Urban poly-centrality as a strategy for the regeneration of the contemporary city

A policentralidade urbana como estratégia para a regeneração da cidade contemporânea

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ABSTRACT

With this article, we intend to contribute to the discussion on the construction of space in the contemporary city, analyzing some recurring problems and seeking possible solutions. Specifically, it is intended to: rethink the notion of centrality, its importance in urban design and possible alternatives; rethink the city with network logic, with neighborhoods as its nodes; seek sustainable solutions for urban functioning and local spatial and productive recovery. The essay carries out a literature review, listing ideas that could be reevaluated and combined, to assist in reflective and proactive actions to improve the city.

Keywords: centrality, neighborhood planning, urban regeneration, urban planning, sustainable urban development.
RESUMO
Com este artigo, pretende-se contribuir na discussão sobre a construção do espaço da cidade contemporânea, analisando alguns problemas recorrentes e buscando possíveis encaminhamentos. Especificamente, pretende-se: repensar a noção de centralidade, sua importância no desenho urbano e possíveis alternativas; repensar a cidade com a lógica de rede, com os bairros como seus nós; buscar soluções sustentáveis de funcionamento urbano e de recuperação espacial e produtiva local. O ensaio realiza uma revisão de literatura, relacionando ideias que poderiam ser reavaliadas e combinadas, para auxiliar em ações reflexivas e proativas de melhoria da cidade.

Palavras-chave: centralidade, planejamento de bairro, regeneração urbana, planejamento urbano, desenvolvimento urbano sustentável.

1 INTRODUCTION
In the 20th century, cities underwent major transformation processes. Cities and territories went from formal, relatively simple organizations to spaces with extremely complex structures, as in current metropolises or mega-cities (MARQUES; LEITE, 2008). The industrial restructuring that occurred during this period, among other factors, were the main drivers of these changes. Caused by the “new economy”, with more flexible and dynamic characteristics, and generating major structural impacts. Many cities that until the 1970s were considered industrial cities, were transformed and could be redefined as “post-industrial metropolises” (KRUGMAN, 1998; MARQUES; LEITE, 2008).

In this sense, Porter (1995) points out that the lack of global strategic planning would be one of the causes of inefficient and fragmented economic development plans. The solution to the city's problems would involve the creation of an economic model that was coherent, equipped with strategic locations and zoning, positioning projects in favorable locations, which would allow them to be more competitive. It also points out that the main strategy that cities would have to explore would be the advantages that their own territories would offer.

Seeking territorial development and economic promotion through the advantages offered by local particularities: clusters, as well as industrial districts, local productive arrangements, innovative environments among other similar
forms of economic organization would be ways of preparing space local, integrating it into the global network (AMARAL FILHO, 2001; CASTELLS, 1998).

From an urban and regional point of view, these schemes are economic and locational organizations, inspiring for territorial definition and planning. And yet, affinities can be seen between the terms, the cluster mainly, with the traditional term used to describe many typical parts of the city: the neighborhoods. So dear to urban planners and city thinkers.

With this article, we intend to contribute to the discussion regarding the city's problems and possible directions. Specifically, we intend to re-discuss the notion of centrality, its importance and possible alternatives; think of the city as a network, with neighborhoods as its nodes; seek sustainable solutions for mobility and local spatial and productive recovery. This is a theoretical essay, but it seeks, through reflective analysis, to propose innovative actions for the city.

2 RETHINKING CENTRALITY

Globalization and the impact of new technologies have caused significant changes in social, economic and cultural contexts. These phenomena are identified as causing new dynamics in international relations and, consequently, transforming the territorial configuration, both local, regional and global. Most studies address the topic, focusing on the hierarchization of cities and the formation of global social networks, such as Castells (1998), Hall (1997) and Sassen (2008).

Authors such as Borja and Castells (1997), Finquelievich (2001) and Jáuregui (2002), relate the process of integration of cities and/or territories to a new condition of centrality, playing a functional role as a node within this larger network.

According to Choay (1972), centrality would be the ability of a city [or territory] to offer equipment, goods or services to a population that is not its own. This definition would have been proposed by W. Christaller, in 1933, in his “Theory of Central Places”.

Centrality would depend on the power of attraction or diffusion of an urban center or a polarizing equipment, which could be a cultural, financial, commercial or administrative center. And, centrality would result from the effectiveness of this central pole and its accessibility (CHOAY, 1972).

Centrality could also be seen as the combination of economic activities, administrative and political functions, collective representation and social practice, which would exercise control and regulation of the city's structure. The city center should bring together commercial, economic, political and ideological functions. Enabling the fulfillment of the needs associated with it (CASTELLS, 2000). It is clear that the position of centrality would not necessarily be linked to the geographic center of a territory, nor would the center of a city have to coincide with its historic center (SANTOS et al., 2023).

The displacement of large factory complexes and consequently, the obsolescence of large residential areas, which has been occurring since the middle of the 20th century, has generated decentralization and produced a peripheral space, where the diffuse location of activities appears along access roads (PORTER, 1995; REIS FILHO, 2006). This phenomenon, as shown by Reis Filho (2006), would be the beginning of the “separation of the urban periphery in relation to the central city”. The new urban dynamics would be established through transport routes, more specifically, through the use of automobiles, which would have enabled access to new spaces formed by the fragmentation of the road network (REIS FILHO, 2006).

According to Dematteis (1998), this dispersion could occur through three distinct processes: (a) the process of counter-urbanization, where the population would leave large cities towards smaller ones; (b) the process of suburbanization, which in short, would be the expansion towards the peripheries; and (c) the process of reticular diffusion, which according to Indovina (1990), could be understood as the formation of new centralities, independent of large centers.

The formation of new centralities in reticular diffusion would normally be associated with new forms of settlement, also diffuse, and individual motorized mobility. These initiatives would determine the convergence of private services in
dispersed areas. Large enterprises such as hypermarkets, shopping centers, office buildings, large industrial plants, among other attractions, would be located along major roads or in remote locations and, at the same time, would promote the dispersion of residential neighborhoods.

According to Villaça (1998), this new dynamic of spatial structuring, which would privilege real estate and land value, would occur based on different strategies for reconfiguring and altering the urban and natural landscape.

Contrary to these dispersion models, poly-centrality with urban spatial compaction would be considered a strategy for the sustainable and intelligent development of cities. More compact cities would promote living and working in higher density places, increasing interaction with other city dwellers, while reducing the need to make individual trips by car or long distances using public transport (SANTOS et al., 2023; VARMA, 2017).

Urban planners and policy makers, taking this change into account, could create new planning policies that would enable the implementation of ideals for more compact cities, with urban densification and mixed use (VARMA, 2017).

2.1 NEIGHBORHOODS: NEW AND EXISTING

Neighborhood planning could facilitate sustainable development at the local level. Due to the spaces available on the scale of human activities, a city could only be considered sustainable if its components, mainly neighborhoods and construction sites, met sustainability criteria (CHOGUILL, 2017).

Neighborhoods, as basic planning units, have always been of particular interest to urban planners (ROHE, 2009). Therefore, many new neighborhood planning initiatives have been developed. This process would not be exclusive to more advanced countries, but would be a way of dealing with local sustainable issues in many places (BOYKO et al., 2006; SHARIFI et al., 2013; VALENTIN et al., 2000).

However, in the process of valuing neighborhoods, especially in the creation of new neighborhoods, significant transitions and, paradoxically, challenges to sustainability could also occur: such as the decline of social capital,
excessive urban expansion, traffic congestion, environmental deterioration, the decline of urban culture, overvaluation of land and social inequality. Findings of this type would raise awareness about the real sustainability of many types of neighborhoods (ZHANG, 2018).

Therefore, keeping in mind the ability to allow sustainable neighborhood planning actions, but with control of urban density and without encouraging excessive urban expansion, it is considered that it would be more viable to invest in the recovery and consolidation of existing neighborhoods.

According to Jane Jacobs (2000, p. 52):

Beneath the apparent disorder of the traditional city, there exists, in the places where it functions satisfactorily, a surprising order that guarantees the maintenance of security and freedom. It's a complex order.

Furthermore, according to Duarte (2013), these neighborhoods would already have a “feeling of locality” for their residents, there would be social and cultural capital there. Its formation would depend not only on its geographic position, but also on the relationships between people and the place. It could be said that the neighborhood would be the place to which residents would be aware of belonging.

For Nakano (apud DUARTE, 2013, n. p),

(...) the neighborhood is a micro-local scale – that is, a living territory where people live and interact, where they live their day-to-day lives, move around, have neighborhood relationships and live with concrete problems that affect their daily lives. The neighborhood is not an administrative limit: it is a cultural and anthropological entity.

In this sense, adequate urban mobility, better accessibility to equipment and services and also the possibility of greater social interactions through quality public spaces would be some goals, which it seems to us, could be made viable, in a more sustainable and plural way, through recycling and renovation of existing urban infrastructure. In a process of city regeneration, starting with degraded neighborhoods.
The idea of Urban Regeneration (UR) is not exactly new, as it is a way of thinking and building city space (ROBERTS; SYKES, 2000). The UR would respond proactively to specific questions depending on the different urban contexts in which it arises. It would have a characteristic, as a way of thinking about the city, that would differentiate it from other interventions and that would determine its way of implementation in the territory. The RU would be an urban planning action of a strategic nature, which would be formalized in fundamental interventions, in a series of dimensions that would not be limited to just renewing the built space, but from which profound changes would emerge, both within the scope of territorial planning and within the scope of urban geography (TALLON, 2010).

Thus, UR would be a new urban policy that would seek the requalification of the existing city, which would develop multiple intervention strategies, articulating actions in a coherent and programmed way, which would be aimed at enhancing socioeconomic, environmental and functional values of certain urban areas, with the aim of substantially improving the quality of life of local populations (COCHRANE, 2007; TALLON, 2010).

This can be exemplified in the words of Carlos Leite (2016, p. 181):

Efficient and balanced cities are those that allow the requalification of their deteriorated areas. Improving central regions is the first step towards having more humane cities and new opportunities can emerge from Innovative Urban Instruments (...). The 21st century is the century of cities and the current search is for the construction of what we call “urbanity”: living and dynamic cities, cities for and with people. Urbanity is built with systemic processes – there is no magic solution in the solution of cities, (...). With actions planned and implemented in the long, medium and short term. The metabolism of our cities – the result of the dramatic urban explosion and a terrible series of planning errors committed in the 20th century – must be reinvented with the systemic construction of the city made up of a network of compact, dense urban centers with diverse and mixed uses.

For Awad (2016), UR would go hand in hand with the productive restructuring of the city and/or space. The author speculates that new productive arrangements could be combined with new spatial arrangements, and thus
enable the construction of new territories that add value in terms of both productive and urban functionality.

In this sense, in a multidisciplinary way, new arrangements could be thought of to solve old urban problems, such as the lack of mobility and the excessive sprawl of the city. Alternative approaches could emerge through new technologies, and who knows, the city could be reinvented (AWAD, 2016).

2.2 NEW BEHAVIORS AND NEW TECHNOLOGIES IN THE SAME NEIGHBORHOODS.

Thinking from the perspective of mobility (others would also be possible), the conditions of disordered local planning and the lack of continuity of roads and sidewalks mean that pedestrians and cyclists, who would be emblematic actors in terms of the search for sustainability and quality, of life, were left in a disadvantaged position (SPECK, 2016).

A condition that, in theory, could be changed based on an urban design that values and recognizes both (pedestrians and cyclists) as the main components of urban mobility. For this, a model based on territorial planning and organization would be necessary, aiming to make land use and occupation compatible with the public transport network (PETZHOLD, 2013; SPECK, 2016).

According to Bertolini and Spit (1998), the construction of more compact neighborhoods with high densities, served by quality public transport services, would provide less travel and shorter distances, provide better accessibility to services and also enable greater social interactions in the community, population, through quality public spaces.

For Varma (2017), presenting studies conducted by the London School of Economics and the Political Science and Innovation Center for Mobility and Societal Change, there would be three main trends in new urban mobility: (a) urban change – denser, mixed-use cities; (b) new alternatives to the car – improving public transport, cycling and pedestrian infrastructure; and (c) digital technologies and innovations in transport – new opportunities for access to the city.
Among other methodological alternatives in the field of urban mobility, for the regeneration of neighborhoods, “Transit Oriented Development” (TOD), presented by Calthorpe (1993), would have as its main conceptual aspect, that the development of urban space it should be pedestrian-based, encouraging walking trips.

TOD concepts are based on organizational strategies with high-density growth, high-capacity public transport corridors and multiple centrality nodes. Reducing the need for travel by private vehicle and allowing the community to be more integrated (HIDALGO, 2015).

According to Carlthorpe (1993), the idea of TOD would encourage, in the vicinity of boarding or transfer stations (which would be the central nodes), walkable routes and the use of mixed areas, with buildings that provide the first floors for commercial and service activities. While on the upper floors the uses would be housing.

Calthorpe's (1993) basic scheme for the TOD shows an area of influence of approximately 600 meters in radius, where the central point would be the modal station. The adjacencies would be limited by the arterial road system, from the core which would be commercial and job-creating, with open public spaces, contiguous to the (primary) residential areas in the form of a mixed zone, also permeated by open public areas. Further away from the station would be secondary areas, which would connect to other parts of the city.

According to Hidalgo (2015), this scheme would enable fluidity in the continuous road system linked to the transport system, while the scale of the project would favor pedestrian access to the system.

Nigriello et al. (2015), addressing urban planning, name “articulation points” as places that have spatial attributes that justify their location linked to the structural transport network, local feeder lines and also with other normal city activities. urban functions. A variety of interactions would be established, forming the nodes and the transport network itself, relating directly to pedestrians and the surroundings, in a more or less hierarchical way.
It is important to highlight that the implementation of TOD would not completely eliminate the use of private cars. For there to be an effective reduction in traffic on public roads, it would be necessary for investment in public transport to enable faster, cheaper and more comfortable travel, in order to attract the population that will travel further afield.

For Jeff Speck (2016), changes in the city that make them more walkable would be based on three fundamental aspects, which would be the guarantee of prosperity, health and sustainability.

Still according to the author, there would already be enough demonstrations of the validity of his argument in favor of walkable places. The economic advantage of this model would be demonstrated and would be attributed to three key factors: first, that for some social groups, particularly young creative people, living in the center would be more attractive; second, that according to current demographic changes, there would be a tendency for these pro-urban groups to predominate, which would stimulate investments in a perspective that could last decades; and thirdly, choosing a walking lifestyle would generate household savings and stimulate the local market.

3 FINAL CONSIDERATIONS

This article sought to contribute to the discussion on the construction of city space, pointing out possible strategies for its collective construction and sustainable urban development.

The discussion took place mainly around urban regeneration based on neighborhoods and communities, re-discussing the idea of centrality, suggesting poly-centrality as an alternative, in a network structure, with valued nodes and connections between them made viable, in sustainable terms.

These considerations, even more so in this post-COVID-19 pandemic moment, when so many have been inserted into home office routines, offer us another perspective and enhance the discussion. It is necessary to rethink the city in spatial terms, in new uses for public and private spaces, in addition to debating local and regional use and consumption, the tendency to reduce
physical displacements due to the use of technology, communication, and also, the role of new centralities in people's lives.

The pandemic situation highlighted and/or intensified existing problems in the lives of populations: such as social inequality, injustice and lack of access to things in the city. It would still be too early to affirm all the lessons from that time, but we have already managed to draw some conclusions: for example, the perception that in addition to health issues, economic and locational issues, with their interactions in the territories, would be at a point where the discussion of new options is latent. And, taking a position and proposing alternatives needs to be carried out by the different sectors of the city. Actors representing progressive sectors and concerned with a sustainable future for the city would need to seek innovative ideas and position themselves to negotiate the construction of the contemporary city.

A way to better plan life in large metropolises would perhaps be the perception and mapping of the networks that constitute the territories, their problems and potentialities, how this would be configured and how it would be carried out. This refers to relationships between people in the city, socio-technical relationships and development possibilities.

How the city is a territory of innovation and opportunity. It seems current to us, a proposal for a dense, plural and creative city, based on public transport, walkability and coexistence. And, in a planned way, focus on people's quality of life.

We believe it is important to learn lessons from the past. History shows us that the great issues of their times have always been reflected in the form and development of cities. Thus, based on these experiences and the observation of current problems, other forms of circulation, communication, work, housing, sanitation, use, monitoring, management, among other possibilities, could be created for the city.

And, the issue of centrality is perhaps one of the turning points, it is believed that polycentric cities would be a good option, which should establish itself and develop. It would be a strategy that meets the understanding that the
recovery of neighborhoods, forming functional clusters or local innovative environments, would bring coherence and diversity to urban planning, without neglecting local tradition. These would be innovative actions, where the issue of transport and information, with the technological innovations that are relevant to them, would emerge as important economic and social relations.
REFERENCES


