The Forms of Representation in Architectural Design Teaching: The Cases of Politecnico Di Milano and Faculty of Architecture of the University of Porto

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Abstract : The representative component, a determining aspect of the architect's training, has been marked by an exponential and unprecedented development. However, the multiplication of possibilities has also multiplied uncertainties about architectural design teaching, and by extension, about the very principles of architectural education. In this paper, it is intended to present the results of a research developed on the following problem: the relation between the forms of representation and the architectural design teaching-learning processes. The research had as its object the educational model of two schools – the Politecnico di Milano (POLIMI) and the Faculty of Architecture of the University of Porto (FAUP) – and was led by three main objectives: to characterize the educational model followed in both schools focused on the representative component and its role; to interpret the relation between forms of representation and the architectural design teaching-learning processes; to consider their possibilities of valorisation. Methodologically, the research was conducted according to a qualitative embedded multiple-case study design. The object – i.e., the educational model – was approached in both POLIMI and FAUP cases considering its Context and three embedded unities of analysis: the educational Purposes, Principles, and Practices. In order to guide the procedures of data collection and analysis, a Matrix for the Characterization (MCC) was developed. As a methodological tool, the MCC allowed to relate the three embedded unities of analysis with the three main sources of evidence where the object manifests itself: the professors, expressing how the model is assumed; the architectural design classes, expressing how the model is achieved; and the students, expressing how the model is acquired. The main research methods used were the naturalistic and participatory observation, in-person-interview and documentary and bibliographic review. The results reveal the importance of the representative component in the educational model of both cases, despite the differences in its role. In POLIMI's model, representation is particularly relevant in the teaching of architectural design, while in FAUP's model, it plays a transversal role – according to an idea of 'general training through hand drawing'. In fact, the difference between models relative to representation can be partially understood by the level of importance that each gives to hand drawing. Regarding the teaching of architectural design, the two cases are distinguished in the relation with the representative component: while in POLIMI the forms of representation serve essentially an instrumental purpose, in FAUP they tend to be considered also for their methodological dimension. It seems that the possibilities for valuing these models reside precisely in the relation between forms of representation and architectural design teaching. It is expected that the knowledge base developed in this research may have three main contributions: to contribute to the maintenance of the educational model of POLIMI and FAUP; through the precise description of the methodological procedures, to contribute by transferability to similar studies; through the critical and objective framework of the problem underlying the forms of representation and its relation with architectural design teaching, to contribute to the broader discussion concerning the contemporary challenges on architectural education.