

# COMPLEXITY AND SOCIOCULTURAL URBANIZATION OF SPARE TIME IN MAGDALENA MIXHUCA SPORTS CITY

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## ABSTRACT

This article derives from my thesis research project “Fragmentation and sociocultural urbanization of spare time. High-significance places in Magdalena Mixhuca Sports City”. Its purpose is to concisely present those considerations that allowed integrating transdisciplinary epistemological and methodological frameworks. An analytical method was designed to integrate epistemological considerations for cultural and deep hermeneutics analysis, and the principles of complex thinking and complex systems theory, with the purpose of explaining the spare time sociocultural urbanization that is taking place in this fragmented public space that is characteristic of Mexico City.

We present here some of the results of the implementation of this analytical method based on hologramatic, recursive and dialogic principles, that allowed interpreting Magdalena Mixhuca Sports City (at first sight considered fragmented, disarticulated and chaotic) as a fractal space, integrated by symbolic forms, socially and historically structured in this public space, from its origin, in 1958, up to the 21<sup>st</sup> century. We can conclude that these symbolic forms, located within a complex system, are condensed in high significance places such as Juan Escutia Sports Palace, Rodríguez Brothers Racetrack, Foro Sol, Gates 3 and 2, and Agustín Melgar Olympic Velodrome Esplanade, all of which have their own cultural dynamics that determine the characteristics, as a whole, of this sport centre.

## KEY WORDS

complexity, deep hermeneutics, sociocultural urbanization, public space and spare time

## CLASSIFICATION

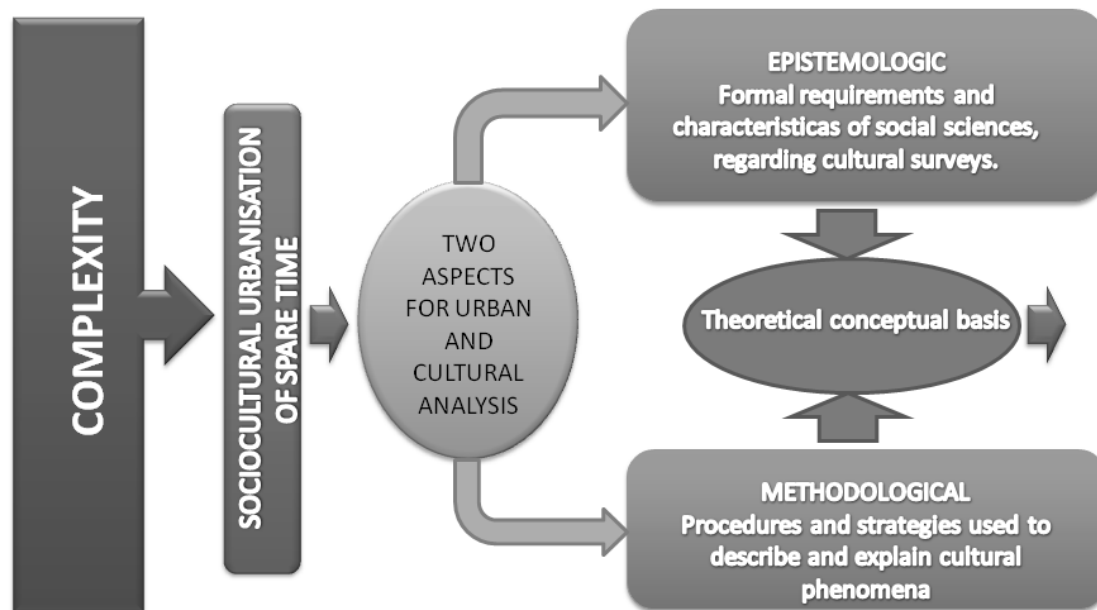
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## INTRODUCTION: REFLECTIONS TO *UNTHINKING THE CITY*

This paper is partly based on the results of my thesis research project “Fragmentation and sociocultural urbanization of spare time. High significance places in Magdalena Mixhuca Sports City”, which I presented in 2010 to obtain my PhD in Urbanism at Universidad Nacional Autónoma de México (UNAM) [1], and on other research projects developed by Instituto Politécnico Nacional and published in 2012 [2]. This thesis was an epistemological and methodological study with a transdisciplinary approach, where complex thinking principles were joined to the complex systems theory, as well as to epistemological considerations for cultural and deep hermeneutics analysis, with the aim of explaining, in a more accurate way, the sociocultural urbanization that takes place in a fragmented public space, in the context of the citizens’ spare time (Fig. 1).



**Figure 1.** Epistemological and methodological aspects of sociocultural urbanization of spare time from the complexity.

Our aim was to open an analytic door in order to understand the contemporary city in a different way, by looking for new paradigms that, as a whole and in an ecumenical way, would complement themselves within the cognitive surpassing, noted by Rafael Lopez Rangel [3; pp.18-34], that is taking place in urbanism. This shows not only the relevance of undertaking urban research projects starting from their cultural dimension, but also the importance of developing these surveys based on alternative forms of thought, different from those related to the paradigms of modernity and functionalist positivism, that shed light on the explanations given on the phenomena and problems affecting urban environments in the context of global and postmodern fragmenting processes. As it is well known, spatial and sociocultural urban fragmentation is characterised by the dominion of the tertiary sector over urbanization guidelines<sup>1</sup>. Such situation has driven apart the processes that structure cities from their subjugation to industrialization guidelines (as it has traditionally occurred in modern metropolis) and has brought them closer to commercial and service activities, to which cultural industry, related to massive communication media, belongs.

These structuring processes have favoured the existence of an informational society, such as the one described by Manuel Castells [4; p.33], that is mainly defined by money and information flows running through certain city enclaves, which disturb the city systems by

fragmenting them on a daily basis, but that also allow interaction with other places, on a global scale, on the understanding that globalisation<sup>2</sup> and postmodernity<sup>3</sup> processes, to which these enclaves belong, do not structure a city in an homogeneous way. This diversity of factors, characteristic of sociocultural and economic processes as the ones described earlier, allow the restructuration of certain properties of city fragments related to leisure or entertainment during spare time<sup>4</sup>, which must be considered as part of urban analyses from a close and inside interpretative position, such as the one presented by Jose Guillermo Cantor Magnani [8; p.14-17].

The field of contemporary urban studies with that close and inside interpretation position seeks to account for the phenomena and internal problems that affect urban environments, taking into account how they are disrupted by extra-local processes that link them with other parts of the metropolis and even with other parts of the world. This type of urban studies start from a local scale and centre the analysis on ordinary citizens who use, on a daily basis or sporadically, the places where they live, by weighing up activities and discourses that arise from their mutual interactions, due to which both city and society are considered active subjects that determine and transform each other, leaving behind those researches in which urban space is only seen as an object, that is, as a container or a location where social events occur, but without paying attention to the analysis of its properties.

The above results from using urban experiences as a way to understand cities lived by their citizens. Cities formed by urban environments, where they concur at the same time remnants of the traditional city, old towns, the modern city in constant transformation and the postmodern city linked to globalisation and technological advances, each with its own dynamics and socio-cultural life forms that point to a spatial and socio-culturally fragmented city where the boundaries between public and private are increasingly blurred and citizenship is under constant construction.

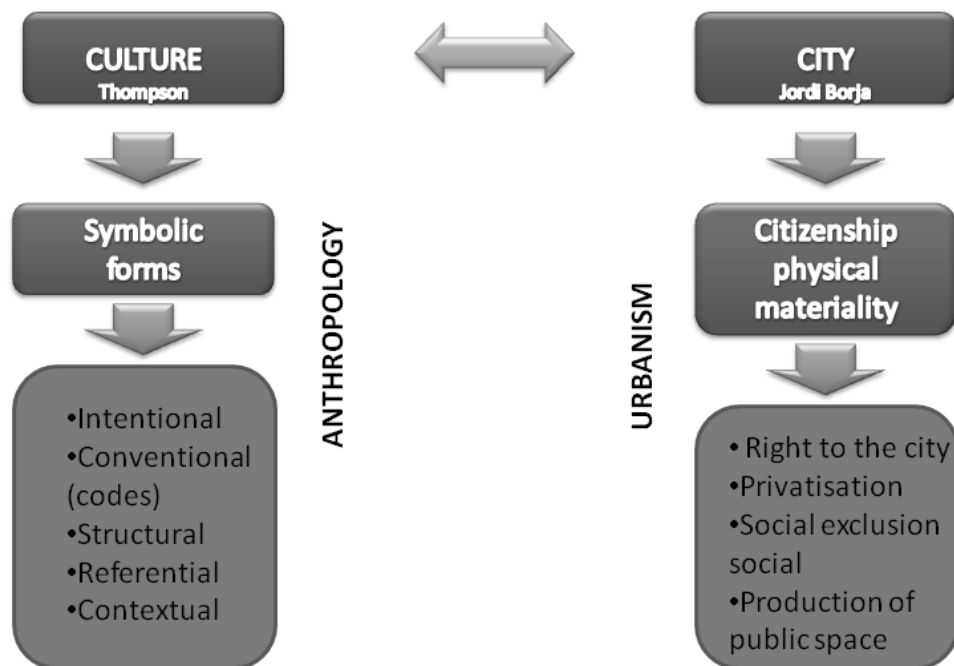
The topic of urban experiences to which citizens are exposed inserts into the debate on the urban condition and its sociocultural determinants in public spaces built by the citizens who are in constant interaction with them through the urban activities they perform and the symbolic representations they comprise, which altogether accounts for the way city urbanises society through a process defined by Ricardo Antonio Núñez Tena as sociocultural urbanization [9; pp.72-78], whose importance lies in thinking the city as an actor that feeds back on itself through the cultural effects it has on the society that created it and continues to transform it.

To face the epistemological challenges posed by current urbanization processes, such as sociocultural development in fragmented spaces, it is required, according to López Rangel [3; pp.15-17], *to unthink the city*, this implies not only radically rethinking the conventional paradigms of urban analysis, spatial planning, theories, concepts and assumptions of modern science that dominated the 20<sup>th</sup> century, but also to establish a boundary, certainly wide and winding, between these forms of knowledge, from the apriorism (conviction where knowledge is given and settled since its origin, so that reality must adjust to a particular theory) and positivism (supported by an empiricism in which knowledge is based on a set of datum, facts or sensory experiences that are functionally linked), and the higher forms of knowledge coming from complex thinking, that allow a different understanding of the city, and that by converging with urban studies from the cultural dimension, provide different epistemological elements for profound interpretation of the structuring and restructuring processes.

Complex thinking proposed by Edgar Morin [11; pp.25-164], is a scientific paradigm emerged from natural sciences and mathematics, based on a dialogical constructivism between

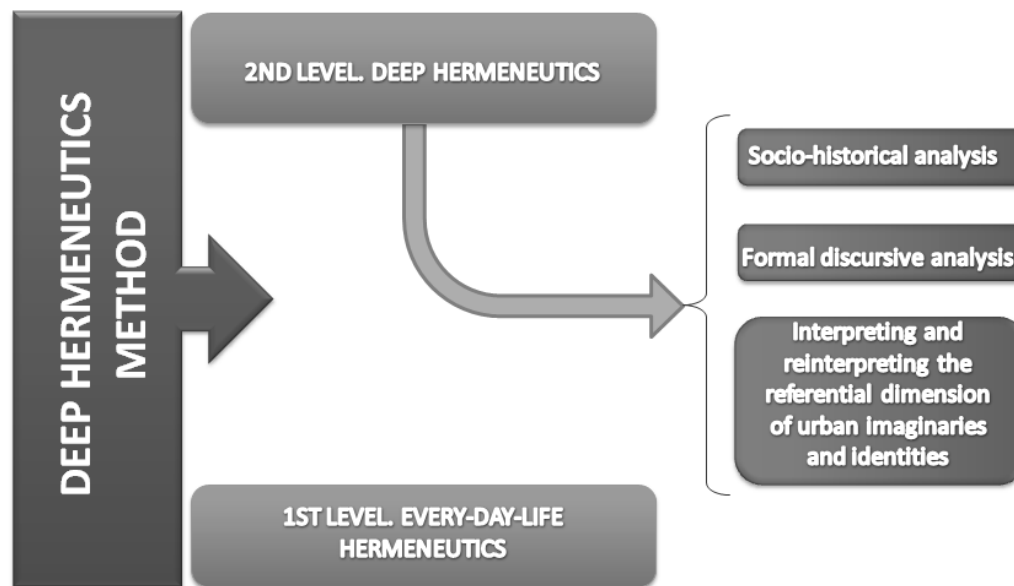
theorisations and experience, capable of conceiving a new epistemological environment to explain the properties of a complex system in constant transformation and the interdefinability of their processes, which is ideal to overcome the aprioristic assumptions and the positivist thought. This has led to the belief that knowledge of socio-cultural and urban issues is a broken mirror of deterministic, reductionistic and linear sciences and disciplines (economics, architecture, urban planning, transportation engineering, sociology, ecology, among others), which are useful to analyse separately each part constituting them, and therefore generating within the city separate sectors such as economy, housing, public space, transport, society, environment, etc., aspects that render the city incomprehensible, especially considering that it is in itself a complex system.

This allowed to consider an epistemological analogy posed by Michel Maffesoli [12; p.36] in which there is a possibility that a fragmented urban space works with an overall coherence in the way a fractal<sup>5</sup> does, and which in turn is presented as a useful tool for spatially analyzing the city, especially considering its most essential sense, which refers to that disarticulated but united, linked with complex thinking and its dialogic, hologramatic and recursive principles<sup>6</sup>, that are useful for interpreting urban space as a complex system, characterised by forms of interdefinable organisation among the relationships of flow and the structuring or restructuring processes that are set through the component parts.



**Figure 2.** Basic concepts to analyze fragmented urban space from the complex systems theory.

From this approach, fragmented urban space cannot be analysed from partial guidance, but as a whole, where one of the structuring or restructuring processes, one of its flow relationships or any of its elements cannot be modified without modifying the rest of the complex system. This approach laid the foundations for the epistemological and methodological interaction of the principles of the complex systems theory formulated by R. García [14; pp.65-150] and for the considerations of city cultural studies, which start from an interpretive concept of culture<sup>7</sup> and a relational and evocative city concept<sup>8</sup> (Fig. 2), framed within the linguistic paradigms defined by G. Giménez [16; pp.33-66], and within the deep hermeneutics method proposed by J.B. Thompson [17].



**Figure 3.** The deep hermeneutics method.

Thompson formulates the deep hermeneutics method in order to study socio-cultural phenomena as comprehension and interpretation activities. We can distinguish two levels in this method: everyday life hermeneutics<sup>9</sup> and deep hermeneutics<sup>10</sup>. Deep hermeneutics is, in turn, divided into three phases or levels: socio-historical analysis<sup>11</sup>, formal or discursive analysis<sup>12</sup> and interpretation-reinterpretation<sup>13</sup> of the referential dimension of the symbolic forms (Fig. 3).

An advantage of the deep hermeneutics method is that it does not represent a conjunction of rigid steps that have to be applied in a strict order and that do not allow the integration of other types of analysis within them. This allowed considering Thompson's method as a general framework of analysis to integrate within each of its levels, the principles of organisation<sup>14</sup>, evolution<sup>15</sup> and equilibration theory<sup>16</sup> derived from the complex systems theory, where the interaction between the triad<sup>17</sup> and the states<sup>18</sup> allows unravelling the functioning of an urban space as a fractal. By considering its organisation as the stratification at different levels of its components, which interact among each other to articulate themselves internally and with other complex systems, not in a linear way (cause and effect), but through processes of interaction between different levels, occurring in overlapping stages and substages between levels, that take place in structuralising phases that transform this system until it reaches structured phases of relative stability where its features can be clearly identified.

These and other methodological principles derived from the complex systems theory allow detailing the articulation of certain analysis stages within the deep hermeneutics method used for the study of socio-cultural urbanisation of spare time in a fragmented public space, taking into account that the knowledge of the totality of this complex system is not the addition of all that exists in it, but only that which can answer the central research question, which implies a selection within the studied urban area that reveals its behaviour as a fractal space; an epistemological analysis guideline where the whole is more than the addition of its parts, but also less. This is nothing but the application of the hologramatic principle.

## **SPORTS CITY AS A FRACTAL SPACE**

The epistemological and methodological considerations that arose, led to the study of Magdalena Mixhuca Sports City, a public space located between Iztacalco and Venustiano Carranza, devised by Jesus Martinez "Palillo" to meet the need of sports and recreation

facilities, and accessible to popular social classes, but especially aimed at athletes and young people exposed to the dangers of a big city that has few proper spaces for athletic activity that meet the citizens' demand of free time enjoyment.

This idea was appropriated by the Mexican welfare state of the mid-twentieth century, and was used to plan Sports City under the principles and concepts of functionalist modernism, in order to offer society a large public space conceived as an achievement of Mexican Revolution, which aimed to make real the benefits of progress related to sport, recreation and contact with nature. However, since its inauguration in 1958, the eventful life of this public space has always been full of vicissitudes that have disrupted its sociocultural urbanization by going through stages of renovation, but mostly abandonment, that not only fragmented it, but transformed it into an unhealthy and dangerous place where private interests dominated over collective ones.

These features have been transformed through various rehabilitation processes launched since the late twentieth century, when government authorities and the private sector began to reassess the virtues of this sports complex, not only as a place of leisure and athletic training, but as space for entertainment and nature, conforming a public space classified as an urban forest, in which a variety of sports and recreational facilities, combined with great ecological and sport educational facilities and mass scenarios, have become iconic for certain social sectors that considered them sanctuaries of their likings and fondness or heritage sites that account for the achievements of an era.

Places such as the Sports Palace, Agustín Melgar Olympic Velodrome, the Rodríguez Brothers Racetrack and Foro Sol (Figs. 4-6), which with the rest of the high significance places of this sports complex contains, and their physical, socio-cultural and environmental properties, have made Sports City key to understand the ludic history of Mexico's capital city.

In this sense, Sports City turns out to be an interesting analysis laboratory, since it is a public space that contains many of the properties that currently characterise Mexico City in the field of spare time, with the combination of leisure and entertainment spaces that face a spatial and socio-cultural fragmentation that creates discontinuities within the dynamics of the urban activities they promote, which suggests a disruption of them and of the urban spaces they house. But it is also an ideal place to observe the effects of the centres of global entertainment over public spaces, with venues such as Rodríguez Brothers Racetrack, Sports Palace and Foro Sol (Figs. 7-9), that are characteristic of an informational society that articulates to global networks.

Therefore, the functioning of this public space, fragmented by different spatial appropriation processes undertaken by the private sector and by different government entities, has made of Sports City a place primarily seen as disarticulated and chaotic, but that can function as a fractal space that keeps a logical order and an overall coherence and that can be interpreted starting from the sociocultural development of leisure that takes place in it. This accounts for the existence of a high-significance-places system that feeds back on itself by concentrating the primary properties of the dialogical relationship between leisure and entertainment that characterises it.

It should be noted that high significance is a concept developed to designate a place of imagined sociability and/or socialite, that is, an emotional territory with an specific sense intended for daily or occasional social coexistence, in which basic, complex and socialite sociability networks are established depending on whether the encounter point is of local, extra-local or metropolitan nature, producing a relationship that triggers a set of meanings, symbols, values, emotions and feelings.



**Figure 4.** Agustín Melgar Olympic Velodrome.



**Figure 5.** Rodríguez Brothers Racetrack.



**Figure 6.** Foro Sol during Vive Latino Festival.



**Figure 7.** Vive Latino Festival Graffiti at Rodríguez Brothers Racetrack.





**Figure 8.** Sports Palace Esplanade during Mexico City Fair.



**Figure 9.** Red Stage during Vive Latino Festival at Foro Sol.

With the concepts, principles, methods and assumptions referred previously, the sociocultural development of the fragmented Sports City, located within a fragmented Mexico City (which already resembles a fractal), was analysed. To achieve this, the most representative entertainment and spare time high significance places of this public space were identified in order to account for their fractal nature, in which the processes and properties of the high significance places define the state of the public space, and vice versa. Moreover, the dynamics of urban activities in these places were characterised in order to distinguish their continuity and discontinuity within their urban environment.

Speeches of different actors who enjoy leisure and entertainment in this sports complex were interpreted with the purpose of defining the imaginaries built by those representing significant elements of spare time. In addition, the physical properties of high significance places in Sports City were detailed in order to distinguish the spatial determining factors that establish their sociocultural functioning. Finally, the structuring processes and the structured states of public space that have determined the properties of leisure and entertainment in Sports City and in each of its representative points were analysed.

Once this analysis on Sports City was completed, different conclusions were drawn, firstly on the different symbolic forms whose characteristics can be described in view of three complementary theoretical fields. As for spare time, two subsystems were clearly structured from their predominant properties: one related to leisure activities in which recreation is not seen as business, and another made up of those entertainment activities serially produced by the cultural industry capital, with a high economic cost to those who consume them.

Two subsystems such as leisure and entertainment keep a dialogic relationship with each other by competing to occupy people's spare time, and at the same time complement each other to satisfy the citizens' right to recreational enjoyment. Both, leisure and entertainment, have been appropriated and reignified by citizens who attend to this sports complex, creating products, activities and meanings with their own social identities, which are exchanged between social classes, in which those that are in between the dominant class (government and cultural industry authorities) and the subordinate class (athletes, fans and users in general) play an essential role, because they are the link between each other, either as licence holders that optimize the operation of the sports facilities or as artists and professional athletes who are the attraction that allows an entertainment activity to take place and gain significance.

Within citizenship, civil rights and public sphere, it could be seen that public and private space are two elements that establish a dialogic relationship, where one needs the other to exist, and where the boundaries between each other become less clear and precise within the scope of spare time, as they have always been since modernity was established, which has forced to carefully weave their mutual interrelations, especially when private issues override public ones, as in the case of franchised locations in Sports City, which are referred to concepts associated with the interests, values and imaginaries of what is public such as freedom, tolerance, legitimacy and community.

As noted, there are many ways in which you can be a citizen, and public space does not always keeps all the features of the theoretical public space, because it is necessary to think of it as a space made more dynamic by fragmentation and other contemporary processes that intersect in their role of urban life axis. Thus, it is necessary to take into account that public space and citizenship have undergone structuring processes and structured phases mutually defined by each other, that do not allow neither of them to be considered given states, but a condition built every day on the basis of decision making and action taking, with which they were built basic sociability networks (local) and complex sociality networks (extra-local) that

are the amalgamation that permits building different cultural dynamics in a given territory, thus spatialising social issues in the context of spare time.

Regarding public spaces intended for leisure in Sports City, a feature that almost always dominated was that of citizens' freedom of action and choice, associated with a sociability that sets in context the right to "build" city in these scenarios considered by citizens as an extension of their home. On the other hand, the sports complex entertainment options assert the right to the citizens' enjoyment, where citizens share places from a socialite<sup>19</sup> and an expenditure determined by the dynamics of accelerated cultural exchanges characteristic of a mass society immersed in informational flow networks.

Moreover, the symbolic forms of culture showed properties that account for their role within the complex system, which proved to be an effective way to understand the preponderant changes that occur within the main components of this public space, and the sociocultural urbanization they display, which allows to understand how the whole structure of this element and this process will be modified, but also to identify the predominant properties of their cultural environments, in order to see what the determining factors that structure their processes in each high significance place and in the totality of this sports complex are.

Places of high significance are hologramatic elements containing the predominant properties of the leisure and entertainment subsystems of Sports City. Such properties deployed in symbolic forms, feedback on these sites and account for the continuity and discontinuity of sociocultural urbanisation process unfolded similarly to the spatial fragmentation that characterises this sports complex. But not because of it, it stops articulating at different stages and at different levels with a coherence of the whole, where the addition of their high significance places is less and more than the entire sports complex, because these places have more properties and processes with a greater level of detail than those linked to all of this public space.

## **SPORTS CITY, A MULTIDISCIPLINARY HIGH SIGNIFICANCE SPACE**

Within these high significance places, there are scenarios of entertainment that maintain properties and processes with local and extra-local impacts, important for the functioning of Magdalena Mixhuca Sports City and of the cultural circuits articulated outside it. Its vitality is a circumstance that would make possible to increase the strength of the leisure scenarios, but mostly the entertainment subsystem to which they belong, as accounted for by the series of symbolic forms they house at certain times of the year, but whose viability and convening power are constrained to metropolitan, national and global circumstances, making them weak as public spaces under concession, because they require sound economic investment from the private sector managing them and an efficient interest negotiation among public and private actors, that allow boosting the development of mass events, but without forgetting to diminish their affectations on the rest of Sports City, as well as further encouraging the use of open spaces as public spaces through activities that create continuities.

These entertainment scenarios in Iztacalco are the key to building the meanings that root citizens living in Mexico City to this sports complex, especially since they are high significance places with a more intimate relationship with different interests on artistic and sport shows, which concentrate significant properties related to diverse metropolitan identities.

Within these entertainment scenarios, it can be found Juan Escutia Sports Palace (Fig. 10), which can be considered the core of Sports City (next to Agustín Melgar Olympic Velodrome), a heritage site, headquarters of global entertainment and geosymbol of rock and of the 1968 Olympic Games, which articulates with entertainment circuits at all levels, whose territory extends to every corner where there is a basketball court, skateboarding is practiced,

a concert is held or there is a place complementing the activities it houses, which in addition assembles commercial establishments, service and entertainment activities, but that requires a better preservation of its heritage assets which are deteriorating, as it is happening to the dome and to Mathias Goeritz' Polar Bear, as well as the rescuing of some of its parking lots and the elimination of certain barriers that limit continuity of urban activities that it houses or could possibly house.

Rodriguez Brothers Racetrack is another scenario of entertainment (Fig. 11), which can be seen as a historic site of global entertainment that encloses magical places with a reputation that allows it to be considered "the Mexican Cathedral of Motor Racing", and that articulates with other Sports City entertainment and leisure scenarios, displaying cultural dynamics that extend to its immediate environment. It is also a scenario that fulfils a function as a place of leisure by housing a number of sports and recreational activities that demand negotiating public and private interests in order to preserve the versatile use of this scenario, however, it also encloses problems resulting from the mismatch of its technical properties to the global quality standards necessary for it to host again international motor races, a fundamental condition to avoid it falling again into underutilization and abandonment, which at different times have been very harmful since they reduce its vitality and its symbolic power.

Another scenario is Foro Sol (Fig. 12), which can be appreciated as a versatile place, characteristic of global entertainment, which is building its own legend, but that already houses iconic events which display a continuity of urban practices that articulate through different cultural dynamics at different entertainment places of Sports City and its vicinity. However, it is necessary to continue improving spaces intended for the public, in order to provide a better service during the shows held there.

On the other hand, there are those high significance places classified as leisure scenarios that maintain properties and processes with a more local impact but that not because of it are less important for the functioning of Sports City. Its optimal maintenance is a condition that would allow a better functioning of entertainment scenarios, but mostly of the leisure subsystem itself, as shown by the number of symbolic forms they contain, but that are exposed to outside disturbances, which makes it fragile as public open space, since they require great economic investments from local governments, and a better negotiation of interests, that would encourage public practices that articulate spare time dynamics at the sports complex, with the objective of discouraging those practices that create discontinuities.

These scenarios are essential for building leisure meanings that root citizens who inhabit the surroundings of this sports complex, especially because they are high significance places with a closer relationship with these inhabitants, but also because they concentrate significant properties related to different local identities which articulate to metropolitan identities.

Among these leisure scenarios, three scenarios stand out in Venustiano Carranza. The first one is the Agustín Melgar Velodrome Esplanade (Fig. 13), part of the core of Sports City, but that shows the leisure and open public aspect of it, due to the versatility and accessibility of its esplanade, which concentrates practices and emblematic events that unfold cultural dynamics that articulate this public space with other leisure scenarios of Sports City and its surroundings. Here, the role it plays regarding global entertainment scenarios surrounding it is critical, because it is an encounter point that complements these places, so, there must be a negotiation of interests between public and private actors to optimize its use and to preserve the spare time practices it host.

This is the reason why its underused "Cathedral of Mexican Cycling", the Olympic Velodrome (Fig. 14), a historic space that has to be rehabilitated to regain enough power to



**Figure 10.** Mexico City Fair at Sports Palace.



**Figure 11.** Mexican Grand Prix Pits at Rodríguez Brothers Racetrack.



**Figure 12.** Foro Sol Stage during Vive Latino Festival at Foro Sol.



**Figure 13.** Fronton game at Olympic Velodrome Esplanade.

trigger cultural dynamics that accomplish to retrieve various public open spaces (in its esplanade and parking lot), co-opted by the City Government and different private concessionaires, which creates discontinuities within the spare time practices, and conflicts for citizens who see them as limitations for physically and symbolically appropriating them as places of sociability and encounter, facing the need for parking areas to help meet the parking demand for events hosted in this scenario and in the surrounding places.

The second stage of leisure is Gate 2 (Fig. 15), which is seen as an open public space with a variety of facilities that allow to host various cultural practices that connect it with other sports, leisure and entertainment facilities of Sports City, as well as with the surroundings, but it must also be considered that the internal cultural dynamics that it houses are important enough to form a local historical and identitary space, despite some facilities in poor maintenance condition. They need to be rehabilitated in order to encourage their use by citizens, as it happens with the facilities that are in good condition, because they need to be preserved in this state, for which proper management from concessionaires and local governments is required.

The third scenario is entertainment Gate 3 (Fig. 16), another public open space that concentrates leisure, sports and training places, which allows hosting the cultural practices that connect with other sport and leisure places of Sports City, as well as with other sites nearby. It is also a local historical and identitary space, because of the cultural dynamics that unfold its sports facilities, however, the conditions of its recreational and socialisation facilities are not the best, since they require to be renewed so that they can once again become a space for family and child sociability, attractive enough for citizens of the surroundings.

Therefore, one must consider that to lessen the effects of fragmentation on the sociocultural development of Sports City, it must be considered the rehabilitation of the places that are still in unfavourable maintenance conditions, considering the opinion of the various actors with interests in them, in order to integrate public policies and management programs that take into account the properties and processes that are currently structuring this sports complex as a whole, as well as those related to high significance places in particular, so that more profound scopes can be reached, and the future of this public leisure space, emblematic of Mexico City, can be guaranteed in order to satisfy citizens' legitimate right to enjoyment.

## **ACKNOWLEDGMENTS**

To all the mentors I had through my academic path, especially to Dr. Rafael Lopez Rangel, for urging me along the long and winding road of complexity, full of uncertainties rather than certainties, and who invited me to unthink the city.

## **REMARKS**

<sup>1</sup>This process, called by Gustavo Garza [5; pp.178-184] servialisation of developed economies, has nowadays transformed economic specialisation of large cities by significantly reducing their industrial facilities and increasing the tertiary ones.

<sup>2</sup>Globalisation must be considered, according to D. Harvey [6], as an economic, productive and technological process of temporary restructuration, which is geographically unequal. Globalisation is characterised by the rising of communication and transportation networks, electronic devices and services that favour money flow, organization and accumulation, commerce, available information and time optimization around the world.

<sup>3</sup>According to David Harvey [7; p.23], postmodernity favours heterogeneity, simultaneity and differentiation of liberating forces in the cultural speech redefinition. Fragmentation,





**Figure 14.** Velódromo Underground Station, next to Agustín Melgar Olympic Velodrome.



**Figure 15.** Skateboarding at Gate 2.





**Figure 16.** Children's Day at Gate 3.

uncertainty and deep disbelief regarding every universal and totalising speech are hallmarks of postmodern thought.

<sup>4</sup>Leisure and entertainment are considered two antagonistic ways of being, in the sense of Z. Muxí [10; pp.98-102], the former is of a not-for-profit nature, linked with sociability, and the later with of a lucrative nature, linked with consumption and socialite. At the same time, these two ways of being complement each other to satisfy recreation and rest needs, by providing pleasures, rest and enjoyment during spare time, which is the time frame in which both take place.

<sup>5</sup>Fractals (from the Latin *fractus*, fragmented, fractured, fractional, cracked or broken) were discovered by the engineer and mathematician B. Mandelbrot in 1975 [13]. According to García [14; p.149], they are objects with sinuous outlines, but with such a structure that when magnifying each fraction of the contour the structure of the whole object appears (principle of self-similarity). In many cases, this can be produced by a recursive process capable of yielding self-similar structures, regardless of the specific scale. Fractals are geometric structures that combine irregularity and structure, where the fragments do not only refer to each other, but also to the whole object.

<sup>6</sup>To help design complex thinking, Morin [15; pp.331-334] suggests three principles: dialogic, recursive and hologramatic. In the dialogic principle, two elements are necessary for each other, that is complementary, but at the same time, antagonistic, with the purpose of generating organisation and complexity. In the organisational recursive principle each product is at the same time producer of itself. In the hologramatic principle, the part is within the whole system and the whole system is within the system part, at the same time, which

allows to go beyond reductionism (which sees only parts) and holism (which sees only the whole system) and thus consider a fraction of reality as a complex system.

<sup>7</sup>We recover the symbolic concept formulated by Thompson [17; p.203], who defines culture as the set of symbolic forms (imaginaries, cultural products and activities, among others) related to contexts and historically specific and socially constructed processes by means of which, such symbolic forms are produced, transmitted and received.

<sup>8</sup>This concept is presented by Jordi Borja [18; p.77], for whom the city is the public space, since it is the location of open places significant for encounters and interactions, in which all kinds of flows converge, and where opportunities for urban contact, action, expression and exchange are optimised.

<sup>9</sup>Daily life hermeneutics, otherwise known as interpretation of the doxa, consist of the opinions, beliefs and judgments that hold and share individuals within the social world. [9; p.4].

<sup>10</sup>Deep hermeneutics posed by Ricoeur suggests that every process of scientific interpretation of social and cultural phenomena must be mediated by objectifying and explanatory phenomena, so that “explanation and interpretation” complement each other as part of the hermeneutic circle [9; p.4].

<sup>11</sup>The socio-historical analysis involves the study of symbolic forms in relation to contexts and processes, historically and socially specified, constructed through and by means of which, these symbolic forms are produced, transmitted and received [17; p.220].

<sup>12</sup>The formal or discursive analysis consists of explaining the structural features and relations of objects and significant statements [17; p.227].

<sup>13</sup>The interpretation-reinterpretation of the referential dimension of symbolic forms, initially recorded as part of the interpretation of everyday life, is the interpretation process built on the basis of socio-historical and discursive analysis, considering the findings provided by these surveys in order to use them as elements of a creative and constructive interpretation [17; p.235].

<sup>14</sup>According to García [14; pp.74-76] the principles of organization are: stratification (that determines that complex systems present an arrangement of their elements in levels of organisation, each level having its own dynamics, but interacting with each other), interaction between levels (that determines that in a given complex system level, interactions with other levels can be represented by certain types of influences known as inflows and outflows, which are not necessarily material) and internal articulation (that indicates that within each level of a system, certain kinds of complex elements, processes and phenomena scales can be grouped into subsystems consisting of those elements that have a higher degree of interconnection to each other than to the rest of the system).

<sup>15</sup>For García [14; p.78] this principle consists of making successive representations (models) of the empirical reality being studied, in order to reach a satisfactory stage, defined in terms of the ability to explain the functioning of the original empirical complex.

<sup>16</sup>This theory explains that the evolution of each complex system is takes place, not through processes that modify themselves gradually and continuously, but from a succession of imbalances and rebalances that lead to successive reorganizations. Each restructuration corresponds to a period of relative dynamic equilibrium, during which the system maintains its previous structures with fluctuations within certain limits until a disturbance exceeds these limits and triggers a new imbalance [14; p.77].

<sup>17</sup>The triad is the shorten designation of the succession of steps of intra, inter and trans nature; this is, the going from an intra-operational stage (focused on properties) to an inter-operational stage (focused on relationships), until reaching a trans-operational stage (with the configuration of structures) [14; p.131].

<sup>18</sup>The states are periods of organisational forms or stabilised structures that treat evolution by successive reorganisations, comprising two types of alternating phases: structural phases

(periods where structures are built) and structured phases (periods where more or less stabilised structures can be recognised) [14; p.142].

<sup>19</sup>Socialite is a concept structured by Maffesoli [12; p.31] that differs from sociability and socialisation by integrating the imaginary, the ludic and the collective oniric from the spaces where moments and experiences of collective vibration articulate.

## REFERENCES

- [1] García Ayala, J.A.: *Fragmentación y urbanización sociocultural del tiempo libre. Lugares de Alta Significación en la Ciudad Deportiva Magdalena Mixhuca*. Ph.D. Thesis. In Spanish. Universidad Nacional Autónoma de México, Mexico City, 2010,
- [2] García Ayala, J.A.: *Complejidad y urbanización sociocultural del tiempo libre. Metodología para un análisis urbano de cerca y por dentro*. In Spanish. Instituto Politécnico Nacional – Plaza y Valdés editores, Mexico City, 2012,
- [3] López Rangel, R.: *Impensar la ciudad o en busca del pensamiento complejo. Un necesario recorrido epistemológico*. In Spanish. In: Ramírez Velázquez, B.R., ed.: *Formas territoriales. Visiones y perspectivas desde la teoría*. Universidad Autónoma Metropolitana Unidad Xochimilco – Miguel Ángel Porrúa. Mexico City, pp.15-17 and 18-54, 2008,
- [4] Castells, M.: *El poder de la identidad. La era de la información: Economía, sociedad y cultura Vol. I*. In Spanish. Siglo XXI, Mexico City, 2004,
- [5] Garza, G.: *La Ciudad de México en el fin del segundo milenio*. In Spanish. El Colegio de México-Centro de Estudios de Desarrollo Urbano – Gobierno del Distrito Federal, México, 2000,
- [6] Harvey, D.: *Espacios de esperanza*. In Spanish. Akal, Madrid, 2005,
- [7] Harvey, D.: *La condición de la posmodernidad. Investigación sobre los orígenes del cambio cultural*. In Spanish. Amorrortu Editores, Buenos Aires, 1998,
- [8] Magnani, J.G.C.: *De perto e de dentro: notas para uma etnografia urbana*. In Portuguese. Revista Brasileira de Ciências Sociais **49**(17), 14-17, 2002,
- [9] Tena Núñez, R.A.: *Ciudad, cultura y urbanización sociocultural. Conceptos y métodos de análisis urbano*. In Spanish. Instituto Politécnico Nacional – Plaza y Valdés, Mexico, 2007,
- [10] Muxí, Z.: *La arquitectura de la ciudad global*. In Spanish. Gustavo Gili, Barcelona, 2004,
- [11] Morin, E.: *Introducción al pensamiento complejo*. In Spanish. Gedisa, Barcelona, 2005,
- [12] Maffesoli, M.: *La espacialización del tiempo*. In Spanish. En Revista Ciudades **61**, Red Nacional de Investigación Urbana, Puebla, p.31, p.36, 2004,
- [13] Mandelbrot, B.: *Los objetos fractales*. In Spanish. Tusquets, Barcelona, 1987,
- [14] García, R.: *El conocimiento en construcción. De las formulaciones de Jean Piaget a la teoría de sistemas complejos*. In Spanish. Gedisa, Barcelona, 2000,
- [15] Morin, E.: *El método. La humanidad de la humanidad. La identidad humana*. In Spanish. Cátedra, Madrid, 2003,
- [16] Giménez, G.: *Teoría y análisis de la cultura Volumen I*. In Spanish. Consejo Nacional para la Cultura y las Artes, Mexico, 2005,

- [17] Thompson, J.B.: *Ideología y cultura moderna. Teoría social en la era de la comunicación de masas*. In Spanish.  
Universidad Autónoma Metropolitana – Unidad Xochimilco, Mexico, 2002.
- [18] Borja, J.: *La ciudad conquistada*. In Spanish.  
Alianza-Ensayo, Madrid, 2003.

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## KOMPLEKSNOST I SOCIOKULTURNA URBANIZACIJA SLOBODNOG VREMENA U SPORTSKOM GRADU MAGDALENA MIXHUCA

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### SAŽETAK

Rad je izveden iz istraživačkog projekta “Fragmentacija i sociokulturna urbanizacija slobodnog vremena. Značajna mjesta u Sportskom gradu Magdalena Mixhuca”. Namjena rada je jezgrovito predočavanje razmatranja koja su omogućila integriranje transdisciplinarnog epistemološkog i metodološkog okvira. Osmišljena je analitička metoda koja integrira epistemološka razmatranja iz kulturne i hermeneutičke analize s principima teorije kompleksnih sustava, za objašnjavanje sociokulturne urbanizacije slobodnog vremena koja se odvija u navedenom fragmentiranome javnom prostoru karakterističnome za Mexico City.

Izloženi su rezultati primjene te analitičke metode, temeljene na hologramskom rekurzivnom i dijaloškom principu, koji su omogućili interpretiranje Sportskog grada Magdalena Mixhuca (koji na prvi pogled djeluje fragmentirano, neartikulirano i kaotično) kao fraktalnog prostora integriranog simboličkim formama, društveno i povijesno strukturiranog u određenom javnom prostoru od svog nastanka 1958. godine do XXI. stoljeća. Zaključak je kako su te simboličke forme, dijelovi kompleksnog sustava, koncentrirane u značajnim lokacijama poput Sportske palače Juana Escutie, Trkaće staze braće Rodriguez, cjeline Foro Sol, Vrata 3 i 2 te Šetališta olimpijskog velodroma Agustina Melgara, od kojih svaka posjeduje vlastitu kulturnu dinamiku koja doprinosi određivanju karakteristika sportskog centra kao cjeline.

### KLJUČNE RIJEČI

kompleksnost, hermeneutika, sociokulturna urbanizacija, javni prostor i slobodno vrijeme