

# Participative design.

A cross-disciplinary methodology for improving third world' urban development.

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**Abstract:** Traditional performance of architecture, urban planning and disciplines involved with habitat production have been based on rationalist thinking, which has been addressed to simplification, specialization and concept reduction; reaching a fragmented approach to knowledge, called hyper-specialization.

Under this ideology, 20th century's urban – architectonic planning and design have laid their proposals on a functionalist, pragmatic and quantitative approach, leaving aside human and natural phenomena involved with a multiplicity of events, actions, attitudes, reactions and determinations.

Therefore, is necessary architects and urban planners' evolve on their professional performance, and start considering themselves not only as technical proposal developers but as networks weavers among housing, neighborhood and city design; which means, despite the scale at any habitat intervention, their work should become an important piece of wider system that comprises social, economical, cultural and physical context.

**Keywords:** *Urban development, Latin America, Periphery, Participatory design, Cross-discipline.*

## 1. Introduction

Current practice and education' architecture models are characterized by: Modern movement remains, therefore architecture focuses on materializing its discourse through adopting universal type approaches (neutral and immutable); leading us to produce simplified and degraded images, without taking care of complex social reality.

At housing level, the result of this rational-functionalist thinking applied to habitat planning and design, is the concept of accommodation as a serial product. [1] Thus housing is conceived as a utilitarian tool that preserves health, reforms social behavior, conciliates economic justice, saves cities from deterioration, modernizes developing economies or rescues developed ones. This shows a wide range of transformation powers attributed to architecture, not only related with space configuration but at the same time with people behavior, despite of, space by itself does not generate any kind of situation, but architecture supports spatial structure shape and social relationships. [2]

## 2. Setting a framework on third world

During last 20 years Mexico's city metropolitan zone (ZMCM, Zona Metropolitana de la Ciudad de México) has experienced a decrease on inhabitants' figures, nonetheless urban sprawl has increased, as a consequence a big change on urban structure has been generated, first signs appeared in 1980 when periphery emerged along with decentralization. Since then, sudden migration and lack of housing public policies concerned on solving poor people needs have generated irregular settlements emerging at periphery, and getting consolidated through self-housing, this kind of settlements nowadays are known as "popular neighborhoods", they represent an important percentage of urban growth [3]

Nowadays migratory fluxes at ZMCM keep responding to urbanization land' shortage and its high cost at central districts; provoking a continuous expulsion of inhabitants' to periphery. The importance of this fact is reflected on figures, so far 59% of Mexico city's territory is declared conservation land and most of it belongs to social property. However, annual estimation shows that 300 ha are urbanized illegally; in addition the city does not have territorial reserves therefore its sprawling for next decades should be done by urban recycling and re-densification. [4]

Nevertheless, outstanding interrelated facts have to be considered, such as: biggest sector of population constituted by poor people; hence the importance of popular housing, as well as housing production alternatives and owners involvement on them; as well as periphery consolidation and the consideration of territorial reserves shortage for supporting urban sprawl and so on.

Urban studies point trends towards Housing' Social Production (Figure 1) as an appeal increasingly used by new mexican households, because this alternative responds to each family financial status, allowing them to build progressively accordingly to their own possibilities, thus this kind of housing takes around 10 years to consolidate.

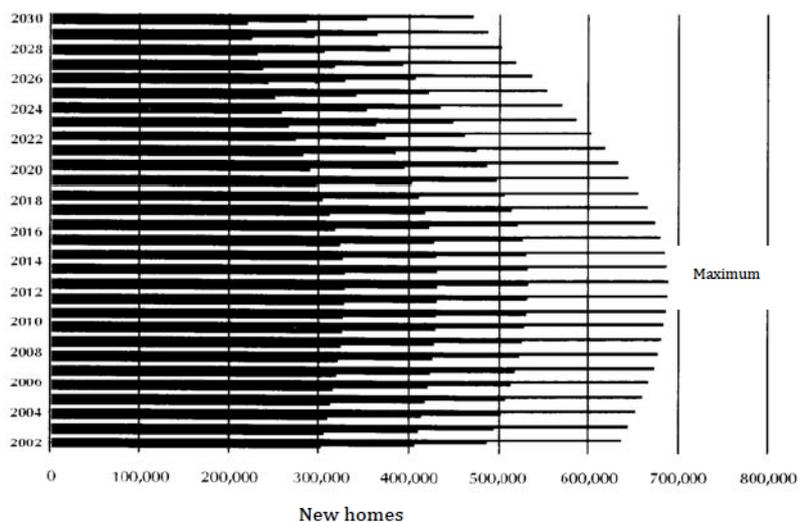


Figure 1. Poverty' evolution in Mexico, source CONAPO 2004.

Based on facts summarized above, the objective of this research, currently in process, is gathering knowledge generated from participatory design (DP, Diseño Participativo) experiences at collective self-housing cases developed in Mexico so far, especially focusing on co-work among stakeholders (the roles each one play at the process), and professionals

supported by techniques taken from social sciences, which are exploring and qualitative methodologies, whose sources relays at different fields, just to mention an example: Participatory Action Research (IAP, Investigación Acción Participación) extracted from critic sociology, which has enabled researchers to develop a participatory analysis, for detecting population real problems and needs, in order to provide basis for elaborating proposals and solutions.

### 3. Habitat' Social Production (PSH, Producción Social del Hábitat)

It is important to remark that DP represents just an element of a complex system called Habitat' Social Production. Couple of decades ago, from the emergence of popular and self-housing phenomena and its growth, PSH concept was created for defining a production system which enables society' sectors to get involved with habitat and housing production in order to fulfill their real demands, through processes of decisions taking and participation; corresponding to their reality, possibilities and potentialities at present and future; attempting to link people particular demands with the ones of their community, in order to build neighborhood and city identity; articulating at the same time social, economic, normative, cultural, architectonic, urban-spatial and sustainable issues. [5]

There are several methods of stakeholders interaction used by PSH (Figure 2), such as: participative planning, participative design, assisted self-housing, assisted management; all of them encourage the work between technicians and users, politics and inhabitants, searching for collective solutions based on shared knowledge and skills. [6]



Figure 2. Universe of PSH methods

### 4. "Participation" what does it mean?

Participation, as Henry Sanoff states, refers to people collaboration to pursuit objectives set by them. It implies several people collective work related to objectives determination and definition of ways to accomplish them.

Common factor among interaction methods, mentioned above, is participation practice which includes as core values the involvement of people at the take of decisions that may affect their lives; in order to reach success through this practice people must be previously provided with necessary information which enables them to understand the whole issue for making their participation meaningful, as well as being constantly informed about how their interventions modify final decisions. [7]

Citizen participation concept gives a new sense at making decisions phase, since its meaning has been manipulated through time because of its strong relation with politic issues and people's empowerment; causing that even nowadays is understood in a restricted and limited way, thus most of people relate participation at making decisions only with vote practice.

## **5. Participation at self-housing processes (PSV, Producción Social de Vivienda)**

Assisted self-housing (PSV) is a non-profit activity, that looks for an answer to inhabitants' needs placed below poverty line. At most of the cases Latin American policies have ignored this practice and government has diminished little by little institutional supports.

In addition to, unavailability of land suitable to develop affordable housing for low-income population; local authorities reduced capacity to provide necessary urban equipment and the high prices of construction materials and components in relation to population' low income levels; explain PSV existence and its continuity.

Consequently, in a measured and anonymous way, architectonic production has started developing "livable satisfaction". A concept that Pyatok and Weber use for defending a serious approach to problems at production and housing distinction which should involve inhabitants at most important decisions related to property and management resources; concerned on getting a livable product, that satisfies population needs and aspirations and also awakes collective awareness on the way currently institutional mechanisms control housing production and distribution. [8]

Despite the emergence of several initiatives which incorporate users at housing production, real state market still focuses on satisfying production system using as main argument the "supposed" easy adaptation of people; it shows that importance of real people is not considered, instead an average user is defined for designing, which is easier to understand and satisfy.

Therefore, real state market keeps being the cause of resources' centralization at developing countries, fast industrialization and economy modernization, main characteristics of currently productive context; which keeps working under social and cultural irresponsibility, physical inflexibility and temporary inadaptability.

It is important to remark that at third world context, majorities do not have access to real state market, because they can not apply for bank loans, but they have found alternative ways in self-housing, which constitutes an answer to people needs and possibilities. Self-housing, refers to every element of habitat production done without looking for an economic benefit, where users have the initiative and direct control at personal, familiar, community or collective level. [9] Furthermore, it becomes a source of urban architecture concerned about identity building, that is to say inhabitants through their houses build recognition and singularity at civil society, as well as urban attachments; ensuring housing and surrounding city' appropriation, thus, generating potential truth citizens by consequence. [10]

Among its multiple advantages, adjustment between housing production and families' savings rhythm, matches their investment to their own effort, putting aside debts but regarding to its progressive growth. Design method used by self-housing producers, might be defined as: Progressive-regressive architecture, because for self-producers, project is already finished in their minds since the beginning, from there they come forward and backward, departing from separated pieces phase and responding to economic resources availability; meanwhile final project is build progressively. [11]

Participative processes involve a stakeholders diversity, first sector is population (families, people organizations) differentiated by age, gender, interests, needs, occupations, habilities, and so on; second sector is technical/professional support (architects, NGO's) and third sector is government (institutions, local authorities, support programs) Figure 3.

Population sector must include “users group” represented by people who does not live in the community but has activities in it, as well as “potential users” who might get integrated anytime.

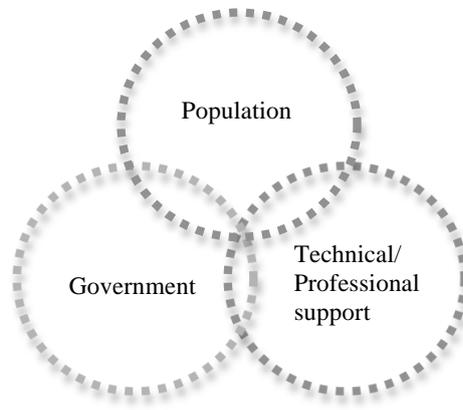


Figure 3. Habitat Social Production’ Stakeholders

## 6. Latin-American Participative Design practice

During last 40 years participation has integrated to numerous activities, aim to several social groups who have fought for providing citizens with a stronger power at decisions making.

Among theorists who have proposed new approaches to architecture involving inhabitants at production process, are: Christopher Alexander, Michael Pyatok & Hano Weber from EUA, Nicholas J. Habraken from Netherlands and Rodolfo Livingston from Argentina. The practice of their methods (Pattern Language, Choice catalogue, Design of supports and Community’ architect) at Latin-American context has been used as theoretical frame for several participative design experiences developed and documented by a group of professionals who work at HABITED-CYTED program.

But theoretical background method is not the only way of practicing DP, also it is a fact that it does not represent a set of rules; at real practice most of DP cases do not follow any given method, most of their work is supported through intuition, basic ideas and qualitative research’ main strength that lies on its flexibility, supported by an infinite quantity of techniques adaptable to any kind of problem.

These empiric or based on the will alternatives are characterized because: they do not follow any DP method, they are not systematized, they can ask for support to professionals from different disciplines extra officially (they put into practice interdisciplinary work); nevertheless, both share same objectives: getting close to people, spending time with them (attempting to eliminate differences among stakeholders), understanding them, listening to them as main source of learning; but also, capturing with respect particular ways of living and organization, and finding new and authentic shapes and architectures.

These empiric experiences contain a big amount of knowledge, which has not been documented nor communicated completely, at most, it has spread little information through oral transmission. Therefore, it becomes a source of potential researches, as the one this paper talks about.

## 7. Conclusions

For searching the information the research is looking for, in-depth interview was chosen as a qualitative method useful tool for extracting information from professional' experiences.

So far, research has released important insights related with different categories, but they start completing a puzzle that will let us understand Participatory design (DP) in a wider way. Next is presented a draft of conclusions obtained until now.

- For population house represents main component of family heritage.
- It has been distinguished two ways of participative design practice, one sustained methodologically and another by the will of professionals.
- At cases that have not counted with institutional or organizational support, the process gets slower and more difficult.
- Many of these examples, despite its lower cost and its non-aesthetic architecture, do count with enough elements to generate security, privacy and comfort for its inhabitants.
- Participative design has been qualified as complex by many authors; because it involves a new conception and mission for architects and urban planners', which is understanding that we do not only make technical design proposals, also we have to interact with different stakeholders and other professions for building a local and integral development emergent from complexity. [12] Next characteristics summarize complex participatory design:
  - It faces problems from an integral perspective (physical, social, administrative, political, economical, environmental)
  - Its proposals integrate housing, neighborhood and city.
  - It is a dynamic process (it concerns about present and future)
  - It is a process that involves all the stakeholders related with the issue.
  - It can be an alternative or guide for preservation and cultural resistance.
  - It is concerned about a contextual, human-centered and equilibrated relation with nature.
  - It acts over agreements but also over uncertain possible scenarios.

After this Participative Design condensed view, I would like to invite the readers to make a reflection about the reasons for including this method at design field in order to develop a bigger influence on social issues. Otherwise, what would be necessary to call attention on its benefits already evident?

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