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Teaching through the project design

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EDARQ REVISTA DE CULTURA ARQUITECTÓNICA ABRIL, 2013

JOELHO

04

ENSINAR PELO PROJETO
TEACHING THROUGH DESIGN

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Exposição TAPE
2011–12

José Fernando Gonçalves
2.2. Teaching through the project design

In the session on programmes and themes in the teaching of architecture, three pedagogical experiences were presented, that question the way through which they critically inform the project. Although heterogeneous in perspective, they are complementary to each other as, through the projectual exercises, they question how one can create the best conditions for the development and realization of architectural ideas.

Still, how to construct meaning in architecture?

1 — According to Tiago Borges, that construction of meaning is proposed through the spatial narrative. This narrative is constructed by the sequence of distinct spaces which creative trigger, or *design engine*, is the image; any image can evoque the "espace heureux" refered by Bachelard (2009, p. 17)[1].

Although supported by an orthodox working method (inventory, analysis and project management), the creative and representative process appears as expression of a *place of affection* and arises through an "inside out" movement, representing not only the transition from the individual experience to the collective sphere, but also the spatial sequence that leads from the interior to the exterior. This passage, though without the purpose of architectural design, is poetically described by Xavier de Maistre in 1790 in the *Voyage autour de ma chambre*[2]. The journey's narrative as well as the journey's spatial and emotional sequence revealed by Maistre, is build up exactly with the memories invoked in the images and objects that shape the room in which he was closed.

The project's role evoques therefore, more than the logical-deductive thought necessary to the realization processes that we are used to, an architectural synthesis thought supported by each author's spatial / emotional meaning. The architectural design is thus a spatial experience, because "vivre est passer d'un espace à un autre" (Perec, 2000, p.16)[3].

As for Socrates Yannoudes the theory and history of architecture seem to be a design tool capable of triggering creative thinking. In the visionary *avant-garde* projects of the '60s is the theme and challenge for the design of contemporary architecture found.

Among the two exercises that he presents as corollary of this method of approaching the real, *Toybox installation and Train(ing) Pleasure*, not only this production process' potentialities but also its arising problematic disciplinary questions are revealed.

The main quality that seems to be revealed is that of reissueing the question about how to design and characterize contemporary urban spatial relationships. In this context, as in the vanguards of the '60s, accurate disciplinary boundaries are identified, as those that refer to the role of the architect in a context in which he conceives the system's conceptual and formal principle, but does not control its results.

But the attempt to give contemporary shape to the challenge of the past vanguard, even in an academic context, threatens to render meaningless or transform into design that process of critical thinking over the real. Indeed, the radical vanguard defies the embodiment

of their projects, a continuous questioning of the means of design and architectural creation as well as of the technical and social conditions of the present over the future. Significantly, within the vanguards in which the two proposed exercises are based, some premises are already fulfield (the obsession with systems, networks, interfaces and communications – mobility, spatial indeterminacy and free choice). The work presented sets, in that sense, an *anti-avant-garde*.

Finally, Rosamund Diamond proposes a design methodology that has as its central purpose the question of how the construction techniques influence the design and the ideas themselves, and their processes of representation. The challenge for the student is to, through experimentation and analysis, discover how the techniques affect the ideas, the manufacture and the representation.

The implicit question seems to be discovering, through making, what distinguishes the disciplinary field of the architects from that of the builders.

Her answer comes through the process of technical and artistic experimentation that she designates as *Technical arts*, a term that encompasses, more than building, an entire architectural culture. This learning process is carried out in research studios, in key moments of the creative process, where materials and assembly systems allow students to assimilate how these influence the construction and meaning of space – from the most basic notion of synthesis between structure and casing, to the studies of tectonic culture that, from Semper to Frampton, cross the critical thinking in architecture over the last two centuries.

Unsurprisingly, what results from this methodological proposal is the perception that architecture is the product of the tension between empirical and technical knowledge. Its relationship or interdependence is the question that arises in the teaching of architecture; its result is architecture as a cultural product.

2 – At the FCTUC (Faculty of Science and Technology of the University of Coimbra) Department of Architecture (Darq), the programme of the design studios in the recent years of the course has promoted, through a long term practical exercise, a project methodology centered on the design and construction of three-dimensional models aimed at the conceptual questioning, the domain of the different scales of architectural design and the processes of materialization of buildings. The project is thus understood as a means for the development and deepening of the architect's critical action over the real.

Focusing on a problem solving approach that goes from the general to the particular, that is, from the urban insertion to the constructive detail of the building, the acquisition of design technics is promoted, enabling effective integration and coordination of knowledge gained across the different disciplines of the course as well as across the individual research.

At first, through the construction of spatial and formal narratives, one seeks to articulate the problems of scale, proportion and balance of the project with the place and with the programme. In this context, the understanding of political and economic mechanisms that interfere with urban planning, the social dynamics present in the city (suggested in the programmes that accompany the most relevant themes) and the way history is used as a project tool, are extremely relevant. This helps to promote and deepen a critical reflection about the productive and social transformations of the urban places one inhabits.

The mechanisms of materialization, which establish the nexus between the conceptual principles and the constructive materialization, allow to deepen further issues of great relevance to the project. Among them one counts the way the materials and the construction techniques can not only give meaning to the space but also promote and develop the adoption of traditional materials and / or prefabrication integrable systems so as to present an architecture of strong local / regional identity, live and attentive to the contemporary productive reality. One reflects on how the adopted construction techniques contribute to the mechanisms of incorporation into the "place", comparing the results aimed at shaping a local architectural identity vs. those pointing towards a global architecture.

3 – The three pedagogical approaches present interesting questions concerning the teaching through the project design. The construction of architectural meaning through affective narratives, the challenges of architectural culture and technique somehow coincide with the array of conceptual architectural teaching at the Darq.

But perhaps it is appropriate, as these proposals (supported in teaching methodologies where the conceptual challenges are so clearly defined) suggest, to take advantage from the disciplinary autonomy that the academic projects have in relation to real constraints, in order to promote the "intellectual boldness" of students, as refered by Tiago Borges. This conceptual clarification as well as the creation of laboratory spaces that allow an experimental knowledge of materials (with the practice of design by making), seems to be a disciplinary clue of great interest to the many future challenges at the Darq FCTUC.

1 → Cit. by Tiago Borges In Topofilia.
2 → Xavier de Maistre, Voyage autour de ma chambre, (1790 1.ª ed), Flamarion, Paris, 2003.
3 → Cit. by Tiago Borges ibidem.