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THE IMPLEMENTATION OF THE TERRITORIAL DEVELOPMENT CONCEPT IN THE REALITY OF VIRTUAL WORLD: THE CASE OF PUERTO RICO

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Abstract

In the new virtual world, it becomes necessary to consider new concepts of development that allow to achieve social justice and equity. It is for this reason, in this article present a synthetic review of the development theories evolution, the definition of the concept of territorial development and the implication of this concept in the case of Puerto Rico. The findings presented in this article are part of a larger investigation that was developed in the Doctorate Program of City, Territory and Sustainability at the University of Guadalajara, Mexico. The main objective of this research was to determine how the processes of territorial development were affected by the presence of dependent territory geopolitical condition.

However, this academic research is only the basis for extending a discussion about a concept that requires further analysis for adjust to other realities in the world and to incorporate the lessons and experiences of other individuals. It necessary understands that territorial development concept is relatively young and has only two decades since its first formulations, so it requires a process of operationalize the definition components. Such work would allow the territorial development concept can be considered in the preparation of different territorial studies and analysis.

Introduction

Today, there is talk that society has entered into a new era where communication and information have become their most important assets. A new era, in which society begins to have part of their existence in a world that not materializes in the physical sphere but rather in the virtual. Usually, in the field of information and technology, virtual is used to refer to the reality constructed by systems or digital formats.

This virtual world has been seen by some people as a positive element for countries and individuals because the knowledge is socialized, the relationships and interactions are globalized and more freedoms are extending for the human being. But the benefits of this virtual reality are far from being global because there are many people in the world who do not have access to this technology.

For this reason, it is necessary to observe the phenomenon of virtuality as a barometer of global inequality and the problems that have territories to achieve adequate levels of development. The lack of access to the internet is today, cause of social exclusion processes. Individuals that want to join the networks cannot do so because they have lack economic resources, poor infrastructure, unknown the technology or simply are not a basic necessity of their lives.

Given this reality, which is inevitable for the various societies in the world, it is necessary to revisit the notion we have of development in the territories. It is necessary to re-examine if only look the development from the perspective of economic growth or we should consider the introduction of other alternative conceptions that give more weight to human development. Therefore, in this article is examined the evolution of the concept of development, the definition of territorial development and the analysis of the study case of Puerto Rico.

Evolution of the development concept

Before introducing a definition of the territorial development concept must start from the historical evolution of the development term. This term emerged in the nineteenth century from the study of the richness accumulation processes in the industrialized countries and that over time became a theoretical formulation directed at changing the reality of economically backward countries. This theoretical formulation, which is prepared for the second half of the twentieth century, was constantly changing because in the implementation received multiple critiques.

In a thesis prepared by Antonio L. Hidalgo (1998) for the University of Huelva, Spain, it can appreciate the different kind of thoughts that various theorists elaborated about development. In this thesis, he classified the development thought into five categories shaped by the theories of modernity, structuralism, neo-Marxism, neo liberalism and alternative theories of development. This kind of thought started to copy the development processes of the industrialized countries but the difficulties encountered in the implementation of many theories will be the engine for the constant evolution of the concept.

The first line of thought which was elaborated about the development was related to modernity. There is an effort to rationalize the historic transition from preindustrial society to industry, in order to establish strategies that were applicable to countries that were economically laggards after World War II. The theoretical formulation under this stream of thought goes from 1940 to

1960. The theories related with this stream of thought were found: the stages of economic growth, the doctrine of the vicious circles of poverty, the post-keynesian dynamic models, the neoclassical models of structural change and the debate on the balance and imbalance of growth.

It is part of an evolutionary approach, which views development as an end to which all nations should aspire. Different countries therefore should be placed along a *continuum* that is bounded by the poles of tradition and modernization. According to Hidalgo (1998), the fundamental characteristics of these theories are five and consist of: 1. identify development with economic growth and modernity, 2. consider the phenomenon of underdevelopment as a problem of backwardness and stagnation, 3. see industrialization as a key element of modernization, 4. conceive planning as an essential element of development policy, and 5. consider the aid, loans and foreign investment as activators of the growth process (p. 68).

The first criticism to the modernization theories arises from the structuralism that taking place in Latin America. These theories have its origins to the late forties, due to the development of a critique of neoclassical theories of international trade. Among the theoretical contributions of this school of thought found works as the tendency to deterioration of the terms of trade, the center-periphery model, the dualism, the obstacles to development, the structuralism dependence, interdependence, and the neo-structuralism.

The elements of the structuralist theory of the development, according to Hidalgo (1998), consist in distinguish between economic growth and development and define the concept of underdevelopment (pp. 104-105). Structuralists conceive the economic growth as merely expansion of production based on the use of existing technology while economic development is defined as a continuous expansion of the number of sectors using advanced technology. Underdevelopment, rather than being seen as an economic backwardness in certain regions, as proposed by the modernists, is seen as a particular historical problem of how these economies are inserted into the international economy.

Among the proposals suggested to address the problem of underdevelopment, it's found the interventions of governments of peripheral countries directed to transform its production structure by the creation of diversified national industrial sectors. This economic strategy has been called the industrial model of import substitution. As imported products are produced internally in the territories by local actors, also must be reduced the dependency relationships between countries.

The neo-Marxist theory arises during the postwar as an alternative to the theory of modernization. Among the theoretical works produced in this school of thought are the modern theory of imperialism, neo-Marxist dependency, unequal exchange, the world capitalist system and disconnection. The main elements of the neo-Marxist theory can be summarized in the elaboration of a definition of underdevelopment, explanations of unequal relations between countries and establish the need for a radical political change to achieve economic development (Hidalgo, 1998).

Underdevelopment for neo Marxist thinking is a process characterized by continuous extraction of the surplus generated in the periphery by the advanced capitalist economies. The industrialized capitalist countries introduced the peripheral countries to a system of relations of

unequal exchange in which the economic surplus was extracted from the periphery. Such unequal relations destroy pre-capitalist artisan production of the peripheries and reduces incentives to indigenous capitalist industrial development.

Parallel to the development of structuralist and Marxist theories, was forged a critical stream to the modernity theory from conservative sectors. Since the mid-seventies, the development thinking has been clearly dominated by the neoclassical approach, developed by neoliberal thinkers. According to the work of Victor Barone (1998), the economic policies of neoliberalism are based on the absolute free market, privatization of state monopolies, intervention on macroeconomic variables, containment of wages, against tax reform and trade oriented to the exports promotion.

These policies are implemented by an ideological discourse characterized by the commodification of rights and conquests of the workers, identification of the state with all bad, the development of a sphere of virtual consumption, the imposition of a common neoliberal sense, appropriation of the vocabulary of progressive forces, the illusory characterization of alternative options and envision the lefts and social organization as spokesmen of defeatist pragmatism.

The economic perspective that have the neoliberalism and the other theories lead in the seventies to the elaboration of other conceptions of the development denominated alternative theories. According to Hidalgo (1998) these theories are the result of a change of view that capital accumulation is no longer the further end of the development but rather the satisfaction of the basic needs of man (p. 232). Among the features of consensus that has this line of thinking are found: the satisfaction of human needs, take advantage of endogenous resources of the territories, strengthen the confidence of society, make proper use of the resources of the biosphere and generate a political transformation that allows self-management and citizen participation.

Territorial Development

Alternative theories have been a breakthrough in the conceptual evolution of development. These have achieved to redirect the focus on the economic field to other aspects were also important for development as the environment, society and political rights. However, these theories have been developed fragmented so it has required an effort of synthesis and consolidation to make them operational. This process of theories consolidation can be found in many works produced by various theorists and institutions about territorial development.

The concept of "territorial development emerged as a concept associated with the idea of territory" (Becerra & Pino, 2005, p. 91). The geographical location became the main element to be considered in generating a development process. The territory is not only a physical place where a population lives but rather the geographical area in which social dynamics are built through networks, institutions and social capital (CEDET, 2011). However, according to Schneider & Peyré (2006), the territory in this concept of development "loses its heuristic and conceptual sense" (p. 84) to become a variable in which can perform some type of intervention about the space or the population.

In this sense, "the territorial development approach presupposes action on space and changing social relations" (Schneider & Peyré, 2006, p. 84). The territory has the dual function of being; on the one hand, the lens or supposed where the solution to the problems of development is conducted and, secondly, the subject where practices are implemented to achieve a welfare state. These features lead to consider the factors or dynamics affecting the subject of study. In theoretical work produced by Boisier (2004), Bervejillo (1995), Méndez (2002), FAO (2005), MIDEPLAN (2005) and Ramírez (2011) are presents the new territorial reality.

Sergio Boisier (2004), provides the keys to understanding the new environment in which territories are immersed. This author establish that this new environment is configured through the interaction of three new sceneries that are contextual, strategic and political. The contextual scenery is related to the processes of external trade opening that globalization has developed and the internal political opening that has been created by government decentralization. In the strategic scenery it has given a new territorial organization based on a virtual logical and a new forms of territorial management focused on the quasi-states and quasi-companies. In the political scenery is noted a modernization of the state based on territoriality and reinventing of local governments to host functions of direct and encourage the development.

The statements of Boisier are supported by the work of Blanca R. Ramírez (2011), who tries to revalue the functions of the state and institutions in the current global reality. For Ramirez, the welfare state as the neoliberal have confronted problems to impel policies which tend to development the territories. Given this reality, states need a transformation to become in agents of territorial cohesion, make a rational, fair and by consensus of the natural and heritage resources use; and promote an equitable and fair competition.

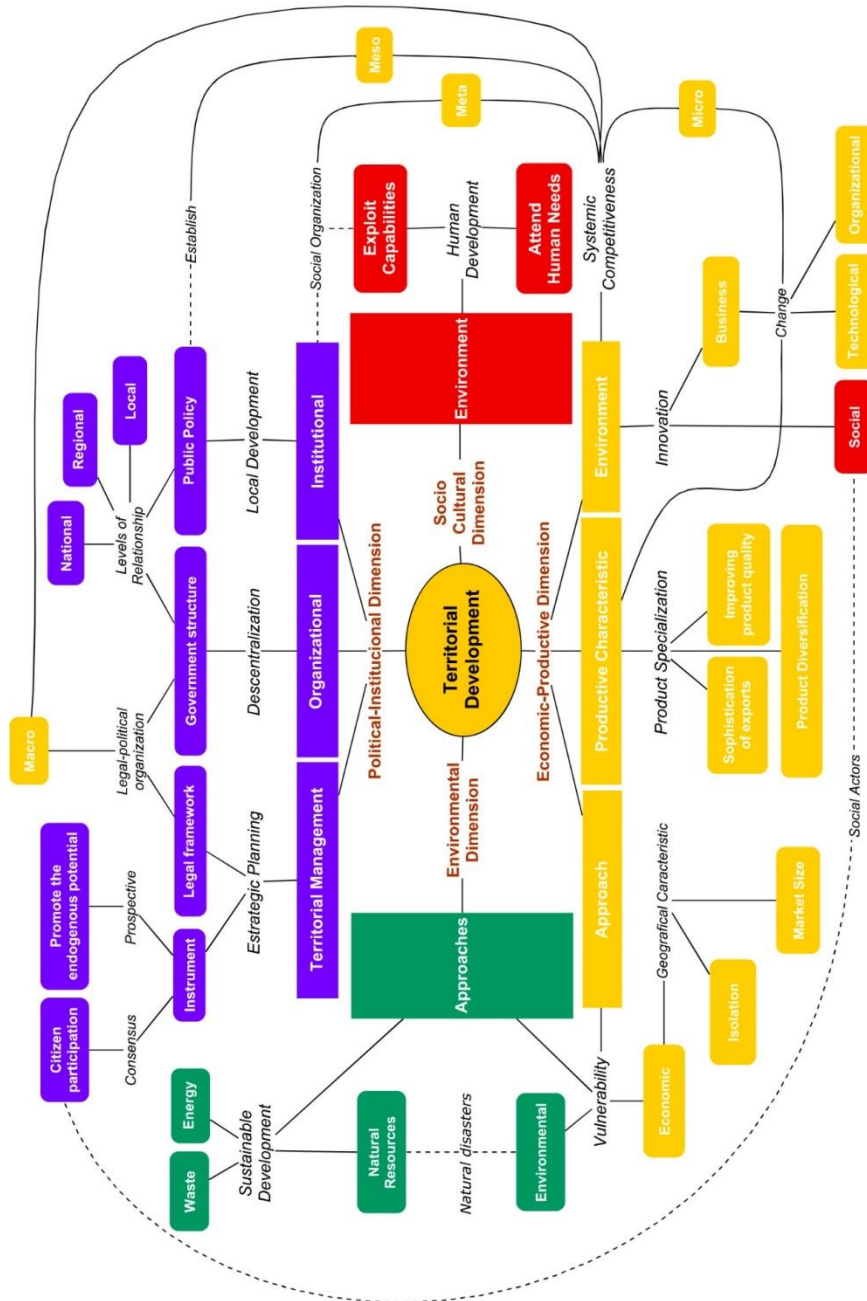
In the writing, *Territories in the Globalization*, Federico Bervejillo (1995) suggests the need to associate development with the creation of a new environment in which the competitive is associated with the advantages of the territories and the activities to be performed at different levels of system. Therefore, for this author, the creation of innovative environments that are articulated in inter-local production networks are an important consideration for the development. Ricardo Méndez (2002) coincides with these appreciations when developing an article dedicated to the relationship there are between Innovation and territorial development.

On the other hand, Bervejillo contributes to the elaboration of a definition of territorial development when he argues that territory intervention should be performed on the basis to redefine the planning process. For this author planning should incorporate strategic management and prospective. The Ministry of National Planning and Economic Policy of Costa Rica (MIDEPLAN, 2005) supports the approach of Bervejillo when expose that prospective is "a unique event which serves to overcome the limitations and contradictions posed by the short-term and generate hope for citizens " (p. 5).

In the case of Food and Agriculture Organization of the United Nations (FAO, 2005), citizen involvement is another element to be considered in the definition of territorial development. In the experience of developing technical assistance projects for 30 years, this organization have found that top-down strategies do not work. In its point of view, the social entities, every day, have been taking a more leading role in decision-making on the territory, which leads to consider new approaches such as "bottom-up" and the use of participatory methodologies.

The approach presented in different areas of territorial development carry to consider other theoretical works that grouping different perspectives and visions which they have been done on the issue. Among these works are important to mention those produced by Maria S. Di Filippo (2008), DDTs (2009), CEDET (2011) and Bernard Pecqueur (2013). Works that help to define dimensions, components, categories, variables and indicators of the territorial development.

Figure 1



Making a reflexion of the different definition that have been elaborated about the concept of territorial development, we can say that it is a development approach that integrates different disciplinary and sectoral strategies; whose purpose is systemically build social environments that ensure constant improvement of the quality of life of citizens who are part of a territory. To achieve this objective, territorial development requires systemic solutions that address different areas of society life as are the political-institutional, economic-productive, environment and culture-social.

Concerning to political and institutional dimension, territorial development must incorporate institutional, organizational and managerial processes. Institutionally, it should be given process of promoting local products through enterprises development that receive public support. Organizationally, the local government structures must be transformed to assume the historical responsibility of managing the territory. Function that could be perform strategically by means of prospective, the public participation and use of endogenous substantive elements.

The economic-productive dimension of the territorial development should be achieved through changes and transformations in the productive environment that will allow a good insertion to markets. These changes should result in a productive specialization, generating innovative environments and development systemic competitiveness. Economic achievements that must be accompanied by improvement of the social and environmental aspects.

In social terms, territorial development should be directed to build an environment in which human development is achieved. This means to articulate a process in which the actors of a given territory exploit their full potential and satisfies their needs and interests. This social construction must not be in conflict with the environment, because there must be a balance where the natural and local cultural heritage is valued.

The territorial development in the case of Puerto Rico

Puerto Rico is an island located in the Caribbean Sea, between the geographical coordinates: latitudes 17° 50' and 18° 30' North and longitudes 65° 13' and 67° 58 'west. It is located at the junction of the Greater and Lesser Antilles, which positions to the center of this region (Gould, et al., 2008, p. 8). Superficially, it has a land area of about 9,104 square kilometers. Its territory is composed of a main island, two smaller islands, Vieques and Culebra, and several islets and cays as Mona, Monito, Desecheo and Caja de Muertos. It bounded on the north by the Atlantic Ocean, on the south by the Caribbean Sea, the east with the Virgin Islands Passage and on the west by the Mona Passage.

This island for its geostrategic importance since its discovery in 1493 has been in a position of subordination of economic powers. Initially this subordination was under Spanish empire, but since 1898 is part of the territories dominated by the United States of America. This domain condition has made Puerto Rico a place of implementation of various development models through its history in order to be exported to other parts of Latin America. Among development strategies that have been implemented in Puerto Rico from the second half of twenty centuries are found the policies of structuralism, the model of modernization and various strategies of neoliberalism.

During the last government administration established by the United States in Puerto Rico, between 1941-1946, the industrialization process used criteria similar to those proposed by the structuralist strategies. The last US governor in the island, Rexford G. Tugwell, implemented strategies consonant with what is known as a model of industrialization through import substitution and public interventions to sponsor for the creation of diversified national industrial sectors. In this task the government creates institutions that were projected as physical manifestation of the aspirations of Puerto Ricans to development.

The process of industrialization of Puerto Rico began in 1942 with the creation of the Industrial Development Company. This agency was created with the initial goal of establishing factories with financial support from the government. The factories were created to produce goods for local consumption with raw materials produced in the country (Silvestrini & Luque de Sánchez, 1987, p. 507). Among the factories that were established by the Development Company were cement, paper, shoes, glass, and ceramic products. This first industrialization strategy failed in the great task of reducing unemployment and poverty, because the effects caused by the Second World War that overshadowed any achievement in this regard.

Before the assumption that first model of industrialization was a failure, subsequent governments were obliged to adopt the prevailing trend of the theories of modernization. The government changed its development strategy by the adoption of an economic policy that persecuted to convince American capitalists about the advantages of invest in Puerto Rico. These advantages consisted on cheap labor, competitive operating expenses, granting tariff protection to goods produced on the island and enter to United States market, low production costs for new businesses (including water and cheap electricity), generous tax incentives and implementation of government programs to train workers for these US companies to increase their yield (Muriente, et al., 1994, p. 214).

In that sense Puerto Rico became an industrial enclave of the United States where local production was geared towards generating products and services that need this country. This economic strategy had its achievements as increased life expectancy, improved health conditions of citizens, raised the level of education and developing a significant middle class. However, modernization strategies, which remain the country's economic policy, have ceased to succeed when the world has globalized and economic policies have led to neoliberalism. The opening of markets between countries and the development of free trade agreements have undermined competitiveness of Puerto Rico. There are countries with access to the US market that offer better benefits to companies that were located on the island.

Given this reality, the economic and social model of Puerto Rico has entered a process of economic contraction that has reduced labor supply and government revenue. It is for this reason, since the nineties, the government has been implementing neoliberal measures that are looking to reduce functions. The state government has decentralized functions to municipal authorities and has hired private companies to provide government services. Among the services most affected by neoliberal policies are health. It went from a universal health care system to one in which private insurers, contracted by the government, provide services to the medical indigents.

Thanks to this neoliberal development model has been shrinking governmental structure, but at the expense of creating a private sector that dependent on government funds. A private sector that sometimes does not improve the services offered by the government and does not reduce the fiscal costs to dispensed these. In this dilemma, Puerto Rico requires restructure its development model to fit the new global reality, hence worthwhile examining the contributions that could be obtained of the concept of territorial development.

At the political level the governmental structure of Puerto Rico complies with the precepts that territorial development concept seeks to achieve institutionally. On the one hand, they have delegated functions to local level and on the other, have instituted processes to ensure citizen participation. It is only necessary that the spacial plans preparation incorporate the prospective approaches and the processes of strategic planning.

In the economic sphere, Puerto Rico require of a productive specialization that is not tied to productive changes in their administrative authority. It necessary that the island economy specializes in the creation of products and services that truly exploit the capabilities of manpower and physical resources available. But above all, it is urgent to incorporate a development strategy that generate an innovative environment. This change of perspective should be accompanied by a redefinition of competitiveness as a business opportunity that values the good structuration of the different territorial system level.

In the social sphere, Puerto Rico required measuring human development indicators. The data for this indicator are produced by the UN for many independent countries, but not for dependent territories. The measurement of these indicators would allow Puerto Rico compare its performance relative to other countries in the world as well as with other units of the same territory. Finally, in the environmental sphere the case of study shows contradictions palpable because, although has strict environmental regulations, in the practice its urban model goes against sustainability strategies. Puerto Rico has implemented a model of suburban development that consumes the limited resources of the island and promotes the car as the unique means of transport.

Conclusion

The virtual world has been expanding across countries and social groups thus forming a new territoriality that required different conceptions of development. Today is inescapable that the progress and development of countries is strongly tied to the connection with the communication networks. The lack of access to these media are causes to exclusion and backwardness of certain social sectors. Therefore, it is necessary to check the visions of development in the countries.

A new view of development can be found in the alternative theories, especially from the perspective of territorial development. This concept is relatively young and seeks to synthesize various theoretical currents as human development, local development, systemic competitiveness and sustainability. Currents of thought that developed in isolation and required unified in one concept. Therefore, in this article we have developed a definition of territorial development based in the contributions of different theorists.

The definition of territorial development, however, requires changes that can adapt to different territorial realities. In that sense, the case of Puerto Rico becomes relevant because it shows the inability of certain development strategies to adapt to territories of small surface area, in isolation and under the control of another territory. In this case, any development strategy must be tied to a redefinition of the geopolitical relations and implementation of solutions that not originating in continental realities.

On the other hand, the Puerto Rico limited extension and its location in the path of hurricanes do necessary to consider other concepts such as smart growing and resilience. It is important modify the patterns of suburban settlements to reduce the consume of scarce soil that owns the island. Furthermore, although it is necessary to continue implementing sustainability policies, the reality is that everybody have to face with the effects caused by climate change and natural phenomena. All these concepts could enhance territorial development definition.

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