Towards an adaptive strategic framework for urban development
Advocating for a resilient, alternative and democratic path

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Abstract. Urban informality emerges as one of the main and most diverse ways of producing urban space in contemporary cities and territories, defying formal design and planning processes that have demonstrated nowadays, in certain contexts, a lack of appropriation and connection with the social, economic, political and spatial dimensions. The fast pace and complexity in which cities develop challenge the traditional ways of examining the dichotomy between the notions of formality and informality and the 'functionalist paradigm', which is based on a rigid structure for the control of space (Lutzoni, 2016).

In Latin America, and in general in the global south, urbanization patterns have been characterized by a spatial and socio-political tension between formal and informal development, evidencing the inability of the existing planning and developing frameworks to embody and decode the complex conditions and dynamics that this tension represents (Hernández, 2010). Therefore, currently, it seems appropriate to broaden the definition of the informal beyond the understanding of the phenomenon as the city of the poor and marginalized (Lutzoni, 2016) considering theories which enable more comprehensive and realistic analyses of the subject-matter. This paper will examine and apply the notions of 'evolutionary resilience' and 'adaptive governance' to the current planning and design frameworks, in order to propose a reconfiguration thereof, with the purpose of achieving more comprehensive and democratic development strategies.

Keywords. Formal/Informal development; planning strategies; adaptive governance; evolutionary resilience.

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1. Introduction

Nowadays, in most of the cities of the global south, multiple conceptions of urbanism coexist and manifest in the same socio-spatial and political sphere, causing realities that go beyond the scope of the traditional theories used to study urban development. The case of Latin America, in which the analysis will be circumscribed, is pertinent in this respect because the existing urbanization patterns are one of the best examples of the current challenges for urbanism in relation to inequality, poverty, and exclusion, as evidenced in the strong division between formal and informal ways of development. These formal development instruments, traced back to a 'functionalist paradigm' based on a hierarchical idea of control[1], have proven not to be able to decode the complex metabolisms of the city or territories in every case (Lutzoni, 2016). On the other hand, informality has gained so much ground and strength nowadays that the existing

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[1] *For further elaboration on this topic see generally:* Calderon (2017) The Endurance of the Modernist Planning Paradigm: The Functional City in Contemporary Planning in Medellín, Colombia. Journal of Architecture and Urbanism ISSN 2029–7955 / EISSN 2029–7947 Volume 41(3): 234–252. doi:10.3846/20297955.2017.1355280

institutional and political attempts of 'formalization' do not seem to be the adequate solution, neither to be sufficient to address the intricacies of reality.

Therefore, the tension between these traditionally bifurcated avenues for urban development reflect an urgent need to re-evaluate and re-envisage the notions of the formal and the informal city from a novel perspective, understanding their complementarity and interdependent condition (Hernández, 2010). This topic is so broad that with the time and space limitations of this paper, it is indispensable to circumscribe the analysis to a specific region, as stated previously –Latin America–, and dimension of urban development, which will be the spatial translation of the socio-economic dimension related to vulnerable communities of informal settlements, in order to be able to delve deeper and offer some sound final conclusions.

In this sense, it is important to briefly contextualize some considerations related to the subject-matter in Latin America and to mention the premises under which the study will be conducted. To begin with, the notion of informality in the field of urbanism is related to the capitalist trend characterized by the marginalization of the migrant population in Latin American cities. Migration, new economic dynamics and emergent territorial organization patterns where the result of the role played by Latin American countries within the 'imperialist' global system. Therefore, the theory of 'dependent urbanization' (Castells, 1973), which will be further analyzed in the next section, intended to introduce the interrelation between the urban and the socioeconomic structure in the informal sphere of cities, not focusing on the 'external' dependence of Latin American countries caused by 'neo-colonial' globalization schemes, but on the 'internal' reproduction of urban inequity (Roy, 2009).

Indeed, these unequal socioeconomic and spatial realities led to the emergence of the traditional binary –formal and informal– configuration of the situation. The urban complexity behind the relationship between formal and informal development is reduced to highlighting the features that characterize its opposite pole. The positive lessons and 'know-how' of the emerging development strategies associated with informality, conducted outside the rigid structure of spatial control, are excluded, denigrated and de-legitimized in many cases. Formality, is understood as the regulated and planned urban sphere contrasted with informality meaning the unregulated and uncontrolled growth of space on the edge of a society. Almost understood as the cure and the disease, the good and the evil. The critical capacity assigned to the two terms is blurred by simplifying and separating the complex condition they represent (Lutzoni, 2016).

Hence, when proposing an alternative approach for the understanding of the formal/informal paradigm it is necessary to abandon the dichotomous approach and rather explore the potential contributions between the two areas of development, exalting their intrinsic values. In this sense, the notion of informality will be analyzed and decoded, not as an opposite of the formal, but as a complementary phenomenon.

For this purpose, the analysis is composed by a revision of the abovementioned 'dependent urbanization' theory, and by a revision of the unpredicted failures which led to a reconsideration of the role of the State in urban planning strategies, and the importance of participation of various stakeholders in the invention processes. This section aims to show how currently governments are not seen, solely, as the drivers of the economy and/or the architects and urbanists for effective

development. Additionally, it is pointed out the importance of considering informality as a 'rupture of power' notion and an 'insurgent' form of citizenship participation (Müller, 2017) [**section 2**].

The conclusions of section 2 will support the need for seeking new political alternatives that can deal with the complexity of the formal/informal relationships, which must be more flexible and comprehensive in order to address the vulnerable conditions of a specific urban environment (Leanne, 2013). In this endeavor, the notion of 'evolutionary resilience' (Nunes, 2019) (Davoudi, 2013) will be explored, as a tool to understand the complex and multiscalar challenges faced by informal urban settlements, based on the correlation of both socio-ecological and socio-economic systems and on the need to interpret the dynamics within larger and more complex systems. Complementarily, the concept of 'adaptive governance' is proposed as the organizational framework, as it recognizes the complexity and the flexibility necessary in the planning strategies, instead of instituting standard procedures. An ideal response requires participation, collaborative management and adaptability to the specific needs and conditions of a place (Leanne, 2013) [**section 3**].

The following section will demonstrate the application of the proposed theoretical framework [**section 3**] to socio-economic urban networks. This with the aim to revisit the poor's economic agency in Latin America and test the theory of 'endogenous development' (Baquero, 2007), which comprehends both resilience and adaptive governance elements, as key strategies to counteract and address the unequal balance in the city [**section 4**]. Lastly, some considerations will be provided as final conclusions, considerations, and recommendations for future studies [**section 5**].

2. Revisiting the traditional planning and design frameworks in Latin America

2.1. Separation geographies

Firstly, it is important to point out that the urban structure in Latin American cities has profound relationships with the social structure, usual production practices, and predominant political opinions, interests, and relations, derived from various 'domination' schemes that have shaped the history of the continent. As stated in the introduction, the starting point will be exploring the historical process of the 'dependent urbanization' theory and the spatial patterns which are a consequence of the stance and role of Latin American countries within the neo-liberal and capitalist production systems. This overview leads to envisage a 'common' problematic in the cities' spatial organization and a clear link with the phenomenon of informality or urban marginality (Castells, 1973, p.7).

The 'dependent urbanization' theory can be understood under three main features. Firstly, the accelerated demographic growth and the trend of exponential agglomeration of populations in urban areas (Castells, 1973, pp. 7-15). In this regard, Latin America's populations experienced an extraordinary and overwhelming growth after the WWII, faster than every other region of the world at the time. In numbers, from around 149 million inhabitants in 1950, the population increased to around 352 million in 1980 [more than doubled in only 30 years]. The peak was reached in the first half of the 60s [more than 2.8 percent of accelerated growth] (CEPAL, 2000).

This speeded growth evidently brought with it numerous and varied economic and spatial challenges.

Secondly, and intrinsically related to the aforementioned feature, massive migrations in tandem with the social consequences of the continent's integration into the world economy, had an enormous impact on the processes of industrialization, urbanization, and transformation of agriculture. Moreover, this impact was almost equivalent to the dismantling of traditional economical frameworks, which together with rural impassivity, were one of the most influential aspects in the economic and urban dynamics of the metropolis. This, caused as a consequence deep regional imbalances between the city and the countryside (Crosa, 2015). Excluding the integration of migrants into the economic system of cities and the equivalent development of productive capacity, the spatial concentration of the population in the city is defined to a large extent by the expansion of the informal sector. With this understanding, the migratory component is essential to understand the urban growth of Latin American cities (Castells, 1973, pp. 7-15).

Thirdly, the formation of a truncated and disjointed urban fabric can be pointed out as the last feature of 'dependent urbanization' in Latin America. The disproportionate predominance of large agglomerations and the concentration of urban growth in the metropolitan region did not only affected the economic and political management of the countries, but also brought as consequence the enhancement of sociocultural separation between the urban and rural spheres, resulting in the disintegration and fragmentation between them, as well as in the internal composition of the two. This, together with the strong social stratification and the sharp intra-urban differentiation between old and new populations, gave rise to major problems of social segregation and fragmentation of contemporary cities (Castells, 1973, pp. 7-15).

The internal segregation in the urban fabric linked to the absence of an urban planning system, led to the informal constitution of large marginal areas and represents, according to Castells, the most striking phenomenon of 'dependent urbanization'. Only after understanding the processes that gave rise to the emergence of the different modalities of urban development, it is possible to assess the current dichotomy that separates the notions of formal and informal city. However, this perspective, while historically valuable and enriching, must be revisited in order to address deeper the issue from social, economic and cultural scopes that are intrinsically related to urban space.

2.2. Informal insurgency

In the last decades Latin America has seen the expansion of the so-called 'financial capitalism', which ironically has seen by several scholars as considerably unproductive. As neoliberalism[2] started to expand wildly most countries were confronted with new challenges: inefficient and corrupt political regimes, stagnation of national economies, and the failure of development decision-makers to formulate adequate development policies. Therefore, as mentioned in the introduction, these unintended setbacks led to rethink the role of the State within urban planning strategies. It can be said that, currently, governments are no longer considered as the only motor of the economies, nor the architects and urbanists of development (Smith, 2016).

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[2] *For further elaboration on this topic see generally:* Jordan (2016) Neoliberalism and Free Trade in Latin America. Oxford Research Encyclopedias, Latin American History. DOI: 10.1093/acrefore/9780199366439.013.227

As stated by David Harvey, this new era has seen a shift from urban 'managerialism' to urban 'entrepreneurialism', understanding the State role only as one of the several stakeholders of the market system, rather than a regulator and having its traditional leading role (Roy, 2009). These circumstances, to a large extent, led to seeking new political alternatives that could embrace this new condition of co-production and cooperation between different agents (Smith, 2016).

It can be said that informality is commonly the main path for the production of metropolitan space and urban planning in most of the Latin American cities. In this sense, informality should be seen as a 'structured' field itself, through the application of different methods and procedures with social, expansive, and extra-legal parameters. Then, informality moves beyond being just an economic variable and becomes a complete discourse of urban resistance to hegemony and an original and autonomous way of producing space (Roy, 2009) (Müller, 2017). These multiple variables had led to a disproportionate invasion of the urban poor through the construction of far-reaching survival strategies in the peripheries of cities, which has been described as an "insurgent form of citizenship" (Holston, 2008), arising in unregulated environments as part of the struggle to belong to the urban and functional structure of the city. Consequently, informality should not be understood just as an indicator of how the poor are urbanizing, but as a power struggle. Peripheral suburbs have become emblematic settings in which inhabitants claim their right to live in the city (Lefebvre, 1968). This vindication of urbanity in the peripheries is also one of the causes of segregation within informal peri-urban environments and turns out to be a more pressing problem for social cohesion (Müller, 2017).

Social fragmentation and the enhancement of democratic governance have led to the decentralization of public administration. The centralized state crisis as a protectorate has transferred political responsibilities and actions to social movements, considered as public forums in which groups can better express the collective and pluralistic identities of the populations that they represent. These emerging social movements constitute the beginning of the construction of alternative social identities and greater participation in legitimate and successful modalities of alternative government development discourses (Müller, 2017). This expansion of participation channels to new actors would broaden the spectrum for consensus and increase the influence of the most vulnerable sectors in the political decisions that affect them (Müller, 2017). Informality, then, becomes a way of executing more and more efficiently in cities, or portions of cities, with fewer resources (Roy, 2009), depending on the use of potential networks and the capacity to transform the processes that are the cause of vulnerability (Leanne, 2013).

3. The new political alternatives

Considering what has been said so far, it is now important to discuss two novel theories of social sciences considered to be suitable as new political alternatives for addressing the formal/informal paradigm from a fresh urban planning perspective as follows.

3.1. 'Evolutionary resilience' thinking

Firstly, it is paramount to state that resilience is a scientific concept applied to several disciplines of knowledge. Masnavi quoting Alberti's famous definition, points that resilience is "[…] the extent to which a system is capable of absorbing risks and reorganizing itself." (Masnavi, 2019). Accordingly, resilience has been understood as a framework or capacity to effectively manage unforeseen challenges and risks associated with complex systems. The resilience thinking approach evokes the cumulative and self-reinforcing effects of diverse problematics, imbalances, and hazards as an interlinked system (Leanne, 2013) with the capacity to absorb risks and adapt, while maintaining and improving the system's essential functionalities (Masnavi, 2019). In this sense, considering that the concept of resilience encompasses changes, this notion leads to planning that focuses on uncertainty, which is a novelty in relation to traditional urban thinking (Nunes, 2019).

Furthermore, from a doctrinal point of view resilience has been defined and catalogued in three main notions, as follows: 'engineering resilience', 'ecological resilience' and 'socio-ecological' or 'evolutionary resilience'. The socio-ecological approaches to resilience, defined also under the notion of 'evolutionary resilience', acknowledge that society and nature are interdependent systems. This conception, challenges the notion of a stable equilibrium of both 'engineering' and 'ecological resilience' by introducing a dynamic interaction between persistence, adaptability, and transformative capacities across multiple scales and time frames, within more interactive and imaginative planning systems (Davoudi, 2013).

In the same vein, the limited focus on social processes in the 'engineering' and 'ecology' stream like memories, local capacities, networks, and cooperative relationships [the intentionality of human action and intervention] have received little space at the time of devising strategies to foster resilience. In this regard, it is appropriate to consider that in addition to the phases of adaptability, persistence, and transformability, a phase of 'preparation' [as entitled by Simin Davoudi], must take a major place in the formulation of urban development. (Davoudi, 2013).

Therefore, Complex adaptive socio-ecological systems can become more or less resistant depending on their capacity to be prepared, to be persistent and robust, to be flexible and adaptable, and to be innovative and transformative (See Figure 1). These attributes can be achieved through social learning, increasing the possibilities of resisting or absorbing disruption and through creativity and imagination at the institutional, community, and individual levels. 'Evolutionary resilience' promotes the institutionalization of the awareness of the dynamics of adaptability as a way of improving preparedness and, with it, the ability to influence the direction of future transformations (Davoudi, 2013).
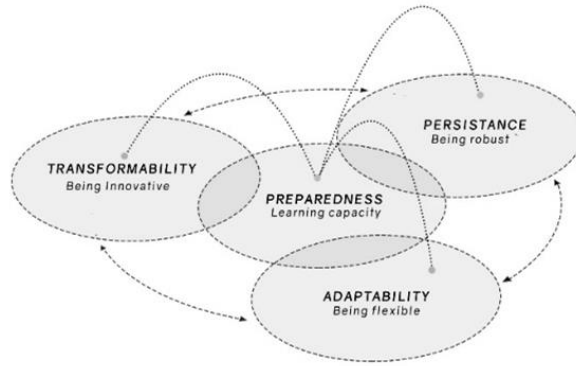
Figure 1. Dimensional Framework for resilience building. Adapted from "Evolutionary Resilience and Strategies for Climate Adaptation" by S. Davoudi, 2013.

In this sense, the socio-ecological dimension has become an essential concept for cities and urban development, due to the aforementioned problematics i.e. exceptional agglomeration of population in the city and economic activities, which leaves the cities exposed to diverse and greater risks with potentially demolishing consequences. In other words, to ground somewhat the theoretical discussion, the concepts of resilience, risk, and vulnerability must be related to social systems and to the opinions and needs of the populations, as well as to the natural systems and physical assets (Leanne, 2013). Urban resilience challenges traditional urban planning, and environmental management strategies, to be integrated as single concept or combination of different approaches towards resilience. The uncertainty and dynamism of the future can be better, and more accurately, addressed through an integrated view that enables the discovery of challenges, opportunities, and applicability in urban planning and development (at 428) (Nunes, 2019).
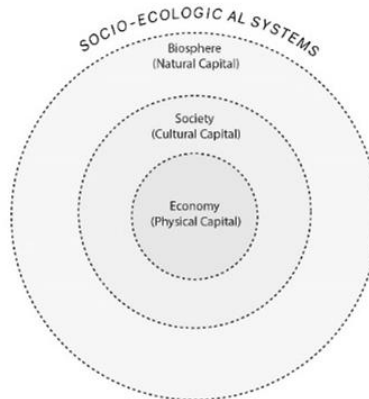

Figure 2. Interlinked social-ecological systems. Adapted from *"Resilience offers escape from trapped thinking on poverty alleviation"* by S. Lade, 2017.

In the same line of argumentation, resilience has become a useful concept in urban planning, and especially as a light in the traditional debate between formal and informal development, for the following reasons. Firstly, it emphasizes the need to consider human settlements and the

inherent risks to which they are globally exposed, understanding that economic, social, cultural and environmental problems are interrelated. Secondly, it underscores the imperative need to interpret the dynamics of informal settlements in the context of wider urban areas and in the long-term framework of urban transformation. This, because informal areas are located within, and shaped by, larger and more complex systems, taking advantage of possible [positive] external connections and on the capacity to transform the processes that cause vulnerability (Leanne, 2013).

To sum up, the crucial features in the notion of resilience as a correlated to social and ecological aspects, as proposed by Davoudi, are focused on the intentionality of human actions, the possible outcomes of the resilient process, and to the influence of power and politics in planning and decision making in order to respond effectively to challenges (Davoudi, 2013). These dynamic systems are increasingly examined from a multilayered and multi-stakeholder perspective, and address issues such as endogenous growth, evolutionary behavior, and resilience (Reggiani, 2001). Considering that human beings and nature are part of interrelated socio-ecological systems, the economic activity arising from these interactions (Lade, 2017), will be further analyzed in section 4.

3.2.A shift to an adaptive paradigm

This paper argues that an ideal and natural complement to the 'evolutionary resilience' theory is the ground breaking concept of 'adaptive governance'. Nowadays, the multiple social, economic, and environmental challenges in contemporary cities have led to rethinking the way in which, principally, governments manage environmental resources and their approach towards urban socio-economic structures. During the last decade, the concept of 'adaptive governance' has been proposed to be used as an alternative to the traditional prediction and control regime, focusing on the capacity of self-organization through flexible institutional arrangements that foster innovation and resilience (Rijke, 2012).

Informal urban settlements are complex systems (Dovey, 2012) and when it comes to analyze them and proposing possible interventions, it is paramount to consider flexible and negotiated participation with stakeholders, pursuing collaborative management. The 'complex adaptation systems' (CAS) theory analyzes the dynamics, functioning, and performance of complex systems as a whole that depends on interactions between its constituent elements. These systems are characterized by their non-linear processes, their diversity of stakeholders, the multi-scalar approximation towards them, and their self-organization and emergent features (Wohl, 2018). In this sense, traditional methods, i.e. normative enforcement and generic and uniform urban development procedures, have proven to be insufficient and lacking a coherent connection with the multiple and dynamic features of informal settlements.

As stated above, the vicious cycle of socio-spatial and socioeconomic exclusion, related to conventional forms of public administration (Leanne, 2013) can be addressed in an innovative way from an 'adaptive governance' approach. This, requires permanent cooperation and correlation between formal and informal systems for their effective operability. With this approach, informal and local solutions could be allocated within functional and more formal governance structures in the city, generating new networks, opportunities, and interactions (Leanne, 2013). The 'adaptive governance' management of a complex system is based on the one hand on knowledge, acquired

by learning strategies and experience and, on the other, through other organizational theories. The former, involves understanding the dynamics and impacts of socio-ecological processes in management structures at multiple scales, in order to adopt a learning, continuous adaptation, and adjustment strategy. The latter, is based in organizational skills, focused on the need to achieve balance in power relations and within the responsibilities assigned to the communities, government agencies, and other stakeholders. This approach focuses on managing the process rather than the results [i.e. an architectural end product] and explores how through management stakeholders can be permanently involved, open, and receptive to change (Leanne, 2013).

Exploring the management of a negotiated processes between informality and formality can provide clues of specific needs and challenges of a place, and therefore turn generic interventions towards a comprehensive strategy. Each informal settlement has different living conditions and fosters different day life patterns and requires an adaptable assessment to the needs of the particular local situation and a balance in power and responsibility of the actors involved in the process. There is a urgent need to shift the idea of categorizing communities as passive beneficiaries, to empowering them inclusively as active partners in decision-making and in improving their socio-economic and socio-spatial conditions (Leanne, 2013). This flexible and committed approach goes beyond the management of informal settlements (Karpouzogloua, 2016) to a multidimensional and multi-scale integration approach taking economic, ecological, spatial and social components in a holistic way into account.

Taking the innovative theoretical approaches set out above, the following section will explore resilient and adaptive strategies in relation with socio-economic systems within informal settlements, underlining how these interlinkages can potentially have as effect alleviation of poverty. It is relevant to reemphasize that the socio-economic dimension is only one of many variables that compose a reformulation strategy for existing urban planning policies, and that as previously stated, other components which are not discussed in depth in this paper have as much relevance in an integral proposal for an 'adaptive governance' framework.

4. The application of 'evolutionary resilience' and 'adaptive governance' in socio-economic urban networks

4.1. Revisiting the poor's economic agency in Latin America: considering the experience of Medellin as case-study

To land the theoretical analysis presented so far, it is considered appropriate to use the experience of Medellin as case-study, to visualize characteristics of urban planning strategies in a Latin American city that, despite their success in other areas, deserve a reinterpretation from a resilient and adaptive perspective in a socio-economic dimension. The city of Medellin, the second largest city in Colombia, in early 2000s implemented a 'radical' government experiment under the concept of 'social urbanism', which transformed the world's most violent city[3] at the time into a global example of innovation (Coletta, 2019, pp. 63-65). But what are the real transformations

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[3] *For further elaboration on this topic see generally:* Maclean (2016) Social Urbanism and the Politics of Violence. The Medellín Miracle. Chapter 3, Medellín: The Most Violent City in the World, Pages 29-52 DOI: 10.1057/9781137397362

behind these strategies in Medellin? Underlying the interventions in marginalized neighborhoods in the city, there are standard needs, considered as such by the authorities, and resolved eminently from the formal sphere and procedures of the city. Urban interventions such as large parks and sidewalks, monumental libraries (See Picture 1), and street art tourist attractions, despite having generated changes in the physical structure and, somehow, in the collective interpretation of this type of informal settlements, are not embedded in the living logics of space and are at risk of turning into superficial transformations, guided by the currents of neo-urbanism, urban marketing, and contextual urbanism (Montoya, 2014).

Picture 1: Library "Spain" in Informal Settlement in Medellin, part of the Social Urbanism Strategy.
Source: Municipality of Medellin. https://architectureindevelopment.org/

From this example arises the possibility of suggesting that while approaches towards the redistribution of social infrastructure have had massive physical impacts on the urban structures of informal neighborhoods in Medellin, the limitations of the formal discourse and procedures of the 'social urbanism' in such complex contexts are now evident, almost 15 years after they were implemented, in the persistent violence and high poverty rates (Montoya, 2014). This paper therefore argues that the redistribution of economic infrastructure has limited influence on urban development approaches (Marx, 2011), and can be seen as one of the key elements in considering adaptability and resilience as a novel approach to urban planning and poverty alleviation.

Precisely, the inability to incorporate the economic capacity for action of low-income populations when dealing with poverty and inequality leads to unequal distribution of opportunities in the city and rooting these conditions generating an almost unbreakable reality. Local strategies continue to concentrate public investment in formal areas of the city that are already considered growth-enhancing, restricting new possibilities for productivity in other neglected areas. Thus, in territories with strong socioeconomic inequalities where 'integration' processes have not improved equality standards, their continuity over time tends to create socioeconomic institutions that favor the most influential groups of society (Baquero, 2007).

The segment of the city inhabited by poor people will continue to be economically marginal as the opportunities to build strategies that invest directly in the economic agency of the poor are restricted since the inception of formal urban planning strategies. In this sense, the economic agency of the poor is conditioned in one hand to the notion of economy as such and, on the other,

to the existing patterns of urban distribution. In other words, the socio-spatial correlation behind socioeconomic inequities enables possibilities for alternative strategies for resilient and sustainable urban configurations (Marx, 2011). As Edwuard Soja states, spatial problems do not replace class problems analysis, but they can be an integral element when understanding social inequities and class struggle in modern capitalism and production relations. The structure behind the urban distribution of people establishes the social division of the city and at the same time the economic disparity within them. The socio-spatial dialect thus represents a call for the re-inclusion of socially produced space as something more than an sub-product, suggesting that social classes have a complex interrelation and are interdependent to generative economic structures (Soja, 1980).

Governmental and planning authorities have the responsibility to invest and maintain social and economic infrastructure providing platforms for economic growth, while having the responsibility of coordinating investments on spatial redistribution. Such strategies must confront existing complex models and patterns, where attempts to alter fragile agreements and relations are resistant to change (Marx, 2011). Resistance to change must be approached under a process of progressive and incremental transformation (Dovey, 2016), constructing strategies through collective means, where it is necessary to go beyond the notions of formality and legality, in order to understand the 'big picture' and the processes in which these dynamics are organized in space terms. The urban environment and the opportunities that will arise would be formulated by the decision of the affected populations, quitting the ill-suited tradition of rigid imposition of norms. The space, then, is considered as a cooperative process that responds to the needs of those who inhabit it, rather than a fixed and stable architectural product.

4.2. The 'endogenous development' and local adaptation strategies

It is also worth mentioning existing urban development strategies that propose specific socio-economic policies involving resilience and adaptation. In this sense, the so-called 'endogenous development' (Baquero, 2007) entails an interpretation of complex realities in order to adapt the socioeconomic needs of the society, by means of acknowledging the processes, cultural values, and institutions within a system. This development strategy seeks more flexible paths in the territorial organization of production. For this purpose, it founds necessary to reformulate the variables of the traditional economic analyses in a territory by recognizing socio-cultural and institutional components as strategic values within the processes of 'evolutionary development' and resilience of a city. In this sense, local development initiatives can be considered as one of the needed elements for the effective socio-economic integration and as a solution for urban equity challenges in contemporary cities (Baquero, 2007).

This strategy argues that development initiatives differ from one territory to another. Whatever approach is adopted, development policies must be built on the correlation of the economic, social, environmental, institutional, urban, political, and cultural factors that are uniquely combined in each territory(Baquero, 2007). This flexible and adaptable approach goes beyond the integration and empowerment of the vulnerable population to the functional dynamics of the formal city. It embraces complexity based on considering the particularities of each context, the scales of correlation, and the multiple layers and interconnections that compose a territory, in order to enhance resilience and reduce vulnerability by comprehensive political and planning strategies (Leanne, 2013).

Local initiatives aim to influence the forces and mechanisms that determine the process of capital accumulation, with the purpose of integrating various forms of development, improving the interrelations between them, and thereby generating a sustainable development in specific portions of the territory and, in general, within the wider urban system (Baquero, 2007). The strategies and policies that promote the autonomy of local communities are framed under the notion of 'social economy'. This idea arises as a response to social deficiencies, which neither the market nor the State has been capable of resolving through rigid and formal ways, in order to overcome the separation between capital and labor and introduce solidarity into the economic process itself (Toscano, 2000). Some of the socioeconomic objectives and initiatives that should be implemented in an 'adaptive governance' framework would necessarily include: empowering low-income populations by the diffusion of innovative strategies, the co-production of knowledge and space, the implementation of new forms of organization, new management policies, and synergies with other functional systems of the city (Baquero, 2007).

5. Conclusions

5.1. General conclusions

The failure of traditional urban planning in Latin America in recognizing the dynamics and real needs of the people, while acknowledging informality as a part of the operative and organizational system of the city, has generated an unequal distribution of opportunities and has promoted a cycle of exclusion that urgently demands a reconsideration in the planning approach. To this end, this paper presented a reformulation of the action framework, focused in exploring the relationship between the notions of 'evolutionary resilience', 'adaptive governance' and, lastly, 'endogenous development' [which involves components of the previous two, applied specifically to socioeconomic dimensions] as part of its strategic trends. As argued throughout the paper, human settlements and their inherent risks must be addressed from the correlation of economic, social, cultural, and environmental dimensions, with the imperative need to interpret risks under the dynamics of larger and more complex systems.

To this end it became clear that, under the notion of 'evolutionary resilience', urban planning, socio-economic systems, and environmental management are integrated under a unifying concept that allows for a broader, more comprehensive, and flexible dimension of analysis. At the same time, understanding the socio-spatial dialogue behind socioeconomic inequalities may provide alternative possibilities for more resilient urban reconfiguration, adaptable to the diverse characteristics of the contemporary city. This represents a call for the re-inclusion of socially produced space as more than just a sub-product, suggesting that social disparities, embedded in a cycle of exclusion, have an interrelation and interdependence with the generating structures which are influenced by formal development instruments rooted in the hierarchical notion of control. (Leanne, 2013) (Marx, 2011) (Soja, 1980).

For this purpose, a strategic planning framework was proposed on the basis of cooperation and balance of power, responsibilities and management, understood under the notion of 'adaptive governance'. This, in order to explore the characteristics of negotiated management between informality and formality and, thereby, to orient current generic interventions towards comprehensive urban development strategies. These strategies should be adapted to the conditions,

needs and potentialities of the particular context, through interventions, management, and planning perspectives.

As the main subject of analysis, the complexity of socio-economic dimensions was examined, in which conclusions lead to understand that initiatives for local development are potentially one of the solutions to socio-economic integration and urban equity challenges in contemporary cities, understood in terms of 'endogenous development'. Empowering low-income populations by the diffusion of innovative strategies, the co-production of knowledge and space, the implementation of new forms of organization, new management policies, and synergies with other functional systems of the city are part of the 'adaptive governance' strategy.

This approach, naturally, has limitations. There are major obstacles when it comes to devising strategies that break down generic and rigid intervention models. It is acknowledged that this type of proposals involve more time, resources, efforts, and require deeper analysis, greater willingness to evaluate multiple management and development models, and, in turn, needs multi-stakeholder cooperation, which challenges current power hierarchies and traditional methods. Nonetheless, the 'adaptive governance' structure based on the notion of resilience calls for the urgent production of more just and conscious urban spaces. The challenges posed by the elimination of poverty, the structural and functional transformation of urban systems, and the need for adaptation and resilience to processes that involve society and its environment must be addressed through innovation and must inspire the development of comprehensive solutions. These solutions must be addressed from multiple spheres, involving diverse stakeholders at various scales, in order to achieve comprehensive, sustainable, and dynamic results.

5.2. Final considerations and recommendations

The comprehensiveness of new urban planning schemes is determined by a variety of domains that are included as part of the problematic, the scales at which they operate, the stakeholders involved, and the extent to which they are resilient to the changes and risks faced by specific settlements. As discussed, socio-economic necessities are only one part of the equation. Future elaboration will be required in the other dimensions which must be integrated into a holistic development system [based on adaptive governance], i.e. socio-cultural, ecological dimensions, etc. In turn, there is a perceived need for a practical assessment that tests the notions and theories put forward in this paper from various perspectives.

Despite the obvious problem of social segregation and inequity in the urban sphere, major changes are currently being seen in policies concerning informality in Latin America. There is enthusiasm and hope for change and the strategies suggested in this paper may contribute to the path of inclusion and transformation that today's world demands.

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