

THE ECONOMIC REVIVAL OF PUBLIC HOUSING ESTATES THROUGH URBAN DESIGN

Introduction

In response to extensive deterioration of some Mexican old social housing estates which have proved to be a short-term solution for the problem of housing for workers, this paper attempts to introduce tools of public open space morphology to improve the economic performance of these estates. The proposal lies in providing more comprehensible and sustainable urban design tools to re-shape and transform the old social housing stock into a more productive one through the accommodation of a more diverse and self-contained distribution of productive activities at the local level to carry out the residents' daily-life activities.

This work is intended to develop a conceptual framework for intervening Public Housing Estates [**hereafter PHE**] with deteriorating environment joining the approach of public open space morphology with economic development. The paper analyses the ways PHE can develop physical –spatial strategies to run an economic flow. It consists of three parts. The first part presents the review of principles of the economic development in local areas and the economic implications of the configuration of PHE. Key issues are identified and the theoretical principles to guide the conceptual framework are highlighted. Building on these key issues, a review of principles and qualities of urban design qualities follows. Finally, the conceptual framework is developed.

Background

The original configuration and design of the PHE built between the fifties and eighties have shown to work in a limited way because of the physical-spatial distribution of public open spaces and buildings, and the distribution of land uses. However, since the retrieve of the housing institutions as managers of the maintenance the situation of physical decay has been growing in all areas: common areas -public open spaces and public close spaces as lifts, corridors, and soon- infrastructure, maintenance of the landscape and buildings.

At the present, towers, buildings, attached and detached dwellings have modified facades, levels of construction, installation of water tanks, but also many public open spaces have been modified, some of them have disappeared as product of illegal appropriations of common areas or to individualize parking areas with bars and cages and the remnants have become illegible and with very low level of natural surveillance.

In economic terms there is a very low density of businesses and most of them are of trading activity, however they do not help to the maintenance of the estate. The wealth which could come from the exchange of properties has decreased in quantity and appreciation of the properties. And from the human capital point of view, some of their residents are becoming older and with this the economic resources are transformed, they changed from salaries to pensions, and the other main components still remain as resources from economically active population, however they come from workers in professional positions not very competitive and lower labour positions. There are no financial institutions around these PHE able to introduce new resources to the local area.

Another accumulative process is happenings around the PHE, they are inside of intermediate zones of the city in which a process of intensification of productive uses or the substitution of residential uses for productive ones is taking place, because commercial businesses and services are looking for central locations to take advantage of the consolidation and strengthening of the family incomes in the area, and creation of location advantages in these zones of the city. The PHE just participate as

consumers, they have not been able to get involved with a more active role happening around them. This situation has created additional economic tension between the market and the residents in terms of land rents, attraction of investments, generation of economic activities and attracting talented people inside.

In social terms the life of the residents of these PHE has been transformed and the existence of conflicts between neighbours has become frequent. There is no social cohesion, conversely the neighbours do not want to establish friendly links with each other, and feelings of insecurity for all groups of age are a common state. Additionally, a development of an additional pressure over the already weak and difficult relationships between neighbours has been taking place since the retrieve of the state due to the accumulative lack of maintenance in the PHE provoking more difficulties to consolidate a community so needed for these PHE.

Finally, the lack of common places inside to bring options for neighbours to know each other has persisted since the beginning of the living, and gradually more and more functions and activities than just working have been throwing away from the estate, as the supplying for goods and services, parks, amusement and many other facilities because of the insecurity which has made of these configurations increasing dependent of facilities and businesses around them.

In conclusion these PHE are an old residential stock for workers in a deterioration process which the social actions are not able to ameliorate. The physical deterioration of large quantities of built stock built in one moment, the reduce scheme of productive and commercial land uses, the lack of definition about the ownership of businesses and the lack of knowledge about how to live with the form of ownership, the condominium and its implications make the PHE an option of dwelling very deficient and with quite few possibilities to insert them into the economic development of the rest of city.

Nevertheless it is difficult to establish links between the spatial situation in PHE and the economic development; It is important to analyse the economic implications of the physical environment of public open spaces and dwellings to be able to make more effective physical interventions over the PHE.

The wealth of a neighbourhood

It results very important to know how the wealth is produced at the local level, and the way the built environment intervenes in the whole process of production in different moments of it, especially to analyse the physical-economic behaviour of the neighbourhoods. The next economic analysis is done using the Harvey's approach (1985) that analyses the capitalist forms of urbanization.

In general terms, the wealth is done from three circuits of production; the first one is through the production of goods and services, second through the production of new urban land developments and third from the reproduction of the labour power {Harvey, 1985 #111;Harvey, 1985 #111;Byrne, 2001 #82}.

The first circuit of the production is through the transformation of raw materials to produce goods through the production of services as health services, education services, administrative services and so on. The built environment intervenes as economic units commonly called "businesses". The spatial structure of businesses in the neighbourhoods is predominant locationally - concentrated this means the structure of the autonomous single-region firm. The majority of the businesses have all administration and control and the total process of production {Dicken, 1998 #81;Massey, 1995 #65}.

The type of business, mode of production and organisation of each business will determine certain spatial patterns to be able to run the business, as the location in the

neighbourhood and the immediate public spaces, the quantity of space, and the links inside of the neighbourhood and outside of it. The type of business will determine its location inside at the scale of the neighbourhood, and the level of flow of pedestrians. The mode of production the business will have a list of spaces in order to develop different types of activities which the mode of production demands. Depending on if the business is of customized production, small full-service outlet, front office, back office, direct acquisition, part-process or assembly will characterise the quantity of space needed {Healey, 1991 #21; Sassen, 2000 #63; Dicken, 1998 #81}.

The organisation of the business which refers if the business is an independent company, headquarters, a branch of another company or a franchise will determine also the location, the demand population of the good produced, the area needed, and the image the business needs to run {Dicken, 1998 #81}.

As the same way, the businesses demand different quantities and qualities of spaces towards the interior also require certain qualities and locations of the exterior, the public open space to work and to be economically successful. In this sense public open spaces are important as containers and link among businesses; containers because the streets give structure to blocks and plots; and links because they communicate ones private spaces with others and one neighbourhood with other neighbourhoods and areas of the city.

The spatial patterns in PHE in the first circuit of production:

- Type of business.

The original existence of the residential mono land use with small units of commerce facilities and the restricting urban planning regulations over PHE originated the denying the existence of productive land uses and the reduction of the division of labour. This pattern has limited the economic activities inside of the estates as well as, the sources of inflow of economic resources. Additionally, the existence of few commercial units has favoured the appearance of a non competitive commercial environment because the owners increase the prices of the goods and they have a bad service {Lupton and Power, 2002 #76; Begg, 1999 #47; Massey, 1995 #65; Lupton and Power, 2002 #76}.

- Geographical organisation of the businesses.

The condition described above orients the demand of goods and services (residents) to a scheme of dependence of productive and commercial units outside the estate to satisfy the basic needs of goods and services of the residents. The estate cannot have a scheme of recovery of a rent by the businesses nullifying a very important source of economic resource to finance the maintenance of the estate.

Also the inexistence of local businesses discourages the idea of community and the pride for the self-reliance {Morrison, 2003 #72; Page, 2000 #112; Page, 2000 #112}.

- Mode of production.

All the modes of production are outside of PHE forcing the residents to travel long distances to arrive to their workplaces which implies tired workers and the developing of less assertive residents-workers because they play the same role of workers during many hours of the day without constant changes of social roles as father, friend, acquaintance and worker that an individual can play if the workplace is nearer to his dwelling.

Additionally the workers have very different kind of jobs that the advantage is that the economic resources of the estate do not depend on one singular source of job; however the disadvantage is that they do not have common places, the residents of PHE do not go the same places do to work, to shop, to enjoy and so on.

The second circuit of the production produces wealth through the construction of urban land developments including open and public spaces and close and private spaces – dwellings- as new real estate products or commodities. The prices of private spaces include the cost of creation of public open spaces –streets, parks, and facilities-.

However in subsequent changes of ownership of the properties, wealth just can be obtained from the exchange of private properties; public open spaces are excluded, but they are the major component of the prices, they act as conductors and important facilitators or hinderances of the valuation of the private spaces but not as direct selling goods any more (See Ambrose 1994). The previous situation is reflected in the number of transactions of real estates and the valuation they can reach in the market {Morrison, 2003 #72; Lupton and Power, 2002 #76; Page, 2000 #112}.

The economic implications of the configuration of PHE in the second circuit of production are:

- The ownership and maintenance

The ownership of the detached dwellings and flats by the residents is the property of the poor people. The residents of these estates do not have economic resources to put into their dwellings, in part because they prefer to invest in goods or properties which will help to keep bringing economic resources to home like cars, education or in the businesses in other places in case they have one {Lupton and Power, 2002 #76}. On the other hand, their properties have very limited characteristics appreciated by the market of real estate which with the physical deterioration of the buildings result in very low appreciations of the properties in the market and few transactions of them.

The costs for the maintenance of the dwellings and buildings are high due to the architectural configuration of some of them, and the majority of the repairs are in common areas as the water bombs, lifts, lighting or drainage are facilities for the whole building which implies an organization between neighbours to pay the repairs.

On the other hand, the ownership of public open spaces is collective, their benefit depends on the total supply of that good for everybody and they were paid and have to be maintained by the community. In other configurations they are owned and managed by the authorities of the city but their maintenance depends on more people than just the authority {Carmona, 2003 #18}. However in the case of the PHE, the public open spaces have been in a process of privatisation, in the case of the spaces beside dwellings, and a process of abandonment in the case of more separate spaces of the dwellings, over the time because the very low maintenance makes of them problematic spaces for the owners of ground – level flats.

- Flexibility and adaptability of the built stock

The flexibility and adaptability of the built forms and public open spaces for the implantation and maintenance of productive processes in the buildings are impossible. The high rise buildings are built forms expensive to built, to maintain and even to tear down, the actions that each individual could want to do affect the other owners of the same building. Individual budgets to make adaptations or improvements do not reach for the expensive repairs that these buildings usually need. For the owners of flats in these buildings it is impossible to transform their patrimony into a productive space {Borja and Castells, 1997 #70}.

- Management

The lack of maintenance in private and public buildings as well as public open spaces is the main problem affecting the valuation of the properties. However the deterioration of public open spaces seems to affect more than the level of maintenance of the private areas. This situation influences the attractiveness of the site and therefore the valuation of real estates in front of the eyes of the potential buyers.

The third circuit of the production produces wealth through the social relations of production of the local human capital and its economic resources that the neighbourhood achieves to attract {Morrison, 2003 #72}. The geography of productive activities needs to transcend the two-dimensional pattern to go into the geography of employment. Massey explains that “The primary social process which the geography of jobs reflects is production” (1995: p. 65). The division of labour reflects the kind of

economic resources that enter in the inflow of the neighbourhood, these can be salaries and wages, business profits, professional fees, interests and dividends, sale of goods and services, rent or sale of properties, private pensions, welfare and social security payments, remittances, free goods and services, free goods, gifts and donations {Hallman, 1984 #48;Hallman, 1984 #48}.

The relations of economic ownership and possession of the businesses also influence in the geographical distribution of the division of labour. The ownership of businesses, local initiatives of entrepreneurship and employment and distribution of jobs or division of labour determine spatial patterns and economic patterns and links between the local area and the rest of the city or the “global” dimension {Massey, 1995 #65;Massey, 1995 #65}.

The importance of this is to know the propulsive activities that transmit growth to other sectors in the local economy and which are the dependent sectors and the type of economic needs of each neighbourhood if they need subsidy or private impulse {Hallman, 1984 #48}.

The economic implications of the configuration of PHE in the third circuit of production are related with the division of labour, job competence and entrepreneurship and types of inflows into the neighbourhoods.

- Division of labour, job competence, and entrepreneurship

The local human capital of PHE is not competitive in terms of skills and training but also in terms of assertiveness and undertaking new productive activities (authors). The beneficiaries of these PHE are civil servants, employees or workers are not used to look for new options and opportunities for the developing of productive activities. Their attitude is reactive instead of proactive. The opportunities of self-employment are null {Page, 2000 #112;Norberg-Hodge, 2000 #80}.

- Types of inflows into the neighbourhood

The types of inflows that the PHE receive are wages and salaries basically which come from the workers who go away to work. There are not other types of economic resources coming to the estate. But also, these incomes go away so quick as they came because just a minimal part of them remains on the area when the residents go to buy few goods to the shops inside of the estate, the rest of the resources are expend away and the majority of them to international enterprises as chains of selling of foods and other goods as Wall-Mart, McDonalds and so on. The PHE do not participate in the economic exchange, the incomes of the residents go from the financial institutions to these other kind of enterprises.

Finally the fourth circuit of the production of wealth comes from the circulation of economic resources and “the specialization in the assembly, transmission and processing of information and in the controlling of other business enterprises. The spatial expressions are banks, insurance companies, finance houses, the media, the publishing industry, and so on” {Lloyd and Dicken, 1977 #136}: p. 12). The physical implications of this circuit will be measured in the extension and distribution of investments, economic activities or businesses developing in the area, also in the level of maintenance and consequently in the number of transactions of real estates and the valuation they can reach in the market. But also the origin of the capital seems to consider the public open space different.

For the global businesses the public open space is seen as residual, just like conducts of people because they create economic interest through the cheapening of the goods' prices. Physically, they are big boxes without interfaces between the private and public space. Conversely, for the local businesses the public open space is the feeder of customers, the majority of the businesses depend on the level of success of the urban structure in communicating and transporting people through the streets to have economic success in the business. The public open spaces act like attractors or discouragers of investments.

On the other hand, the nature of the sources of investment finance is also very important to know how much the residents are in control of economic operations happening in their neighbourhood; if the flows of money come from national or even international investors the neighbourhood is more dependent of decisions and people from outside and with less power of influence over them, conversely if the majority of the economic operations come from local investors the neighbourhood wealth is more health, autonomous and sensible to local considerations {Hallman, 1984 #48; Hallman, 1984 #48; Borja and Castells, 1997 #70; Borja and Castells, 1997 #70; Norberg-Hodge, 2000 #80; Sassen, 2000 #63}.

The economic implications of the configuration of PHE in the fourth circuit of production are:

- Financial institutions

The lack of financial institutions in the area is a consequent of the inexistence of a real economic flow of production and consumption in the local area. It can be seen a complete lack of investments of any kind; this creates a multiplier and increasing effect of discourage to attract more businesses or investments to the site.

- Local or global expenditure

The population of these PHE is a captive market for the global expenditure which is an ideal situation for global capitals. However the predominance of a global expenditure in the consumption habits instead of a local expenditure reinforces the weakness of labour and social networks as well as the capacity of the population to build a local economy.

- Economic relations of production

The economic relations between producers and consumers are global and distant, the consumers do not know who produced the goods that they usually consume and few by few this lack of information becomes a lack of interest and a cultural break happen in the economic cycle of the production and consumption of goods.

- Sources of investment finance

The sources of investment finance near PHE are pledge houses and remittances to finance basically the needs of consumption of the residents, but they do not introduce or act like a link of a productive chain to invest in the economic cycle of the local area in any of the circuits of production.

- Social environment

The lack of feelings of security, the lack of social cohesion, the unclearness of ownership of present businesses and the ignorance about the tenure of condominium and the lack of institutional support create a discouraging environment for investments of any kind inside of PHE. First, the environment of insecurity and lack of surveillance boosts the implantation and prosperity of illegal land uses. However there are two kind of these illegal land uses, one type are productive businesses which in a sense are legal as washing of carpets or laundries but because of the urban planning regulations an even more important the location of them in the interior of the estate are not viable, and the second type are the businesses generally considered as negative as brothels, drugs selling, stealing of cars' parts, dogs fights and so on. Second, the confusion of ownership and physical delimitation of the properties also discourage the investments and introduction of productive activities. Third, the lack of institutional support by different types of authorities involved as urban planning authorities, the social attorney for cohabitate problems, ward authorities, public services institutions as water, drainage, lighting, the neighbours' committees, and the housing institutions discourage the investors because they perceive that they do not have guaranties to protect them and their capitals in any situation, the investors perceive the environment to risky to do anything. And finally the conflictive community environment between neighbours which influence the location decision of potential customers.

Urban design

The built stock of PHE can be favoured from urban design approaches mainly because urban design qualities or principles provide a framework to analyze the transformation of the built forms over the time linked with economic and social transformations of the sites. Moreover inside of an urban design framework it can be developed tools to re-shape and transform the old public housing stock into a more productive one through the accommodation of more diverse and self-contained activities at the local level to carry out the daily life of the residents.

By addressing social, physical-spatial and functional aspects, urban design strategies have helped to improve residents' satisfaction about their residential environments. As it has been shown in housing estates as Angell Town in Brixton, London where the place-identity of the residents was very low. Here, deep interventions of urban design related with three desires of the residents have been addressed. One was related with the "*spatial and perceptual linkage*" between the estate and the surroundings, second was oriented to achieve a more "*homely*" appearance, and third to achieve a "*modern identity*" focused to transform built forms in the way they could inspire people to have aspirations {Butina Watson, 2005 #396}: p5).

Urban design approaches can help to achieve the concurrence of consumers and providers in the same place which at the end it is the way in which a market is done, because urban design strategies are done in the public real to address social needs. {Carmona, 2003 #18; Bentley, 1999 #71}. Public open spaces are a fundamental part of the development on emergence of economic activities useful and meaningful for the community; because they connect people with people, but also are supplied and demanded by everybody. In the case of the demand, the residents need secure and comfortable environment to consume, and the side of the supply, the investors need secure places and a potential market to sell their products.

Hillier {Hillier, 1996 #39} shows how the structure of the urban grid is the first factor to put people in public open spaces, how to achieve a certain numbers of people flowing in the streets, which is the prime component of any economic activity at the local level. Afterwards, the businesses are attracted by this quality of the urban configuration and they decide to locate in places of major pedestrian movement. And finally, this is the beginning of a multiplier effect which he calls movement economy.

Urban qualities

This section introduces urban design qualities or principles from different approaches, as the means of developing a conceptual framework to guide the framework of assessing the morphological capacity of the built environment.

The urban design qualities are which can or cannot be identified in urban configuration. The purpose of this is to link physical - spatial structures with distributions of activities and relational meanings of urban grids.

The urban qualities identified as relevant in the literature are:

Permeability is understood as the capacity of reaching places physically and visually {Bentley, 1985 #10}

Convexity is the capacity to create a sense of spatial containment developing a set of relationships, being observable and dominated by the user {Alexander, 1977 #49; Alexander, 1977 #49; Hillier, 1984 #38}.

Variety of use is the distribution and quantity of uses founded in private spaces as well as activities in public spaces {Bentley, 1985 #10; Bentley, 1985 #10}.

Robustness is the ability to accommodate change without significant change in physical form; this quality is also referred as resilience or adaptability {Bentley, 1985 #10}.

Environmental comfort comprises environmental factors as sunlight, wind and temperature for the well stay in a place {Bentley, 1985 #10}.

Legibility is the ability which makes a place understandable through instantaneous site observations, retaining, organizing and comparing of this new information with previous place experiences from the configuration of urban grid {Holahan, 1994 #33; Bentley, 1985 #10; Bentley, 1985 #10}.

Territoriality is the ability to control the degree of social contact and development of activities over certain spaces abutting homes {Newman, 1972 #87}.

Vitality is the ability of the places to support many activities, social interactions and to accommodate various daily residents' routines at the same time {Giddens, 1984 #60; Bentley, 1985 #10}.

Natural surveillance is the ability of the public open spaces to be observed from other public open spaces or private close spaces to be observed any time {Newman, 1972 #87}

Urban design qualities associated with the circuits of production

According with literature referred to PHE urban design qualities which are involved in the performance of the process of production in the first circuit are:

The non existence and low variety of businesses and the isolation or existence of low liveliness in the public open space network are related with the scheme of permeability, pedestrian movement and low levels of legibility established by the physical distribution of buildings and the public open spaces left. The configuration of the superblock and distribution of buildings inside do not create uniform levels of pedestrian movements, the impermeability between public open spaces also hinders this .

The distance to local businesses from the dwellings is not very long; however the supply of goods and services (quality and quantity) is not competitive at all. The local businesses need flows of pedestrians to survive and buildings and detached houses need them to have natural surveillance however the location of them do not correspondent each other and do not create synergies to improve pedestrian movements. The lack of vitality of activities in public spaces as well as of activities in private spaces is part of this breaking {Page, 2000 #112}.

The resilience of the built forms is very low, they are not flexible for the creation and maintenance of productive processes, due to the height of buildings, the costs implied in these forms and the big quantities of owners implied in these groups of dwellings.

The process to develop place –identity by the residents is reinforced by the built forms and the distribution of activities in private and public open spaces, land uses and physical configuration of buildings do not correspond with the significant activities of the population. For example, the high rise buildings are for residential use but in terms of the townscape they are the most highlighted buildings of the estate. There are not public buildings with more complex architecture which could correspond with significant collective meanings among the residents like the church, or social clubs or similar public amenities.

The lack of local economic capacity and local economy discourage the idea of community and self-reliance and finally social cohesion among neighbours.

In the second circuit are:

The low accessibility and permeability to reach PHE by car or through public transport create a situation of physical exclusion. However the current location due to the process of urban development of the city is an advantage that the real estate market recognises.

The level of legibility consolidated by the configuration is very low, the outsiders, delivery boys, employees and others neighbours cannot find a logic of movement and a correspondence with the buildings, and its visual uniformity does not help neither.

The use of superblocks and the lack of legibility have an effect for the permeability at the scale of region, because the outsiders –drivers- do not understand the configuration and they do not receive features that they could relate with their precognitions of spaces to find alternative routes in case of traffic jams.

As same as the previous paragraph, there is a lack of resilience from the built forms to be adequate for the different changes of spatial needs in the family over the time. Uniform visual appropriateness linked with the mono residential use do not help to the identification of the different spaces and groups of dwellings of the estate.

In the third circuit are:

In the case of the third circuit of production the relation is indirect through the vitality in public and private spaces, just like encouraging business environment to inspire residents to look for information about labour networks, jobs, and any other activity oriented to the improvement of their skills and capacity to compete for better jobs position. The existence of public amenities and facilities for the labour and development of labour networks like tools libraries, job information centres, centres of voluntary work: with children and elderly care, wire for internet, English centre, computer skills centre; and so on also encourage the initiative of the people to work.

In the fourth circuit are:

In the case of the fourth circuit the intervention of urban qualities are gathered to create a process of place competitiveness that a local area has to create and maintain to influence the constant attraction of investments to the neighbourhood.

The morphological features associated with urban design qualities

In this section are considered morphological and social features which can be used to build up a conceptual framework to assess the economic implications of PHE.

Morphological features	Social features
Axial lines: straight line passing through teach convex space” (Hillier and Hanson, P.92)	Social encounters
Convex spaces: “no line drawn between any two points in the space goes outside the space” (Hillier and Hanson, P.98)	References of friends and acquaintances
Corners	Satisfaction for the proximity dwelling – workplace
Block shapes	Cognitions of the spaces
Sizes of blocks	Concordance of physical morphology and meanings for users
Buildings	Personal judgements about spaces
Public open spaces	Activities in public spaces
Links between convex spaces and buildings	Activities in private spaces
Flows of pedestrians	Level of participation of neighbours
Horizontal and Vertical rhythms of windows and doors	Institutional support
Links between windows and doors and spaces	Attachment for the neighbourhood
Wall details	Opinion about businesses’ environment
Landmarks, nodes, borders, paths and	Satisfaction for urban and transport

goals in public open spaces	services
Distance house – parking area	Productivity of businesses
Matching between entrances of buildings and first sight of the public open spaces	Incomes of residents
Land uses and associational patterns	Performance of urban planning regulations
	Trips for consuming purposes
	Businesses characteristics

The next section presents the indicators created with morphological, human and social features with which can be measured the urban qualities in PHE.

Methodology for assessment of economic implications of configuration of grids of PHE

Urban Design Qualities	Indicators
Permeability and accesibility	• Axial integration of convex spaces
	• Axial connectivity
	• Axial link index
	• Building-space index
	• Depth of the public space network
	• Permeability
	• Pedestrian movement
	• Detailed linking interface
Legibility	• Continuity of frontage
	• Sequence of paths and goals
	• Existence of intermediate goals between nodes
	• Existence of legible neighbourhoods
	• Spaciousness-dominance of POS
	• Relation (%) of matching main entrance and first sight of public open spaces
	• Back-protected situation
Spatial vitality	• Small squares liveliness
Richness	• Optimum contrast of environmental stimulus by buildings
Robustness or resilience	• Adaptations in dwellings for businesses
Social vitality	• Relation of social encounters
	• Intensity of public space's use
Social variety	• Variety of public activities
Social Identity	• Extension of social networks
	• Level of social integration intra and inter neighbourhood and commitment with communal actvs.
Social cohesion	• Commitment with neighbourhoods' matters
	• Empowerment of neighbours' in the decision-making process of neighbours' committee
	• Level of helplessness of institutional support to facilitate the maintenance and living of the neighbourhood/estate

Meaningfulness	<ul style="list-style-type: none"> • Car connection
	<ul style="list-style-type: none"> • Relation (%) of concordance meaning-form of POS and blgs.
Place attachment	<ul style="list-style-type: none"> • Level of satisfaction for living/working in the neighbourhood
	<ul style="list-style-type: none"> • Level of attachment to the neighbourhood
	<ul style="list-style-type: none"> • Level of exertion of the control of activities over adjacent POS
	<ul style="list-style-type: none"> • Level of satisfaction about the spatial conditions of POS for businesses
place dependence	<ul style="list-style-type: none"> • Existence and quality of services' satisfaction
	<ul style="list-style-type: none"> • Residential location's satisfaction related with the workplace
	<ul style="list-style-type: none"> • Transport services' satisfaction
Economic variety Economic vitality	<ul style="list-style-type: none"> • Array (distribution and spatial) of economic activities
	<ul style="list-style-type: none"> • Land rent productivity
	<ul style="list-style-type: none"> • Economic productivity
	<ul style="list-style-type: none"> • Personal wealth
	<ul style="list-style-type: none"> • Employment
	<ul style="list-style-type: none"> • Level of boosting economic activities due to the planning regulations
Economic Inclusion	<ul style="list-style-type: none"> • Local expenditure
	<ul style="list-style-type: none"> • Businesses' organisation
	<ul style="list-style-type: none"> • Mode of production
	<ul style="list-style-type: none"> • Ownership of businesses
	<ul style="list-style-type: none"> • Local entrepreneurship
	<ul style="list-style-type: none"> • Local employment
	<ul style="list-style-type: none"> • Job competence
	<ul style="list-style-type: none"> • Sources of investment finance

Conclusion

The works presents different ways in which the built environment intervenes in productive processes, in the four circuits of the economic cycle. It analyses the economic processes in the environment of public housing sector.

This paper represents the theoretical proposition for the economic assessment of urban configurations, however it needs to be applied in experimental cases further.

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