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LIVING IN URBAN COMPLEXITY

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Abstract: Inhabiting a city seems to be a normal practice and yet it is not so. Inhabiting is one of the two substantive functions of human beings along with speaking (Doberti and Giordano, 2000) which, lacking a theory of its own, has not been able to explain the possible preferences of citizens in locating their residence in a certain area or another of the city. We can consider that these decisions are part of the complexity involved in living in a city, a phenomenon that is linked to urban complexity, which is just beginning to be studied and understood as the difficulty to understand and accurately reproduce the dynamics of complex systems in cities (Fernandez, 2022). For this purpose, we present a brief description of what urban complexity has been, which we complement with a “theory of inhabiting”. Finally, we include two topics that seem to us fundamental in this decision about where to live; these topics are cultural identity and public space. We consider that this article should be considered as a review article.

Keywords: inhabitation, urban complexity, uncertainty, cultural identity, public space.

INTRODUCTION

In this article we seek to understand what is known today as “urban complexity” and how it has accompanied urban planning during the twentieth and twenty-first centuries. Likewise, we seek to demonstrate that the choice in the way citizens live responds to many factors that we would understand as part of this urban complexity, some of these factors present in our daily lives such as personal tastes, adequate conditions to develop a family, economic conditions that allow us to live in the desired area, and so on. But there are other unexpected factors, such as those brought about by the Covid-19 pandemic, since which there have been transformations in the way we live. In the labor field, the so-called “homeoffice” or the possibility of working from home

thanks to the use of technological innovations already existing in the labor field, but which in the face of such an emergency have had to be applied suddenly and broadly, which has produced changes in the ways of relating to the people who live in each home. However, this labor practice, typical of the neoliberal model, has continued to be applied since then, originating changes in the relations between employees and the companies they work for and, therefore, changes in the ways of living and in the so-called “spaces of socialization of the city”, which in turn has affected many economic activities and the urban configuration itself (Fernandez, 2022: 7). Working at home implied a series of affectations and adaptations of family life due to the conditions in which the pandemic occurred, forcing its members to live together for so many hours, and we still do not know for sure the effect it has on those who have continued to do so.

On the other hand, in the real estate sector there have been strong fluctuations in housing prices, a situation that in Mexico City was already serious since the 2017 earthquake, and which has been further aggravated by the arrival of foreign visitors to live in central areas of the city (specifically in the Condesa and Roma neighborhoods), who, having the possibility of working remotely, find very favorable economic and social environments and conditions in those neighborhoods to establish their residence. All this implies increases in rent prices that have had repercussions throughout the city and, therefore, economic pressures for many families who have had to adapt their decision of where to locate their residence to places where they can afford to pay. In short, all these causes are part of the urban complexity that we must face on a daily basis.

According to José Miguel Fernández in his text *Complexity and Uncertainty in Today's City* (2022), “complexity” and “uncertainty”

have always accompanied the evolution of human civilizations since ancient times. Gonzalo Alberto Perez, president of the Sura Group, comments in his prologue to the Unesco edition of Edgar Morin's work entitled *The Seven Necessary Knowledge for the Education of the Future* (1999), "that those who invoke mathematics as the only measure to build the future are mistaken, we are children of uncertainty and there is a driving force in it" (Perez, 2021: 6). According to Fernández, we must understand complexity "as the difficulty to understand and accurately reproduce the dynamics of complex systems", and uncertainty, the latter translated as "the inability to accurately foresee the future" (Fernández, 2022:12) "The uncertainty that destroys simplistic knowledge is the detoxifier of complex knowledge" (Morin, [1999] 2021, 50). Thus these two concepts have been and continue to be intrinsically linked and feed back on each other. Both concepts are perfectly transferable to today's cities. "There is complexity when the different elements that constitute a whole are inseparable [...] and when there is an interdependent, interactive and inter-retroactive fabric between the object of knowledge and its context, the parts and the whole, the whole and the parts, and the parts among themselves. Complexity is, in fact, the union between unity and multiplicity" (Morin, [1999] 2021, 59, 60). Thus, when we analyze all these aspects that we citizens deal with when inhabiting, we have to consider the impact of complexity in the city and start referring to it with the term "urban complexity", since complexity is one of the characteristic attributes of the city, "since it can be assimilated to a complex organism, fruit of the invention of human societies and built from multiple singular initiatives over time, with a large number of protagonists and connections between them". Similarly, uncertainty "is a constant characteristic of today's cities, which is mainly generated by a complex

environment that envelops and disturbs decision-making about their future" (Fernandez, 2022: 13). Therefore, both concepts are two of the main challenges we urban planners face when designing and ordering today's cities, concepts that hinder the successful formulation of urban policies and the accurate prediction of future events, especially if we plan without considering the people who inhabit the urban space we are planning.

It is important to consider that current urbanism is a product of the growing interest in environmental issues that emerged at the end of the last century and the beginning of this century, so it is a relatively new and virgin field. Complexity studies, which through the Complex Systems Theory represent since the twentieth century, a new paradigm on how to understand science and knowledge, a paradigm that has slowly replaced the previous mechanistic scientific paradigm originated in the seventeenth century. So we are currently in a stage of change of beliefs, values and perspectives in which a "new" paradigm is gradually and slowly replacing the previous one (Kuhn, 1962; Capra, 1998), so all these ideas on complexity are new and have been appearing gradually, including of course these new ideas on urban studies.

Analyzing how these studies on complexity in cities arise is equally novel. Something happens when a small town grows into a city, especially a big city, which in turn, becomes a big magnet. According to Toby Hemenway, (2016), both Geoffrey Brian West along with Luís Bettencourt, a team of economists and technology experts at the *Santa Fe Institute*, stood out for their analysis of urban complexity from the point of view of the scale of cities. After rereading Jane Jacobs (*Death and Life of Great Cities* 1961), they analyzed a large amount of data from twelve cities in search of patterns in various fields of study, from inventions to current accounts, R&D start-ups

to wealth creation. They found that indicators of innovation and creativity did not grow at a simple linear rate but at a superlinear one. So they concluded that the larger a city is, the higher its level of production potentiates. "A city fifty times larger than another gave rise to 150 times more ideas" (Hemenway, 2016; Fernandez, 2022). This higher production can be attributed to the proximity between people and goods, and as Jane Jacobs observed "big cities are not bigger towns", the creativity generated is squared or even cubed (Jacobs in Hemenway, 2016: 28).

Thus, cities are complex adaptive systems that have a dynamism and adaptability that "derive from the ability of their parts to connect, combine, overlap and influence each other" i.e. what gives the system its character "are the interactions and relationships that are established between them, the ability of the many parts that compose them to interact dynamically [...] what gives complex systems their sensitivity and their ability to act in unpredictable and novel ways", the simple fact of interacting with other people and being influenced by their ideas stimulates the emergence of the system's sensitivity and ability to act in unpredictable and novel ways.] what gives complex systems their sensitivity and their ability to act in unpredictable and novel ways", the simple fact of interacting with other people and receiving the influence of their ideas stimulates the emergence of creativity (Hemenway, 2016: 28, 29).

Adaptability or creativity, "does not work well, or even appear, until the system crosses a certain threshold of complexity", which is functional for big cities "By coming together in large numbers, individuals and groups can probe the immense space of novel and unexplored possibilities that arises from the combinatorial explosion generated by many autonomous parts interacting in diverse ways" (Hemenway, 2016: 29). Thus the mixture of

creativity and exploration of the novel is what makes life in the city special, in addition to the fact that urban elements such as people, the knowledge, customs, ideas and skills are not static, but dynamic, "in constant process of learning and evolution", so that they can also be combined because of their malleability and responsiveness to changes "that allow them to combine in ways that can adapt and change. Their ability to learn and grow generates even more novelty and even more possibilities" (Hemenway, 2016: 29). Although we are only now beginning to understand urban complexity, it has been present in the development of cities since the twentieth century, which invites us to a convenient historical review of the development of urbanism during this period, seeking to understand the historical relationship of complexity with urbanism.

METHODOLOGY

In order to understand urban complexity through the different ways that the inhabitants of a city have to inhabit it, to select the place of residence, to understand why the forms of socialization occur in a city and how identity helps us to safeguard the traditional values that exist in cities, one of the few defenses against the onslaught of globalization and globalization, this work is developed as one of its main objectives the study of urban complexity, seeking to understand when the urban becomes complex. We begin with a historical account of how complexity has been linked to urbanism since the twentieth century. We complement with the proposal made by Roberto Doberti and Liliana Giordano on a Theory of Inhabiting, a theory that seeks to explain the problems and considerations that human beings address when inhabiting. We also include ideas about public space, which we understand as the place that allows the inhabitants of a city to coexist, and which, due to neoliberal policies, has become a private

space, and the importance of identity to counteract the globalizing influence. According to the above arguments, we consider this article as a review article.

DEVELOPMENT

Understanding the way in which a city becomes a complex space is a new vein of knowledge that takes us to a different history of urbanism than the one we have traditionally studied, and that brings us closer to this “new” way of looking at the knowledge presented by the Complex Systems Theory. We must also understand that cities will gradually become sustainable or sustainable cities, for which a series of changes will have to be adopted that will turn them into even more complex spaces.

HISTORY OF SYSTEMIC URBANISM

Although we analyze mainly the twentieth century, that is, when urban planning became independent of the architectural project and became a meeting place for different disciplines, already since the nineteenth century (between 1830 and 1850), urban practice took shape in which engineers and hygienists sought to solve the problems caused in cities by the nascent industry, such as the insufficiency of sewage and drinking water or the spread of epidemics (Benévolo, 1974), so, justified by health reasons, the modernization of some European cities such as Paris was carried out, although in a more hidden way, speculative interests also played a role (Choay, 2007). Cities still responded to the particular interests of the nobility or the great bourgeoisie, and the opinions of their inhabitants were secondary. At the beginning of the 20th century, Ebenezer Howard’s proposal to create garden cities on the outskirts of London appeared, influenced by the utopian socialists of the first half of the 19th century, especially Owen, as his response to the concept of a single-family

house with a garden (Benévolo, 1974), which appeared in his work entitled *Garden cities of tomorrow* (1902), and marked the beginning of a concern for the well-being of citizens.

The Modern Movement arose, led by Le Corbusier, which dominated architecture and urbanism in most of the central decades of the twentieth century, and which developed a model of the city “that we can describe today as reductionist and mechanistic with respect to urban complexity” (Fernández, 2022: 138). Le Corbusier found offensive the apparent confusion and disorder of cities, for which he worked his projects with a perfect geometry at the urban level made as they say “from a bird’s eye view” (Hemenway, 2016: 34), and in which he proposes a division of activities that better organize the city. These activities would be inhabiting, working, circulating and entertainment. However, there was little concern for the welfare of the inhabitants of these cities as Jane Jacobs pointed out at the time.

After World War II, the U.S. government initiated a series of measures aimed at improving transportation infrastructures and renovating cities, for which housing laws were enacted. This led to urban renewal programs aimed at demolishing poor neighborhoods in the central areas of the city and replacing them with new housing, offices, shopping malls and urban highways, resulting in the displacement of hundreds of thousands of people, especially ethnic minorities. In the face of these abuses, the figure of the aforementioned New York activist Jane Jacobs (1916-2006) emerges, who through her book *The death and life of great American cities* published in 1961, identifies the causes of the deterioration or preservation of urban spaces in local communities. “She argued that the health of urban life depended on the existence of buildings and neighborhoods with different uses, ages, appearances, layouts, and income levels” (Hemenway, 2016: 33). For her, design influences human behavior, “but

not so much from a perceptual point of view as from a behavioral point of view” (Ordeig, n/d: 143). “Jacobs praised the complexity and diversity observed in the consolidated neighborhoods of large North American cities, as opposed to the monotony and lack of life of the new neighborhoods planned and executed in a mechanistic manner in the 1950s...” (Fernández, 2022: 142). Jacobs referred to the city as “organized complexity”. Also important was his criticism of the Modern Movement which, as already mentioned, designed “from a bird’s eye view”, while cities required an urbanism that was related to their social problems, especially in the poorest neighborhoods.

Subsequently, the figure of architect Christopher Alexander will emerge, who “argued that the best models of dynamic cities came from the world before industrialization and that design from below was an essential element” (Hemenway, 2016: 35). For him the city is a complex receptacle of life through which a multitude of life streams flow, so Alexander understood the city as a highly complex system. However, his line of study of complexity from the point of view of architecture and urban design was not very well developed (Fernández, 2022: 144). He based his work on surveys he conducted with future users, which were later processed in a computer and, from there, results were obtained.

From this point on, we must turn our attention to the resolution of urban problems by means of systemic approaches that emerged from the space race between the Soviets and North Americans. Models were built with good results that improved the public management of certain infrastructure and urban services such as transportation, water supply or waste treatment, “but the proposals aimed at solving social problems, such as the fight against poverty and crime encountered serious difficulties of implementation” (Fernandez, 2022: 145, 146). This way of planning

cities has a multidisciplinary approach and dominated urban planning until the emergence of environmental problems.

At the same time, social problems arose as a result of the urban renewal policies promoted by President Lyndon B. Johnson (as pointed out by Jane Jacobs). We have the *Model Cities Program* of 1966, whose main objective was the comprehensive renovation of neighborhoods with high urban poverty, thus presenting itself as a new approach to urban renewal, and emphasizing “the social aspects of the community, citizen participation in the projects, the rehabilitation of buildings rather than their demolition and the coordination of the actions of different government agencies”, all this “with simulation models that sought to calculate in a systemic way the future needs of the population in terms of housing and facilities” (Fernandez, 2022: 147). Ira S. Lowry’s model of urban growth was the most popular.

Another very important document of the time was the report by Donella Meadows for the Club of Rome through the *Massachusetts Institute of Technology*, entitled *The limits to growth*, published in 1972. The report simulated what would happen to the planet, assuming a limited supply of resources, in the face of exponential economic and population growth. “The model included five variables: population, food production, industrial production, pollution and consumption of non-renewable natural resources. It was proposed that in the future all five variables would grow exponentially, while the capacity of technology to increase resources would only grow linearly.” The pessimistic nature of the report generated great controversy, especially for not giving importance to technological innovations to solve the limitation of resources (Fernandez, 2022: 153, 154). Even today, the Club of Rome has promoted since that time this type of studies with the variables already mentioned, convinced that the problems of the planet are found

in the number of human beings that inhabit it, however, world policies have not wanted to violate the rights of human beings to have the number of children that each couple decides, so these initiatives of the Club of Rome have had little echo in the world panorama.

It is in the United States where the results of architectural research in fields such as semiotics, “as a language perceived through a cultural code related to popular taste”, will materialize through two cases: Venturi and Moore. Robert Venturi “will interpret urban space as systems of languages and symbols” and Charles Moore “will bring to the design the intention of adapting signs to vernacular languages and to a symbolism evocative of the past, hence the presence of eclectic and mannerist elements in his projects” (Ordeig, n/d: 198).

Faced with the quantitative neopositivist paradigms that dominated urbanism, reduced to the simplest expression of the language of physics and mathematics, reductionist, which had as its methodological model the hypothetico-deductive model of the experimental sciences, a rejection arose in the 1960s on the part of the social sciences of the scientific, philosophical and methodological discourse to which neopositivism had led. It was the *neo-historicist* movement that in turn renewed the vision of science, politics and society. It seemed the end of a stage of capitalism and, faced with the emergence of new problems and the need for new sensibilities and new methods to address them, phenomenology and existentialism, on which the *Geography of Perception* and *Humanist Geography* were based, focused on freedom and the unpredictability of human behavior as the basis for the analysis of people’s experience. “Everyday life led to lived space, both tangible, multisensory space, and intangible space, full of consciousness, sensations, feelings and emotions. The abstract space and the econometric and quantitative

regional analysis gave way to the concrete territory and this transcended to the place, to the places loaded with meaning, named, domesticated, felt, moved and lived”. The landscape stood out as the reflection through which the territory, the place, was shown, composed of a set of both sensory and intangible elements, charged with sensations and emotions and which can be read, approached and interpreted in the light of a series of hermeneutic keys and both quantitative and qualitative methods and sources (Monteagudo, 2018: 283-285). The figure of Yi-Fu Tuan stands out:

Concepts of place, landscape, emotional geographies, gender geographies, time, language, culture, the contrasts between globalization and local looks, from the global to the local, the *glocal*, the sense of the depth of the current crisis, much more than an economic crisis, a systemic crisis, of values, of models of society, of ways of life, of systems of production, of forms of governance. (Monteagudo, 2018: 286)

This author shows how deep cracks appear in our way of conceiving the world, in social relations and in relations with our environment, as if a whole way of life were coming to an end. And how, in the face of this reality, a renewed interest in the “spatiality of emotion, feeling and affection” (Monteagudo, 2018: 286) emerges. This aspect fed later studies on landscape, which today has become a key element of urban-territorial planning (Cedeño and Torres, 2023).

It was not until the 1990s and the beginning of the 21st century that urban planners showed renewed interest in the phenomenon of urban complexity, although with different approaches such as Fractal Theory, genetic algorithms, cellular automata, artificial neural networks and artificial intelligence (Fernández, 2022: 160).

As mentioned at the beginning of this paper, since 1985 the *Santa Fe Institute* has been interested in the phenomenon of complexity

in cities through the figures of Geoffrey Brian West and Luís Bettencourt (Fernández, 2022; Hemenway, 2016). In Europe, specifically at the *Centre for Advanced Spatial Analysis* (CASA), belonging to *University College London*, the figure of Michael Betty, a British urban planner and geographer who has served as director of the center since 1995, stands out. He has worked on modeling the structure of urban and territorial systems. In his best known text *Cities and complexity*, published in 2005, he applies complexity theory to urban analysis and planning (Fernández, 2022).

British Peter Allen, professor emeritus at *Cranfield University*, “developed the ideas of physicist Ilya Prigogine on the self-organizing processes of systems in ‘non-equilibrium’ states and applied them to the city. Juval Portugali, an Israeli geographer and professor at *Tel Aviv University*, covers a wide range of topics “from complexity theory to spatial cognition, including ancient urbanism and contemporary . Regarding the city and complexity, “he has specialized in cognitive maps, theories of self-organization, agent-based models and analysis of socio-spatial change (Fernandez, 2022: 168, 169). To study urban design together with the theory of complex systems it is worth reviewing his work *Complexity Theories of Cities Have Come of Year* (Hemenway, 2016).

In recent years we have detected two currents that dominate systemic thinking in urban sciences: a scientific current “that since the second half of the twentieth century has dominated the systemic discourse in urban planning”, and which has been characterized by working with eminently mechanistic systemic models based on mathematical algorithms. There is an alternative position “that studies the city with a more open and fluid systemic approach”, does not use quantitative instruments and tends towards a discourse that is more reasoned than empirical (Fernández, 2022: 178).

As we have been able to observe throughout this historical journey, the study of urban complexity is a consequence of the large number of elements that have intervened and that currently intervene in cities, which has led specialists to opt for systems thinking and instruments such as cognitive maps, theories of self-organization, agent-based models and analysis of socio-spatial changes, instruments that have turned urban analysis into studies different from those traditionally handled by urban-territorial planning. This is in addition to a number of new contributions to the study of the urban, ranging from the study of urban landscape and landscape urbanism, different modalities of sustainable housing complexes such as eco-neighborhoods, permaculture, urban agriculture and adaptive reuse, all of which are new fields that should result in the sustainable city of the future (Cedeño, 2024).

An interesting contribution will emerge in Spain, where bioclimatic urban planning, landscape, the sustainable city of the future and eco-neighborhoods will be the protagonists. In this regard, it is worth highlighting the figure of urban planner Ester Higuera, who has devoted herself to working on these issues, with very interesting results.



Figure 1. Eco-neighborhoods

Note: Eco-neighborhoods are sustainable collective living spaces that in Europe are becoming the appropriate living spaces for the sustainable city of the future. Pictured is the Vauban eco-neighborhood in Freiburg, Germany (Cedeño, 2019).

THE THEORY OF DWELLING

But regardless of the evolution that studies on the city have had from the complex systems and from the environmental problems, the theme of “the uses and customs in the way of inhabiting the city” arises, we must start from the fact that, “knowledge, customs, ideas and skills are not static, but dynamic” (Hemenway, 2016: 29). Roberto Doberti and Liliana Giordano, two Argentine researchers propose a *Theory of Inhabiting*, which starts from the reflexive or rational actions of the human being, which imply “that the direct procedures, and in many aspects automatic, which derive from instinct, are replaced by other indirect procedures, mediated, in short by detours”, product of replacing instincts with more flexible responses, less secure but with the possibility of growth and accumulation (Doberti and Giordano, 2000: 120).

A key element of this theory is the *Description of Customs* whose modalities “show, expose, show off, the differences in the uses and customs - the habits - that manifest themselves when the coordinates of time and space are displaced”. It is here when these researchers resort to citing identity elements as the main ones that move citizens. Thus the customs appear associated with the building and urban or rural environments in which they are developed, with the objects involved, with the clothing worn “and ultimately with the complex perceptual reality that manifests itself spatially”. On the other hand, “the description of customs always manifests itself by paying attention to the foreign, it discovers customs in the strange, the exotic, the unusual [...] Contradictorily, what is customary would not be customary and only the unusual, not what usually happens, is inscribed as use” (Doberti and Giordano, 2000: 123, 124).

For these authors, the inadequacy of the Description of Customs is also a consequence of the asystematic character it seems to

have, with the corresponding lack of rigor in the definition of categories, and of the criteria for analysis and evaluation. “Although the manifestation of cultural diversities through customs is one of its main values, the absence of basic conceptual principles that organize the discourse results in each case becoming an island, without communication or possible comparison with others”. They add that in order for the Theory of Dwelling to contain and expand the valuable aspects and overcome the inadequacies of the Description of Customs, it has to set itself some objectives that may be difficult and complex, which are, first of all, “to recognize the difficulty of its task, metaphorically we could say that it must recognize the difficulty of inhabiting Dwelling”. Moreover, “the closeness of the Inhabiting, its permanence, its necessary and obligatory condition, which turns the Inhabiting into something difficult to apprehend, to recognize in its intimate legality, in its specific structuring” (Doberti and Giordano, 2000: 126).

“Many of the limitations of the Description of Customs stems from the very notion of *description*”. It must renounce its function as a *gaze*, that is to say as an instrument that chooses, delimits, organizes and constructs its object of study, since it is intentional and selective. “The inadequacies residing in the notion of description are more serious because they presuppose and propose an impossibility: the mere recording of data.” Observation can and should be neutral. Probably the greatest inadequacy or distortion lies in the value or place assigned to the notion of custom, an undervaluation (Doberti and Giordano, 2000: 126, 127). Today we know that observation will never be neutral and depends on the interests and formation of the observer (Maturana and Varela, 2003).

As professionals of Architecture, Design and Urbanism, our main objective is the construction of the frameworks that enable and

delimit the Inhabiting. And for this we must use the technical knowledge that seeks fuller, more open, more supportive and more equitable ways of inhabiting, something for which Jane Jacobs fought so hard, however, our disciplines seem rather close to technological, aesthetic or financial concerns, forgetting or relegating within their actions the issues related to inhabiting, which we could generalize as social issues of coexistence, issues where complexity emerges more clearly. Thus it is common to see in architectural production, great technological and formal works detached from the qualities of Living with purely dimensional criteria that respond to parameters only suitable for certain cultural logics of Living, a situation that was very evident during the Modern Movement. Thus, two instances or stages can be established: a first one that attends to the incidence and relevance of Dwelling in the exercise of Architecture, Design and Urbanism, and a second instance that assumes the systematic and rigorous reflection on Dwelling (Doberti and Giordano, 2000), which resembles Jacobs' proposal. This reinforces the idea of the theoretical backwardness of Architecture today, which seems far from responding to the real needs of users and is immersed in architectural models little understood by these users, and without facing the real current challenges of humanity such as Climate Change. The current bioclimatic urbanism, which arose from the idea of the sustainable city of the future (Higueras, 2006).



Figure 2. The architectural style

Note: Eco-neighborhoods have shown us architects that it is not necessary to design harmoniously and in a single style, but housing that meets the needs of its occupants. Housing in the eco-neighborhood of Vauban in Freiburg, Germany (Cedeño, 2019).

There are strong links between the Theory of Habitation and multiple disciplines such as Sociology, Psychology, Anthropology, Economics, Philosophy, etc., because there are many fields from which it is possible to contribute to its elaboration and constitution as an interdisciplinary, and possibly as a transdiscipline (Doberti and Giordano, 2000: 128). And here we must remember the contribution to multidiscipline made by institutions such as the Colegio de México in order to solve urban problems, which, in the end, were not successful because they did not include the environmental issue or understand complexity. Here also arises the proposals of Yi-Fu Tuan and Monteagudo within the neohistoricist movement that proposes that “Everyday life led to lived space, space both tangible, multisensory, and intangible, full of consciousness, sensations, feelings and emotions” (Monteagudo, 2018: 283). And continuing with Yi-Fu Tuan's ideas but with a natural bias, Doberti and Giordano comment that Inhabiting is neither purely nor primarily inscribed in the field of nature but in that of culture or sociality. “We inhabit, and only humans inhabit, because we are the only species that lacks or has renoun-

ced a *natural habitat*, because we are able and obliged at all times to culturally establish our conditions of inhabiting” (Doberti and Giordano, 2000: 128).

The Theory of Dwelling focuses its study on a *practice*, Dwelling is a *macro-practice*, a Spatial Theory of Social Practices, which must be put in correspondence with Speaking, the other macro-practice with which composes the two Systems of Meaning that define and constitute us as human beings” (Doberti and Giordano, 2000: 128, 129).

Social Practices are the framework, the possibility, the matrix of the signifying systems of Speaking and Living. Social Practices are structured according to three levels that we call Normative, Justifying and Meaningful. A primary and decisive issue is that this organization is situated, in turn, on three differentiated planes or dimensions: on the methodological plane -since it constitutes the appropriate instrument for the analysis of the Projectual Practices- on the theoretical plane -since we maintain that the levels are not only categories of analysis but intrinsic structure of the Projectual Practices- and on an ontological or metaphysical plane -it is through the exercise of these levels, and in particular of the significant level that the order of the Real is established (Doberti and Giordano, 2000).

PUBLIC SPACE AS A SYMBOL OF CULTURAL IDENTITY

In order to inhabit “one resorts to the memory one has of the place, that is to say, what contributes to achieve bonds of identity, social cohesion and confluence of benefits and interests” (Peña, 2004). Thus, an important issue at the time of inhabiting is identity, which, together with public space, are two symbolic aspects that greatly condition the choice at the time of inhabiting.

About public space we have that the city offers social groups and individuals spaces

for meeting and manifestation, however this exchange has acquired a strictly functional profile during the twentieth century, due to the fact that most of the movements are made within transport vehicles, which distorts the perception of this urban space and, which generates at the same time, an endless number of urban spaces of disparate meanings, hardly transited, in which the individual lives immersed (de las Rivas, 2012: 125, 126). And where identity plays an important role.



Figure 3. Public space

Note: Public space should allow both adults and children to find a place to gather and have fun. Pictured are the canals carrying water from the Black Forest in Freiburg, Germany (Cedeño, 2019).

Jane Jacobs in her aforementioned work *Death and Life of Great Cities* (1961), also expressed these ideas: “The streets and sidewalks, the main public places of a city, are its most vital organs - think of a city and what comes to mind? Its streets. If the streets of a city seem interesting, the city seems interesting; if they seem boring, the city seems boring” (Jacobs, 1993: 37 in Musset, 2012: 14).

For Costa Gomes “[Public space] is also a place of conflicts, of problematization of social life, but it is above all the ground where these problems are pointed out and signified” (Costa Gomes, 2002 in Musset, 2012: 13). And in this functionality of public space, the streets and squares, traditionally, become the places of greatest coexistence and where urban life is

most present “The streets and squares, i.e. the places where people can walk, are the essence of civic life and urbanity” (Musset, 2012: 14). We understand that public space is vital in the socialization of urban life.

Thus, when the neoliberal idea of destroying public space to convert it into private space arises, we must keep in mind that public space is the very essence of the city (Lefebvre, in Viladevall and Castrillo, 2012, 7). “The announcement of the disappearance of public spaces and the absolute privatization of ways of life plays a fundamental role since, by imagining a world where the city has already lost all political meaning, science fiction questions the very notion of citizenship - that is to say the philosophical and moral basis of our civilizations” (Neveu, 1999 in Musset, 2012: 12).

Modernity [...] also underestimated the value of public spaces as the privileged space for learning about otherness, as a staging of civil society in its social and cultural diversity, as a material support for the construction of a collective identity that, despite being spatially anchored, is lived in an ephemeral way. (Gorrah-Gobin, 2001 in Musset, 2012: 14).

“The public space of modern cities lost its function as a meeting place for the crowd to become a common and ordinary place of mobility and circulation” (Sennet, 1974 in Musset, 2012: 14). If we start from the fact that in big cities we live in a mass society whose behavior is that of incommunication (which is neither isolation nor solitude), and which is reinforced by the narcotizing character of the mass media, which leads the inhabitant of big cities to not identify his belonging to any social group, and to arouse his passion only for certain sporting events; this urban being ends up identifying himself only with what he consumes, that is, news, clothing, amusement (www.monografias.com., 2007). And this could lead us to a preference of the citizen towards certain ways of living.

“Not walking is not knowing the city. All cities reveal themselves through magical pedestrian paths. The walker is the essential artist of the city, the scribe of its novel, the designer of its poems is imaginary architect” (Guest, 1996 in Musset, 2012: 15).

It is not about public spaces for tourists, but about the ordinary collective space “which, on a neighborhood or city scale, hosts urban life in all its complexity. The city needs a vigorous system of public spaces that we associate with the vitality, diversity and richness of urban life. We should not think only of isolated singular spaces “The interweaving of public space and urban life cannot rest only on a singular space, even if it is exceptional, but on an articulated system of spaces” (de las Rivas, 2012: 124).

For a space to meet today’s expectations, “The quality of public space may be evaluated above all by the intensity and quality of the social relations it facilitates, by its mixing force of groups and behaviors, and by its capacity to stimulate symbolic identification, cultural expression and integration” (Borja in Rosas, 2012: 96).

How does public space favor or create possibilities for collaboration and interaction? This occurs during periods of popular “festivities”, moments when people “turn” to the street. “It is necessary to foster an “appropriation” by human beings of their natural and social urban being [...] It is perhaps this path towards a more “human” society that will allow us to free the creative from the perspective of the exceptional, that will make it possible for the citizens as a whole to have better access to the complex of interactions proper to a rich urban space” (de las Rivas, 2012: 127). And all this social interaction should lead us to new practices in the way of inhabiting.

An issue that complements that of public space is that of identity, which has supported our peoples in recent years to stop neoliberal and globalizing policies, which constitute

a subtle destruction, not only of traditional cultures, but also of the creative core of the great cultures, the ethical and mythical core of humanity (Frampton, 1990). These phenomena are expressed through consumption. Individuals who once were so have renounced this condition to become -involuntarily and unconsciously -, a mass of consumers with a basic consumerist culture, in a vital context inadequate for man, and where nevertheless the banner of the search for “utility” and “quality”, abstract concepts (Cremoux, 1974) that modern society has made concrete, is raised.

In this sense, an important manifestation of this consumerism is expressed through the selection of housing, whose purchasers will look for “modern” and “functional”, according to brochures or television propaganda that will lead them towards certain housing prototypes, with “fashionable” construction materials, and despising those traditional construction materials and procedures that modernity has proclaimed “of lesser category” and “outdated”. So, in the face of alienation, these will be the criteria that many of a city’s inhabitants will seek for their new dwellings. These criteria have been prevailing among those Mexican workers who live in the United States, and who send their relatives in Mexico money and drawings of the homes they consider “modern”, which will replace traditional housing, a situation particularly palpable in the State of Mexico.

Seeking to counteract the consumerist effects of our reigning economic model, and focusing on identity, several Mexican towns have been declared “magical towns”, which receive a contribution for remodeling and repairs to guarantee the permanence of our traditional towns.



Figure 4. The importance of heritage in cultural identity.

Note: Heritage allows to reinforce the bonds of identity, hence the importance of its preservation . Image of the Freiburg Cathedral which, despite being destroyed during World War II, was rebuilt (Cedeño, 2019).

CONCLUSIONS

Cities are complex adaptive systems, so complex that we still do not fully understand all the elements that compose them and, therefore, the life of citizens is equally complex. The way of living of the citizens becomes a decision that obeys to different complexities, but of which we can establish as the main variable the purchasing power in front of the high costs that present every year the real estate, mainly in some cities, in second place we must consider the weight that has in a decision the cultural identity, that determines the rooting of the people to be located in a certain place and, as part of this identity, the public spaces like the streets and the squares of this place. Of course, as part of a decision that involves a series of complexities, there are many other reasons, which will also be conditioned by the conditions established by the neoliberal mode of production.

We believe it is pertinent to construct a theory of inhabiting that seeks to explain the preferences of the inhabitants of a city in locating themselves in a certain place or in another, and for which, as this article has shown, it is necessary to know the prevailing social practices at this time, and without forgetting that these are part of an urban complexity.

We had the opportunity to make a historical tour of the relationship between urbanism and complexity, which shows us a different way of understanding this historical relationship, and poses new challenges that urban planners will have to face in the study of the sustainable city of the future.

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