva, traduzido por Beatriz S., Centauro, São Paulo, SP., 1990.
- [3] C. Leite and J. D. C. M. Awad, Cidades sustentáveis, cidades inteligente: desenvolvimento sustentável num planeta urbano, Bookman, Porto Alegre, RS, 2012.
- [4] R. Rogers and P. Gumuchdjian, Cidades para um pequeno planeta, Gustavo Gili, traduzido por Anita R. D. M., São Paulo, SP., 2015.
- [5] R. B. Laraia, A cultura condiciona a visão de mundo do homem, in: Laraia R. B. (Ed.), *Cultura: um conceito antropológico* (14. ed.), Zahar, Rio de Janeiro, RJ, 2001, pp. 67-74.
- [6] F. Choay, O reino do urbano e a morte da cidade, Traduzido de Kavakama, E. B., Proj. História, São Paulo, SP, No. 18, maio, 1999, pp. 67-89.
- [7] J. Lewin, How Jane Jacobs fought “urban renewal” in the West Village and won, Consultado em 23 Abril 2018, available online at: <http://beta.nydailynews.com/new-york/jane-jacobs-fought-urban-renewal-west-village-article-1.2962679>.
- [8] W. Lawson, The woman who saved New York City from superhighway hell, Consultado em 22 Abril 2018, available online at: <http://www.vanityfair.com/culture/2017/04/jane-jacobs-citizen-jane-documentary>.
- [9] A. Paviani, Brasília no contexto local e regional: urbanização e crise, *Revista Território*, Ano VII, No. 11, 12 e 13, set./out..
- [10] L. Costa, Registo de uma vivência, in: Costa Maria Elisa, *Aeroplano*, Rio de Janeiro, RJ., 1986.
- [11] J. Naisbitt, *High tech, high touch: a tecnologia e a nossa busca por significado* (3rd ed.), Cultrix, traduzido por Eichemberg, N. R., São Paulo, SP., 2006.
- [12] N. Bonduki, Os pioneiros da habitação social: cem a anos de política pública no Brasil, *Ensaio Sobre o Conceito de Cultura*, Zahar, Rio de Janeiro, RJ., 2012.
- [13] BELIN, Luciano. "Segunda smart city com lotes a preços populares começa a ser construída no Brasil: "Empresa responsável pelo empreendimento prevê o desenvolvimento de dez projetos do tipo nos próximos três anos" *Gazeta do Povo*. São Paulo, p. 1-3. maio 2019. Disponível em: <https://www.gazetadopovo.com.br/haus/urbanismo/segunda-smart-city-com-lotes-a-precos-populares-comeca-a-ser-construida-no-brasil/>. Acesso em: 6 maio 2019.

- [14] N. Piva, Curitiba fica em terceiro em ranking das cidades inteligentes, Consultado em 22 abr 2018, available online at: <http://www.gazetadopovo.com.br/curitiba/curitiba-fica-em-terceiro-em-ranking-das-cidades-inteligentes-0969jr35coecf3kokxdkt6ipk>.
- [15] Zt. Bauman, O mal-estar da pós-modernidade, Zahar, traduzido por Mauro G. e Gama, C. M., Rio de Janeiro, RJ, 1998.
- [16] R. Rolnik, Guerra dos lugares: a colonização da terra e da moradia na era das finanças, Boitempo, São Paulo, SP., 2015.
- [17] R. Sennett, Carne e pedra: o corpo e a cidade na civilização ocidental, Bestbolso, traduzido por Marcos A. R., Rio de Janeiro, RJ., 2008.
- [18] B. B. Sawaia, O sofrimento ético-político como categoria de análise da dialética exclusão/inclusão, in: Sawaia B. B. (Ed.), *As artimanhas da exclusão: análise psicossocial e ética da desigualdade social* (11. ed.), Vozes, Petrópolis, RJ, 2001, pp. 97-118.