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СМЈЕРНИЦЕ ЗА РАЗУМИЈЕВАЊЕ И ПРИМЈЕНУ МУЛТИСКАЛАРНИХ ПРОЦЕСА ПРОЈЕКТОВАЊА

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Анстракт:

Архитектонски пројекти захтијевају низ теоретских и методолошких знања потребних за препознавање њихових форми и функција. При балансирању између размјера, потребно је разматрати бројне дисциплинарне 'детаље' који омогућују откривање пројектних потенцијала, те неопходну визуелизацију истраживања. Рад предлаже низ смјерница које користе предности мулти-скаларне и универзалне методологије, истражујући могућности примјене ових алата при откривању и вредновању алтернативних начина процеса пројектовања.

Кључне ријечи: архитектура, урбанистичко пројектовање, пројектовање

GUIDELINES FOR READING AND PRODUCTION OF MULTISCALE PROJECT PROCESSES: FROM ARCHITECTURE TO LANDSCAPE

Abstract:

The urban architecture and its project require theoretical and methodological devices for the recognition of its forms and functions. We need to consider a number of 'moments' of the discipline appropriate for the scalar articulating, able to reveal forces of proposal that give us necessary images for researching. We propose guidelines for a project production that take advantage of a multi-scalar methodology and multitemporal, leading to explore possibilities to incorporate these tools for discovery and evaluation of alternatives.

Keywords: Architecture, Urban Design, Multiscalar, Project, Creativity

1. INTRODUCTION. THE URBAN: CONTEMPORARY ARCHITECTURE'S WORK SPACE.

Urban area, the space in which urban functions are developed, has extended in recent decades to practically coincide with the territory. In it we can find cities of all sizes and ranges, as well as natural/agrarian landscapes or hybrids of the two. However, in the urban we also find all of the intermediate spaces or the relation between their parts: Highways, service areas, ex-urban growth, residential spaces associated with natural parks, industries, technologies or thematic spaces; an increasing variety of possible functions that flood the interurban communication channels.

We could therefore define our work space as a unit within a network as a sum of territorialities[1], which needs to be unlinked and understood because it is plagued with articulations between spaces, times, and different themes. It would be, in accordance with the "the city of them remnants" defined by Neutelings [2], a city of cities of a underlined fragmented condition that, however, is often composed of both coherent and aspiring links with those parts of different origin.

On the other hand, from an architectural point of view, there is a school of thought and a practice that tries to keep up with this pace of spatial change. Architecture schools frequently use scale to attract necessary, specialized and different approaches and compositions. The overlap of different disciplinary fields, represented by subject blocks of study (Architectural Projects, Urban Planning, Construction, Installations, Structures, etc.), becomes a non-defined system of sum or combination to the student. Times, rhythms and proportions are not fixed, causing the responsibility for success to fall on their degree of involvement in the planning exercise.

To meet the challenge of the interrelation between architectural and urban projects, and facilitate appropriate mechanisms of reading and interpretation of an increasingly complex territorial reality, we must identify certain articulation places within the discipline that underline the revelatory and liberating force of proposals and give us the necessary images to investigate them and build future scenarios for a relational and eminently urban architecture.

Such articulations are presented in this text as "key project variables" or "methodological guidelines" that provide architecture both with a means to recognize forms and functions in contemporary cities, and the mode to deal with them. This, as we shall see, will involve investigating their different scales and times, and understand and measure, not only the physical space but also the imaginary or "mind map" which defines it in the end.¹

¹ The concept of "mental map" is part of the language of architecture emerged after poststructuralism[3]. It was based mainly on the 'environmental image' of Lynch[4], and can be defined as a generalized mental picture of the outside world held by an individual: "as a result at the same time of an immediate sensation and memory of past experiences (...) for interpreting information and guiding action".

2. MULTI-SCALE PROJECTS, PROSPECTIVE MAPPING AND CREATIVE PROJECT.

In the search for key patterns for the contemporary architecture project, we propose an approximation using three different methodological assumptions: a) the importance of an inherently multi-scale design exercise; b) the generation of prospective and interesting cartographies, as a means for the production of knowledge, and c) recognition of the project as a creative act.

In relation to the first point, for architecture and urban design to attend to the territorial complexity described, it is necessary to reflect more than ever on its ability to move between scales. Many failures as a practice are for a lack of an internalized "multi-scale vision"[5]. The fact that, over any point of the territorial space, many scales of reality act at the same time or intermittently, requiring an additional explicit and intentional effort for the achievement of the objective framework of intervention. In this way, many urban architectural plans and urban projects have inordinately attended regional or supra-municipal economic scales, neglected local relations; and also, many others, entwined with immediate concerns or initial demands of the program, have not taken advantage of the geographical logics or larger scale that arise during the process of generating plans or projects.

Secondly, to operate on the current territory we must reshape the meaning of cartography, finding the necessary skills to mix instruments available to us. From Geddes[6], passing by Lynch, Gandelonas[7] or Viganò[8], Urban Design has been trying to approach territories from a "recopilatory" perspective for decades, breaking them down and putting them back together over and over again. This involves construction methods that distinguish the parts or assembly components, value their importance in the creation of hierarchies, and lay the foundation for the creation of special areas of intervention. Thus, it is possible to speak about the need for a "prospective cartography" that does not underestimate the capacity of progress of the project in the diagnosis and analysis phases. These cartographies are collective visions of reality or scenarios, which are built "with critical capacity to select the past, and with long range vision in its use and usefulness criteria"[9].

Thirdly, and as a result also of the above, creative attitude, the critical position, and freedom of thought are imperative in architectural projects. This means that, in as much as the need to obtain and manage information accurately, well contrasted analysis of the territory must be compatible with allowing urban facts to approach the project, influence it, or even determine its outcome. This concerns a line of research by design[10], which is present in some Schools of Architecture highlighted in Europe (Delft, Venice or Barcelona, among others). This would lead to a way of creative designing that contains qualities or capacities that are relational or synthetic, like abilities of innovation and development of new categories. See Table 1.²

² Based on the article "Abilities and attitudes for the creation of the city. Contemporary Arguments for a non lineal methodology" by Rivas, J.L., Bravo, B. UGR. Course years 2011_2012 y 2012_2013. High Technical School of Architecture of Granada.

Table 1. Abilities and attitudes for the creation of the city.
Compilation by author.

BLOCK → ABILITY/ATTITUDE → Description → 20th Century		
ATTITUDE	RELATIONAL	<ul style="list-style-type: none"> Search for Relationships between spaces, long and short, contiguous or separated distances / Relationships between times: vindicating and protecting the fragile past, attending to the present moment, anticipating scenarios and promoting futures / Definition of relevant relationships and priorities <p><i>The Industrial City by Tony Garnier (1917)</i></p>
	EDUCATIONAL / BROAD-MINDED	<ul style="list-style-type: none"> Creation of positive, useful, and diverse space that contains and spawns future opportunities / Spaces from a difference that respond to specific conditions of the context and the proposal / Tones of space. <p><i>Tapiola (1950s and 60's)</i></p>
	INNOVATIVE	<ul style="list-style-type: none"> Focus on architecture as responsible for forms and functions integrated into urban space. Territorial and urban corners. Generate integrating conscience, in the social and the spacial, between classes, between artifice and nature, between the central and the local. <p><i>Quinta da Malagueira, Évora. Alvaro Siza (1977-1979).</i></p>
MODAL	DYNAMIC	<ul style="list-style-type: none"> Situate mobility as a creator of places / Compression of the movements, the inertias, the velocities, the intensities, the urban forces, the slow places and the confluences / Creation of balancing networks and systems that benefit the project. <p><i>Centro de Rotterdam, Joan Busquets (1989)</i></p>
	SYMBOLIC	<ul style="list-style-type: none"> Nature actualized, creation of intermediate spaces, situations of interexchange between systems or media, to incorporate city into the geography, and infiltrate open space into the urban interior. <p><i>Piano di Coordinamento Territoriale di Salento (PTCP de Lecce, 1999-2001) Bernardo Secchi y Paola Viganò.</i></p>
	SYNTHETIC	<ul style="list-style-type: none"> Operate in function of balance and synthesis of the decisions / Attitude based on the economy of media, reserve of future opportunities, anticipations a previsions. <p><i>Cordoba Congress Centre. OMA, 2002.</i></p>
TECHNICAL	SPACIAL	<ul style="list-style-type: none"> Attention to detail and the specific form of the solutions / Care for the spaces, for the secondary arguments, the combination of the small with the large, the sensorial with the structural / Ability to make urban facts and the proposed solutions comprehensible / Preparation for the current conflicts resolution and the future ones. <p><i>Centro civico de la ciudad de Tapiola. Aarne Erv (1956)</i></p>
	ARCHITECTURAL/ OF INTEGRATION	<ul style="list-style-type: none"> Dedication to the imagination. Acting without model or typical solutions / Increasing the frame of liberty of the project / Transformative and active capacity or attitude of new models and solutions that combine assumptions that are traditionally independent. <p><i>Siedlung Björnholm, Alvar Aalto (1959)</i></p>
	DIMENSIONAL	<ul style="list-style-type: none"> Reinforce the technique of measurement, size and quantities / Search for better values, adequate intervals, right position, interesting distances for the efficiency and quality of the proposal / The pondered measurement of the mix, the density, the concentration, the proportion between the public and the private. <p><i>Neue Nationalgalerie, Mies va der Rohe (1968) Filarmónica de Scharoun (1963), Kulturforum, Berlin.</i></p>

3. GUIDELINES FOR THE MULTI-SCALE PROJECT.

As previously mentioned, the multi-scale condition of urban facts is manifest in all places, and also all the "objects" or urban facts possess this capacity of relationship with short, medium and long distances. However, in architecture, elements that intervene in the daily urban space, as traditionally internal to the work of the architect, i.e., disciplinary, are likely to become instruments for the multi-scale project in a broad sense.

Recognizing these "project moments", the question would be to explore the project options these issues bring to the table allowing for new relationships and links to distance and overlap of project areas that are usually differentiated.

Thus, after a process of selecting variables for comparison, in the framework of the teaching practice of the urban and architectural project in the ETSA in Granada, a definition of a set of guidelines was reached: Building Typology, Typology of Urbanization, Topography, Exterior and Interior Threshold and Material-Landscape.

Working with them, from the different perspectives of the urban project and of the architectural project, opened a field of work themes and scale hybrids, which incorporated such guidelines as discovery tools and alternative evaluations. We also tried to reorient project habits to diversify and improve outcomes and strengthen the creative approach in the teaching framework.

The basis of the research project guidelines were considered individually and reinforced both theoretically and practically in a multi-scale comparison framework. This allowed for addressing the following: creative freedom in the project process, strength in the idea matrix, the incorporation of new sensitivities, different disciplinary considerations, etc.

While a traditional project structure usually scales downward, in the methodology applied concepts or variables are introduced at specific procedural moments, observing an enrichment of the project in this respect and increasing contributions a designer is able to generate in this dimension of architecture.

In the following table we present the project guidelines addressed, their definition and reference in the frame of the disciplines of Architecture and Urban Design and their applicability in multi-scale project processes. See Table 2.

4. TOWARDS A CREATIVE PROJECT.

It was the American architects Venturi and Brown that in the 1970's began to study everything mutable[30], and replacing traditional analysis centered in the stable elements of physical space. In their emerging suburban city they architecture confronted the formal disorder of the city as "high art" with "low art" as the urban buildings, the local initiatives and the culture of the masses.

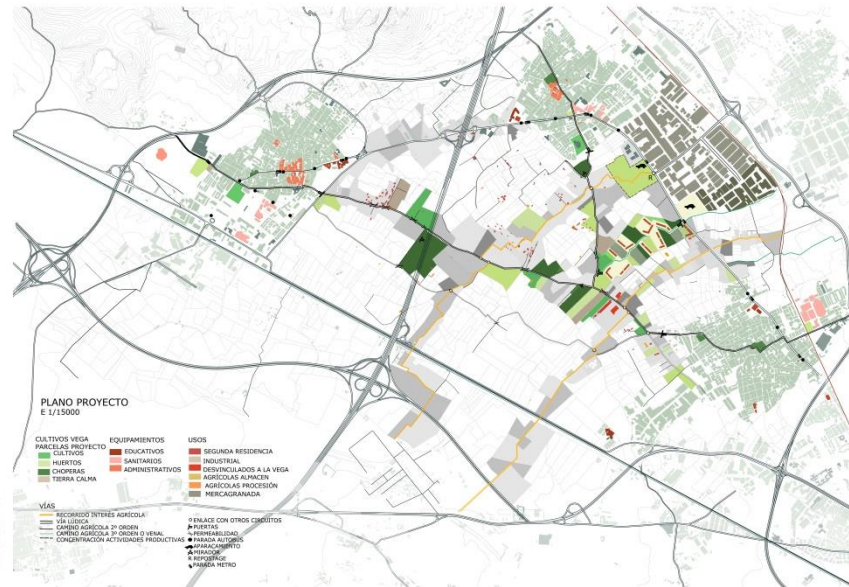
This novel architectural "attitude", born at that moment but promoted later by many other of the cited references that bring about the described guidelines (Ando, Holl, Koolhaas, etc), as well as Libeskind, Sejima, Laccaton y Vassal, etc., consolidated a change of attention in the transition into the 21st century that

Table 02. Application of variables in the project process.
Compilation by author.[11-29]

GUIDELINE / VARIABLE	DESCRIPTION	PHASE (*)		
		1	2	3
<i>BUILDING TYPE</i>	Bet on the definition of the URBAN LANDSCAPE THROUGHOUT ARCHITECTURE, from the general scales to constructive definition. The type as an ESSENTIAL INSTRUMENT FOR ANALYSIS and PROJECT, both building and urban: opportunity to reflect on the HABITATS, sizes and WAYS OF LIFE, quality of the INTERMEDIATE or COLLECTIVE SPACES.	●	●	○
	<i>Ref.: MONEO (2004), MANGIN (2004), MONTANER (2002), ROSSI (1986).</i>			
<i>URBANIZATION TYPE</i>	Transcend the production of a structure or hierarchical organization of the roadway. Plan CLASSIFIED BUT DIVERSE NETWORKS, which may be characterized to generate ENVIRONMENTS and modes of specific HABITAT. The architecture must collaborate in the definition of FUNCTIONS around each axis, and this is linked to the DESIGN OF very different LAND USE TYPES.	●	○	●
	<i>Ref.: ALEXANDER (1977), DESVIGNE (2009), DOMINGUES (2009), ZARDINI (2001).</i>			
<i>TOPOGRAPHY</i>	GREATER GEOGRAPHIC and URBAN CONSIDERATION of architectural scale in the projects. Attention to those moments of generation of the ARGUMENTATION and of the FORM through links and PROJECT-LAND USE RELATIONSHIP. A "MULTI-SCALING TOPOGRAPHY " that reflects three levels of approach to space: the land use performance, urban place, and the relative territory.	●	●	○
	<i>Ref.: RIVAS (2016 [2004]), BUSQUETS (2006), SOLÀ-MORALES (2008).</i>			
<i>EXTERIOR AND INTERIOR THRESHOLD</i>	DISSOLUTION of the separation between the EXTERIOR and the INTERIOR, interpreted of a regenerative mode, i.e., through a MORE INTENSE RELATIONSHIP. A relevant role of LIMITS, TECHNOLOGY, and CIRCULATIONS. Permeate to the threshold of the entire ENVIRONMENT, giving exterior surroundings the same consideration as indoor surrounding. Game of mutual seduction between the interior and the exterior: PHYSICAL SURROUNDING, ENVIRONMENT, mixture of the PRIVATE and PUBLIC SPHERES, of the INDIVIDUAL and the COLLECTIVE. Arguments from the dialog.	●	○	●
	<i>Ref.: LE CORBUSIER (1998 [1923]), AALTO (2000 [1926]), ASPLUND (2002 [1931]), BACHELARD (2006 [1957]), GIEDION (1975 [1971]), HOLL (1996), ANDO Y AUPING (2003)</i>			
<i>MATERIAL-LANDSCAPE</i>	DIRECT RELATIONSHIP between the CONSTRUCTION PROJECT and the SCALES OF THE ENVIRONMENT: fabric, landscape, street, territory. Definition of the TYPOLOGICAL QUALITIES and of construction of the LANDSCAPE that possess the construction materials. CONSTRUCTIVE DETAIL and SELECTION as tools for the contribution to urban multi-scale connections (format, placement, texture, color and combination...) Measurement of the balance between TRADITION and INNOVATION in the strategy of the project.	○	●	●
	<i>Ref.: HOLL (1996), ZARDINI (2001), ANDO Y AUPING (2003), BYRNE (2005), DESVIGNE (2009)</i>			

(*) Phase I: Beginning of the Project. Generation and considerations for starting; Phase II: Project development. Extending and developing considered aspects; Phase III: Problem resolution, definition and final adjustment.

now has become obligatory, on the group of possible interactions o relationships between objects and multi-scale projects, more than on the objects themselves. As can be seen in some of the results of the Teaching Project, which worked with a number of variables as responsible for a more creative way to generate the project. (See Figure 1).



*Picture 1. Reinforcing the pattern of Urbanization Type. Project Plan.
Source: M^a José Irigaray and Nieves Gutiérrez. Prof: Belen Bravo.
Course year: 2011_2012. Urbanística IV. ETSAG. UGR.*

5. CONCLUSIONS.

The results obtained in the teaching projects that activated the guidelines or variables describe proved, at least partially, to reinforce the urban design and architecture project methodology and broaden the creative liberty of the process. Their behavior as “new strong ideas” of the project invited thinking about subsequent guidelines and their future implementation. Continuous practice of project activity in the schools of architecture make them the most adequate proving grounds for experimenting these disciplinary and scale fusions, introducing innovation and encouraging a constant positive critical methodology. The project needs to generate these” interesting cartographies” that underline the revelatory and liberating force of the graphic proposal and offer us the necessary images to investigate them; multi scale and multi-temporal projects as concepts that lead a project methodology and the planning as a balance between knowledge and operative action. The creation of a city and the ordering of the territory need to integrate these dimensions, by superimposing differences, to be able to imagine future scenarios in accordance with our time.

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