THE INTELLIGENT AND SENSITIVE CITY

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ABSTRACT

The paradigm of urban management with a cross and participatory approach in own citizenship and that it raises the review of the management of resources, is the emergence of a new model of city that appears as an alternative to the current model. Thus, urban policies of public spaces are required are much more sensitive to the diversity of use and interaction of activities in our streets and squares, which go into spaces with much greater degree of "empty program". The achievement of these objectives of starting no doubt would enable creative fluidity associated to a certain symbolic appropriation of these spaces by citizens. Examples of this type are the Spielplatz (2011) of La démocratie Creative approaches or assertive of Reclaim the Streets (RTS) (retrieves the streets) based on the Temporary Autonomous Zone (TAZ) (temporary autonomous Zone) postulated in 1990 by Hakim Bey (the pseudonym of Peter Lamborn Wilson). This appropriation and modification of daily use of public spaces is produced, often hand movements citizens who claim improvements in their own neighborhoods.

With this approach the art is incorporated into the city as a tool to transform the environment and the architecture opens to multiculturalism; thus, for example, the VIC (nurseries of citizens' initiatives) advocate the use of existing resources associated with a change of use. In this sense, the initiatives of civil participation suppose a complement to the conventional town planning with initiatives that they use as hardware the TIC's and that are organized by it by means of structures in network to obtain shared targets; the main consequence is a new active form of participation, opposite to the political decisions imposed from above, and that undoubtedly fond of the model of traditional town planning.

Another reading of the same phenomenon is the raised one with the sentient city (sensitive city); the expression refers to the exhibition organized in 2009 by Mark Sephard and Architectural League of New York, as well as to the publication of the same name (2011) impelled by the MIT (Massachusetts Institute of Technology). The book is a reflection on the concept of intelligent city and on the role (paper) of the technology in the civil space with capacity of transformation of the above mentioned space how, for example, with the recycling of materials and the stations of reprocessing. It is a question, finally, of giving a major leading role to the inhabitants of the cities and to an ostensible humanization of the public space. This way, the esthetic sensation of our experience with the urban scenery increases and intensifies perceptibly, even in spite of its character of ephemeral use. On the other hand, a crossbreeding of crossed speeches is made possible also looking for answers esthetically emotional diverse, sometimes even opposite (owed especially to cultural determinants, historical ties(entails) or social factors of diverse nature that provoke associations diversity) and using often conceptual expositions very next to those of the performances.

Keywords: Sentient City, Temporary Autonomous Zone.
1.- Creativity and crisis.

All ideological and economic crisis, such as ours today, it requires a certain loss of cultural references and social; in this sense, before the crisis will usually appear two antagonistic solutions: the continuitist or academic and avant-garde. This article discusses the second of the solutions, in the belief that it makes an explosion of creativity, research and innovation in the urban space. It would also, of a solution that is associated to both the improvement of the quality of life, as to the networks that connect the local with the global. In the words of Joseph Maria Llop: “Never in the urban space had coincided and interacted with the local, diverse linked to the place, and the global, connected to the universality” [1].

On the other hand, the sustainability as a new paradigm, of unanimous consensus, raises a novel multidisciplinary transversality or opening of the architecture, which carries a double critical review: in the first place, a functionalist review, energy and bioclimatic, based on ecological requirements, and secondly, a new reading on key design, if well designed, in most cases, such as something neutral -the classic myth of the "form-function" or the "transparency" - which means that is stylistically it chooses the formal restraint.

![Fig. 1 “Archigram. Plug in city.”](image)

This way, the bioclimatic sostenibilidad would happen(pass) to have its translation in architecture from the proposal of a new functionalism - to resemblance of the functionalism organicista of the twenties that it was absorbed by the purist rationalism of the International Style - although, in this case, it would be especially respectful with the environment. In this point, it is not necessary to forget that clear revisionist precedents are also the architectural worry for the cybernetics of the sixties and seventies along with(near to) the counterdesign of the English group Archigram (fig.1) or of the Italian groups Archizoom or Superstudio. Thus(In this way) it is stated that the new paradigm would be incomplete on not having solved the problem of the form of the building(edifice) for imitating the esthetic neutrality of the historical functionalism. A possible answer might appear looking for relations, not always forced, between the sustainable architecture and the design paramétrico, with multiple possibilities and facets. It would be a question, after all, of valuing the importance of the artistic mediation, with its diverse ramifications and its numerous examples of contaminations art - science, especially attractions for such
cases as when there is used the esthetic potentiality of the energy and of its ambience in the changeable states(conditions); this way, the first proposals of this type have clear precedents in artists dedicated like Olafur Eliasson, James Turrell or Anish Kapoor.

2. - Urban Sustainability: the humanized city.

The creative city, like new paradigm of sustainable city, is always a human cultural product, but that now arises with a well-known absence of historical modality – what must not make a mistake with memory absence-. This orphanage contributes(pays), undoubtedly, that the city has to reinvent itself, although contemplating also the importance that must happen(exist) to the pre-existences (the rehabilitation of housings), as well as to the recovery of the degraded spaces. This way, the unavoidable energy efficiency that bears the 'sustainable' adjective, for some authors as Eduardo Prieto raises problems unpublished or forgotten for the architecture:

"We speak, already with naturalness, exploiting the optimization of solar radiation, the advantages of hybrid ventilation, the use of renewable energy sources or combined systems of high energy efficiency; establish ratings that take into account aspects so far as alien to the architecture and the Elimination of waste, pollution, and the quantification of energy incorporated into own building materials; proposed models of the city and the qualitatively different to the modern city entropic territory"[2].

The city as organism associated issues such as models of population growth, migration flows or requalification of the soil, but also to other issues such as the historical past, adaptive, mutable and alive understands thus the participation of citizens - rights and responsibilities - and projection towards the future of the new values of the present. This is so because not always speak of expanding cities is synonymous with proper urban planning and a minimum quality of life. The city as a place for mixing and Exchange are characterized, often also by the numerous social inequalities. In this sense, talk of sustainability implies thinking also about the transformation of megacities in areas more human, to combat the haste, noise and restlessness, but also inequalities. In the words of Pablo Guerrero: "urban growth messed up, so characteristic of emerging economies and developing countries, is framed in a vertiginous dynamic of population growth" [3] and it is precisely here lies one of the keys to sustainable urban planning.

It is this last point, which is emphasized in a special way in the various documents of environmental sustainability, among which there are highlight the letter of Rio (1992), the Aalborg Charter (1994) and the Kyoto Protocol (1997). All of them dealt with environmental issues such as resources, climate change, noise or environmental health, but also side effects as poverty and exclusion. On the other hand, studies of environmental impact (EIA) and the strategic environmental assessment (sea), together with environmental audits and Agenda 21 Local action plans [4] are also important to take into account instruments. In this sense, the Observatory of sustainability in Spain (OSE) designates different environmental variables as critical: solid waste, waste water, congestion or air pollution and land use.

Before all these environmental control mechanisms, the utopian idea of the sustainable city is seen by some authors with many facets; Thus, for example, Richard Rogers [5] tilda fair, beautiful, creative City [6], ecological or different. This certainly utopian proposal contrasts, however, with the reality of the so-called "space trash", labelling as well by Rem Koolhaas: ' 'Space junk' seems an aberration, but is
the essence, the main thing... the fruit of an encounter between the escalator and the air conditioning, conceived in an incubator of plasterboard (three things missing in the history books) [7].

It is this author who in Delirious (1978) defended the plastic potential of the chaos of New York and the internal vitality of cities against the technocratic calculation and order, albeit with an aesthetic of chaos based on a certain horror vacui which can be also dogmatic. In any case, is Koolhaas himself who has been, at times, arguing that it is precisely the vacuum, with its indetermination, the true source of creative potential [8].

For critics like Josep Muntañola, the aesthetically, in specific sense, would be defined as 'architectural', which has much to do, ultimately, with more human-scale architecture of the territory: "architecture, literature, music, etc., are dimensions of the 'architectural' having one of their best definitions on the ability to specify, in the art object, which is specific to its aesthetic value (...)" [9].

3.- Landscape and sustainability.

The dissolution of the boundaries of the city associated with new forms of Exchange makes it possible to work with the landscape in a new conception of architecture attentive reading of the territory and the landscape with dualities such as 'periphery', 'city-territory', 'artificial-natural', i.e., ultimately to the Canalization of the nature on the three scales of open spaces: territory, city and neighborhood. However, for some authors, such as Salvador Rueda [10], the compact and diverse city would be far more sustainable than the diffuse city.

On the other hand, the intervention in the landscape, as defined in the Convention of Florence (2000), must attend especially to the fragility of the physical environment and numerous assaults that esquillman him and impoverished in the world. This makes necessary the participation for a sustainable landscape management integrating urban planning and quality, which, in the opinion of Javier Maderuelo, should be the improvement of the environment through art:

"During the past few years are becoming aware of the environment in which we live and we're doing it in two ways: every day more aware of the physical fragility of the medium and trying to set up a few landscapes and environments aestheticized with the action of the art contest" [11].

In this sense, since the end of the 1960s several American artists raised, with the so-called Land Art, the possibility of proposing works in a context of unspoil nature; Thus, highlights key figures such as Robert Smithson and his Site Sculpture, as the famous Spiral Jetty (1970) of the Great Salt Lake of Utah, Dennis Oppenheim, and his Snow Projects, such as the Time Line (1969) at the island Time Pocket or Richard Long and its Landscapes. However, should emphasize the idea that, in these first works, artists opted to develop his works in remote places or places abandoned by the industry and that only at a later stage, gave way to the so-called "urban art" in public spaces, whose pioneers were Christo and Jeanne-Claude with their typical packaging of buildings. In this way, it is in this last paragraph where it appears a full range of artist's 'urban art' ranging from Richard Serra, known for his minimalist constructions of large rollers and sheets of steel cut, until Gordon Matta-Clark [12], passing through urban structuralism of Dani Karavan, Nissim Merkado proposals and many others such as Daniel Buren, Scout Burton and Alice Aycock. However, the landscape reality raises several problems; in the last fifty years the
transformations of the physical environment have intensified notoriously, although almost always with actions, uncoordinated and with unsatisfactory results, what justifies the numerous existing legislation on integrated catalogues of landscape integration, protected natural areas or territorial action plans. In this way, the transformation of the physical environment through art, which, ultimately, is culture, should primarily serve certainly prosaic issues as the many uncontrolled and irreversible interventions in the landscape that often result in irreversible damage.

Thus, issues such as the protection of the landscape, with criteria policy or clear, the productive use of renewable natural resources, together with the progressive replacement of non-renewable - or the re-use of waste, for example, become priority criteria of sustainability from a purely ecological dimension [13].

On the other hand, from a Western point of view exists across a landscape tradition, which dates back to England in the 18th century, and that should give way to new, efficient solutions. These solutions should, in any case, be consistent with the spirit of the times and the genius loci or "genius of the place", i.e., should respect the signs and signs of identity and attend the socio-cultural and environmental conditions of the environment; This is also portable to interventions in the urban centers and places of recreation within big cities. However, the construction of neighbourhoods from the hands of a triad of politicians corrupt, promoters speculative builders unscrupulous, represents one of the biggest determinants of socio-cultural deterioration of the inhabitants of these neighbourhoods, often segregated in ciudades-dormitorio with high rates of crime. Other times, to solve this problem, opted for a functionalist rhetoric devoid of message, as in the villes nouvelles of the 1960s in the peri-urban area of Paris.

4.- Participation civic and cultural industry.

From a historical point of view, the city is understood as a palimpsest of substrates of the past that make up part of its physical plot and his identity. In regards to the architectural heritage, addressed for a long time with antagonistic postures of Viollet-Le-Duc and John Ruskin, once exceeded these are necessary new formulas that address in a special way to the reprogramming of uses of the buildings. This form can be made compatible memory and productivity, understanding that rehabilitate is synonymously revitalizing, for which it can choose both for dialogue and confrontation with the pre-existence. On the other hand, a proper reading of bioclimatic behavior or "ambient intelligence" of the pre-existence, can indicate the achievement of comfort through passive as the sunlight or wind systems, in order to achieve the recovery of their environmental performance and make it compatible with new uses. In this sense, is required in all rehabilitation, a rewarding dialogue between contemporary man and the timeless City.

On the other hand, the inherited city or "historic", which traditionally hosts the set of real estate assets, has suffered in the last century various space encroachments with abusive use of the automobile, the concealment of emblematic buildings by advertising and, more recently, the depersonalization of urban space with the creation of non-places such as stores or buildings of multinational, service stations or transit areas. In addition, this historic, tourist attraction, is preserved and rebuilt almost exclusively according to purely economic and administrative criteria, with arbitrary or subjective functional and aesthetic discourses and, above all, without thinking about key issues such as citizen participation, the quality of life of the social
fabric, or the enjoyment of the local community, since this last usually being expelled to the peripheral districts.

The relationship between the city and the cultural industry is vital if we start from the basis that the city itself is a work of collective art or cultural construction; the vitality or the creativity of the cities will depend precisely for this reason, on the socio-spatial context in which innovation or creative uniqueness of its inhabitants unfolds. Could thus, mention factors favoring urban creativity as the concentration of good professionals or artists in the same city, although this type of creativity does not usually go hand of urban planning, but is rather due to a citizen attitude; Ferrán Mascarell writes: "Without understanding that creativity, identity, progress, community and citizenship are part intrinsic and inseparable from what we call culture is very difficult is to build creative cities" [14].

This means that the creative city must be understood as the result of three factors: public administrations, cultural industries and creative individuals. Thus, are of special importance urban strategies of transformation of cities promoted by councils on the occasion of events and specific opportunities, such as the Universal Exposition of Seville or the Barcelona Olympics in 1992, the Forum of cultures of Barcelona 2004 [15], the Copa América 2007 in Valencia or the 2008 International Exposition in Zaragoza.

In this sense, the cultural project global and transversal (economic, political and social), must be understood as a cultural model knowledge based on the responsibility of citizens and a cultural offer of quality with international appeal, implying a high training of community synonymous with local qualified human resources, but also in coordination and cooperation and flattering of enterprise development as well as relations with different cultural realities and the attraction of foreign talent. Cultural industries which act as mediators between creators and consumers tend to adopt a universalist business logic and in this sense, cultural digitization and use of network minimizes production costs but requires more competent professionals: versatile, innovative, daring and creative.

The phenomenon of groups of citizen participation is growing every day in the network; groups like Démocratie Créative, Rebelart, Urban Shit, Urban Bricolage, The pop-up city or Project for public spaces, among others, operating on the Internet with a growing acceptance among a generation of young architects. It's groups dedicated to the realization of art in urban spaces and the social study of public space, which used a participatory and experimental discourse that seeks to analyze the possibilities of the city by creative or alternative to conventional criteria.
Thus, for example, project Spielplatz (fig. 2), a proposal for the Group Creative
democracy (DC), we are witnessing a transformation unprecedented in public space
in land of games and various sports as careers, mazes or jump height, among others.
It's that pose an alternative to the conventional use and facilities that are adapted to
the furnishings of the city. Identical reading can make the protest approaches of
Reclaim the Streets (RTS) (retrieves the streets) based on the Temporary
Autonomous Zone (TAZ) (temporary autonomous zone) postulated in 1990 by Hakim
Bey (pseudonym of Peter Lamborn Wilson). This appropriation and modification of
daily use of public spaces is produced, often hand movements citizens who
claim improvements in their own neighborhoods. With this approach the art joins city
as tool to transform the environment and architecture open to multiculturalism; Thus,
for example, the VIC (nurseries of citizen initiatives) advocate the exploitation of
existing resources associated with changes of use.
It is, in short, to give greater prominence to the inhabitants of the cities and a so-
called humanization of public space. In this way, the aesthetic feeling of our
experience with the urban landscape increases and intensifies significantly, even in
spite of its character of ephemeral use. On the other hand, it is possible also a
mixture of cross speeches looking for various, sometimes even conflicting emotional
aesthetic responses (mainly due to constraints cultural, historical ties or social factors
of diverse nature that cause diversity of associations) and frequently using very close
to the performances of conceptual approaches.

5. - New technologies and cyberspace

It is increasingly common to see computerized work leads to a progressive inactivity;
the consequences of new technologies are translated in a new interpretation of the
use of time and space as well as a noticeable transformation of the leisure time in its
double dimension physical and psychological. On the other hand changes due to the role played by new technologies of information and communication in the transformation of our lives are numerous: from digital to analogue, the "place" against the "non-places" (spaces of anonymity or generic spaces according to Marc Augé) [16]. This raises modes of organization of work which affect both the Organization of time and the immateriality of the exchanges, but also subtle strategies of control through sophisticated digital tools, following the tradition of the domain or the human control through the space and of the panoptic unveiled by Foucault in discipline and punish [17].

In the same line, the acceleration of life or dromology [18], whose prototype would be the anticity California Los Angeles by their strong dependence on transport, its absence of delimitation, Center, of history and characterized by strong socio-cultural contrasts. In this sense, mobility and infrastructures become key parts in the reorganization of the territories, understanding that man is the measure of his time, however, not all readings of this phenomena are positive, in the words of Paul Virilio: "superstructures, suitable to control the environment of the Nations, where the Autodrome and the aerodrome will be, later", the main figures of a new desert of speed (...)" [19]. Speed puts in relation the concepts of work and distance, but also leisure and consumption; It's a concept that entails a superficial knowledge of things with a considerable loss of nuances that give priority to the goal against the road. It is important in this sense of identification with a place for the appreciation of it, the participation of users and of multidisciplinary teams, to ensure diversity and quality of results, from thinking or unique approach, that the latter tends to lead to poor, rigid interventions or little practices for everyday life. Another reading, perhaps complementary, the same phenomenon is raised in the Sentient City (sensitive city): the expression refers to the exhibition organized in 2008 by Mark Seopard and the Architectural League of New York, as well as the publication of the book of the same name (2011) driven by MiT (Massachusetts Institute of Technology). The book is a reflection on the concept of intelligent city and on the role of technology in the area for citizens with processing capacity of the space as, for example, with the recycling of materials and the stations of re-processing. The epithet of 'intelligent' referred to our cities, has its justification in the growing urban infrastructure and its growing capacity for information processing. Proof of this are, for example, the traffic lights of the cities to allow monitoring of traffic, but they may be in the near future other possible uses customized and managed by our mobile devices while a walk through any city. Well, the city becomes sensitive to be a program location to anticipate the actions of the citizens with the proposal of a wide range of possible interactions in contexts increasingly broad and that become the spaces in which they operate our lives. This is a theoretical proposal of great credibility, raised as joint research between the Massachusetts Institute of Technology and The Architectural League of New York in multidisciplinary teams (technologists, artists, urban planners) that seeks to explore the possibilities of new technologies in urban environments and the design of a urban furniture able to execute specific actions, aimed almost always control the behavior of the citizens, but also for any other type of application. As well, projects such as 'Amphibious Architecture', 'Natural Fuse', 'Trash Track' or 'Breakout', explores the potential of wireless technology or infrastructure of the laptop, among others, applied to the planning and urban design.

REFERENCES