PARTICIPATORY ANALYSIS OF THE LIVING ENVIRONMENT: THE PLUS ULTRA NEIGHBORHOOD

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Within the European project OIKODOMOS (www.oikodomos.org), co-funded by the Lifelong Learning Programme of the European Union, a participatory project in environmental education involving students from the School of Architecture La Salle and residents of the Plus Ultra neighborhood in Barcelona was carried out from January to June of 2011. This paper provides a description of the pedagogical context, the objectives, and the results of the activities.

THE COLLECTIVE CONSTRUCTION OF THE LIVING ENVIRONMENT

The construction of the built environment concerns not only technical experts such as architects, urban planners, engineers, and economists, but residents as well. Even though this fact has long been recognized, it remains as a unsettled issue in terms of devising and implementing methods which ensure the effective participation of people in the decision-making processes which have an impact not only on the built environment but, most importantly, on their living environment.

Unlike the built environment, the living environment is constructed of memories, dreams and experiences. The processes leading its construction are integral as part of these experiences. As stated by Martin Heidegger in his essay Building, Dwelling, Thinking, dwelling and building are closely intertwined in our experience as beings (Dasein). In Heidegger's terms, "building is not merely a means and a way toward dwelling; to build is in itself already to dwell" (Heidegger 1971, p.146). However, dwelling/building a house is not only an individual act but is also a collective one. A house is often shared by a family, or with other persons, and this conveys a mutual adaptation between people and a negotiation of their different expectations and lifestyles. In such a context, the house -- meaning its physical structure --becomes a home. It becomes the place with which we identify our lives. Furthermore, a house (but also a home) is always part of a larger structure. A house, in particular, might be part of a block, a district and a city. Each of these realms conveys a level of decision-making where certain choices are negotiated and adopted by specific actors (urban planners at the urban level, architects at the building level). Citizens may also be involved with these decision-making processes in different realms. In this case, as Habraken (2002, p. 16) argued, "[professional experts] are responsible for the management of the process," which means providing an "understanding of the control distribution patterns and the skilful organization of the different parties involved". The management of such participatory processes involving citizens and experts necessitates a new professional expertise, which must thus be developed.

The concept of habitat can be understood as the result of the interaction between built and living environments. As described by Romero and Mesías (2004), a habitat embraces the physical territory created and modified by man as well as the network of relationships people establish with their neighbors, which in turn help them to work together towards a common purpose. Specialists, such as urban designers and architects, become part of this network -that is, part of the community - as they provide the appropriate methods and tools which residents can apply so as to communicate their ideas and negotiate their proposals with experts and local authorities. In this context, architects or urban planners become not only designers but also advisors and facilitators. They become designers of processes rather than designers of artefacts.

The quest for public participation

As Lidskog (2000) recalled, the demand for public participation in environmental planning arose in the early 1970s. Since then, transactional, incremental and dialogical planning (Harper and Stein 2006) have emerged as alternative approaches to the scientific, rational and comprehensive (synoptic) planning. This quest for greater public involvement has continued ever since. In the present day, public participation has once again become an important issue in planning, fueled by demand for more direct involvement by people from all spheres of the public realm. Particularly, public participation has been acknowledged as a key factor to achieve more sustainable cities. In the current discussions of sustainability,

environmental education (Stapp 1969) would contribute not only towards making cities more efficient from the perspective of energy consumption but would also make them socially sustainable by increasing social cohesion and promoting greater public involvement in the decision-making processes.

ICT technologies also help to channel these demands and to create new spaces for communication and participation between citizens, professionals, and academics. A variety of tools can be used for this purpose, including GIS based applications, simulation games, augmented and virtual reality systems, wikis and blogs, and all varieties of social software (Hanzi 2007).

PEDAGOGIC FRAMEWORK: A CASE OF LEARNING DESIGN IN PARTICIPATORY ENVIRONMENTAL EDUCATION

We established a seminar during the second semester of the academic year 2010-2011 in order to give undergraduate architecture students the opportunity to learn some basic skills concerning communication and collaboration with non-experts in the processes of analysis and transformation of the built environment. This seminar was part of the learning activities carried out in the OIKODOMOS Virtual Campus (www.oikodomos.org) around the theme of "Housing and Proximity". The seminar consisted of short theoretical introductions to the issue of participation in architecture and urban planning. It included Bakema's elements of transition, Smithson's signs of occupancy, Alexander's pattern language and De Carlo's participatory process.

Case study: the Plus Ultra neighborhood

Additionally, parallel to the classes, we set up a case study with which to put theory into practice. We found that residents of Barcelona's Plus Ultra district had long been discussing, with the local authorities, the future of their neighborhood, being an area with a distinctive character and history which had become isolated after being surrounded by new developments (Figure 1).

They were organized around a neighborhood association led by an active community leader. When we approached the neighbors, they were negotiating the content and timing of a new master plan for the district with the urban planning department.

The Plus Ultra neighborhood consists of a group of low-rise houses constructed by the first settlers in the 1930s. Over the years, the neighborhood has undergone a considerable transformation: in the surrounding fields, housing blocks have been built, leaving the old Plus Ultra neighborhood isolated in the middle of a newly built environment, as if it were a leftover from another time. The city urban planning office has developed a special plan to replace the existing buildings, while maintaining some of the spatial and formal features which characterize the settlement (Figure 2). However, neighbors have opposed the plan, given that part of their lives would vanish with these buildings. Emotional, but also financial,

interests - discussion on the value of their properties, having to move somewhere else during the time of construction - were some of the issues behind the neighbors' claims.

This was an appropriate scenario for students to get involved with the community in finding solutions to socially conflictive problems dealing with the living environment. It was also an opportunity to create learning scenarios which went beyond the limits of the academia, both in the formulation of the problem and in the implementation of the learning activities which took place not only in the classroom but also in the premises (both physical and virtual) of the neighbour' associations. In this learning scenario, the students and citizens engage themselves in a common study on the value and significance of dwelling in our contemporary societies. The students, guided by their tutors, help the residents to externalize and communicate their views, perceptions, and experiences about their dwellings and their lives in the neighborhood. In this situated learning, students play the role of mediators between the neighbors and the city administrators by creating the conditions that favoured dialogue amongst them.

Strategies to foster participation

Fernández Per turned to De Certeaus' distinction between strategies and tactics (De Certeau 1984) to describe public space as an opposition between both terms: "strategy is an instrument of power, tactics are used by citizens; strategy occupies space, tactics play out in time; strategy is used to control, tactics to protest" (Fernández Per 2012, p.5).

In the design of a participatory process such as the one conducted in the neighborhood of Plus Ultra, this contraposition between strategies and tactics acquires other meanings: as professionals designing the participatory process, strategies were established (following De Certeau's terms: we are the "institution" which sets the "objectives and objects of research," and in doing so we set our own "place", in this case within the collaborative space), while citizens and students provide the tactics, which is to say the "procedures that gain validity in relation to the pertinence they lend to time - to the circumstances which the precise instant of an intervention transforms into a favourable situation . . . to the relations among successive moments in an action, to the possible intersections of durations and heterogeneous rhythms" (De Certeau 1984, p. 39).

Two strategies to apply in the participatory space of the Plus Ultra project were proposed: one based on observation, following the pattern-language theory of Christopher Alexander, and another based on dialogue, as in the participatory processes conducted by Giancarlo De Carlo.

The first strategy comprised observation of the behavioural patterns of the people in the neighborhood. According to alexander, ishikawa and silverstein (1977, p. X) "towns and buildings will not be able to become alive, unless they are made by all the people in society, and

unless these people share a common pattern language, within which to make these buildings, and unless this common pattern language is alive itself". Taking this into account, the students observed the activities carried out in different areas of the neighborhood and how they helped bring identity to spaces. Thus, they observed the different elements of transition, the signs of occupation, and the relationship of the residents with the spaces they inhabit.

The second strategy comprised the dialogue with the residents. This dialogue is not only about providing information about a project to be carried out but is more significantly about carrying out an exchange of ideas through meetings, interviews and surveys. Therefore, it also reflected the relationship of residents with the spaces they occupy every day. One of the pioneers in working with a dialogical participatory process was the Italian architect Giancarlo De Carlo. According to De Carlo (1971, p.13), "As long as a group of humans in physical space exists, the physical organization of space will continue not only as a fundamental necessity of existence, but also as the most direct and concrete means of communicating via materialized systems of self-representation". Therefore, the built environment is a means of communication which represents the persons who inhabit it. The built environment is a vehicle with which to express their aims and aspirations.

During the observation process, students identified the physical characteristics, paying attention to the spatial relationships which are likely to be repeated (morphology and patterns); to define the problem or the field of forces which a pattern sets in balance (functional purpose); and to define the field of contexts where a pattern makes sense (its context). They observed these characteristics, problems and contexts, visiting the neighborhood and taking photographs and videos of the residents during their daily activities.

To support the process of dialogue, the students had to discern the needs of future inhabitants; to formulate and make a hypothesis with which to elaborate the physical forms (the solutions), and to analyze the uses of the spaces in order to evaluate the results together with the neighbors. To facilitate this dialogue, the students created different maps to identify the spaces where the neighbors carry out their daily activities. They also showed them photographs of the facades of the two streets of the neighborhood in order for them to remember important events which occurred in those places (Figure 3). To these representations, as prepared by the students, the neighbors reacted by writing about what they expected of some places, what they wanted them to be or what they imagined them in the future. When they thought about their past and the future simultaneously, they could more fully describe their present needs. Through this dialogical process, the information the students collected in the neighborhood was returned to the community as knowledge and understanding (Riley 2008).

A solution choice can be carried out after an exercise in collective thinking performed by (future) architects/urban planners and

residents. According to Sanoff (2006, p.5), "Participation is taken to be the collaboration of people pursuing objectives defined by them," while collaboration would mean participation in adopting a balanced decision. Therefore, "participation may be seen as a direct involvement in programming and decision-making processes whereby people share in decisions that determine the quality and direction of their lives" (Sanoff 2006, p.52). It is thus the responsibility of architects and planners to provide information about the decision-making process, to make suggestions, and to help people choose the solutions that best suit their needs and the built environment. Depending on the process, they can provide advice or technical consulting. The residents, however, can contribute their knowledge about the environment, define their needs, and consider possible solutions, because they are the ones who actually know how to improve their quality of life. In order to do so, they simply need empowerment.

LEARNING ACTIVITIES

Several learning activities involving students and residents were designed specifically to achieve the following purposes:

- to collect first-hand information from the inhabitants regarding the perceptions and experiences of their living environment;
- to give residents the appropriate methods and tools with which to express and communicate their perceptions of their living environment; and
- to promote residents' participation in the urban-planning process.

To achieve these objectives, the group of teachers and students from La Salle maintained informative sessions and debates with the neighbors over the five months of joint activities.

The calendar and activities carried out from February to June 2011 are summarized below:

- February 2011: first contacts with the neighborhood association: Unió d'Entitats de La Marina, Asociación de Vecinos Plus Ultra; visit to the district; compilation and study of public documentation; preparation of communication strategies with the neighbors;
- March - May 2011: during this period, students designed and executed different tasks to engage neighbors in a joint analysis of the living environment, as described below:

1. Approaching people
Face-to-face dialogue is the most direct method by which to understanding the residents' thoughts and feelings. It is important to read between the lines rather than accepting the statements outright. It is fundamental to give emphasis to the "because" of what is said in this kind of conversation. Keeping these guidelines in mind, the students interview neighbors in order to extract key is-

sues from the dialogue with them. Subsequently, these issues were discussed in the classroom.

2. Relating places

The objective of this task was to find out where neighbors carried out their daily activities, whether within the neighborhood and/or in the whole city. For this purpose, the students created a map of Barcelona on which the neighbors could mark their activities. The map was placed on a wall, in a street commonly used by pedestrians. On the right side of the panel was a list of activities -- visiting family, shopping, entertainment, work, school, and a doctor's appointment -- each of which was identified by a different colour. Pins with the corresponding colours were provided for the residents to place their activities in the map. When this task was completed, it became clear to the students and residents alike that most of the pins were located within the neighborhood or in the area immediately surrounding it.

3. Collecting stories

To carry out the project, it was necessary to find a method by which to collect the experiences of residents, as well as the friends and relatives who visited them. In this case, the communication tool was a photographic montage of the street elevations. Because the streets are too narrow, every building was photographed and then assembled for the purpose of reproducing the street front. The compound photograph was placed on a wall in a street, so that residents could identify the houses - their own or those of other people -and write stories about them (Figure 4). The use of photographs instead of drawings facilitated the identification of people with the buildings. With the conclusion of this task we had a great deal of information about the memory and culture of the place. Also, there were some lively anecdotes which helped us to grasp the character of the neighborhood.

4. Representing the dwelling

The intention of this task was to represent the dwellings. During the meetings, neighbors were asked to draw their dwellings. From the schematic drawings they produced, it was possible to understand the importance they gave to the different parts of their houses. For instance, by analyzing in the video recordings what was drawn first or what was drawn bigger, it was possible to understand what they valued the most and what they valued the least.

These activities were reported and summarized in a blog (lasalle-oikodomos.blogspot.com) and were available to the community while being executed (Figure 5). Additionally, a Facebook group was created in order to disseminate the work through the social network. Once the tasks were completed, the conclusions were presented in the neighborhood association and discussed with the residents. Subsequently, a second round of learning activities was planned.

-   June 2011: presentation of the final conclusions to the neighbors in their local association: for this final presentation, stu-

dents were requested to present the results of the study using a graphical system and a written language understandable to laypersons. The presentation was structured in the following topics: dwelling, memory, community, being rooted to a place, offering resistance, public space, accessibility limits and density. Each topic was introduced with several questions addressed to the neighbour, supported by images. The purpose of the presentation was to leave certain ideas open to the residents for their further reflection. An article describing the work done was published in a local newspaper.

CONCLUSIONS

Through this project, a participatory process in environmental analysis has become a learning experience for everyone involved: residents were able to learn about their environment through the processes designed and implemented by students and teachers; students acquired direct knowledge of the place in all its dimensions - urban, social and cultural - while they developed their skills as mediators and facilitators; and teachers acted as learning designers, creating a blended learning space which could integrate the academic activities with the living environment, the physical learning spaces with the digital ones.

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