## ABSTRACT

"So you can draw the fragments, and then problems will gradually be raised, which shape this has, how it works... then, curiously, these kind of drawings, which positions you are already familiar with, you start bringing them together to the point that tangencies occur, etc."<sup>1</sup>

Enric Miralles

Throughout his career, Enric Miralles developed a personal system of representation that allowed him to design architecture both in a fragmentary and unitary way. Composing with fragments that were simultaneously autonomous and relative to each other, Miralles integrated them into a greater whole according not to classical systems of hierarchical subordination, but to relationships based upon positions of tangency, adjacency, juxtaposition or superposition. This system was instrumental in the process of designing his architecture, it articulated the creative process in a back and forth movement, from the parts to the whole, as from the detachment into multiple units to their final gathering.

Miralles' system of representation was based on the fragmentation of architecture from the fragmentation of the floorplan. This allowed him to develop the spatial qualities of the different fragments in a separative way, turning them into what he called pieces. This system is therefore characterized by a redefinition of the use of floorplan and orthographic projections in architectural design. It is defined as "Miralles plan", as a way of using both the polyvalence of the term in the architectural lexicon<sup>2</sup> and its connotations as a particular strategy of action and design. Moreover, the definition includes all techniques of representation used by Miralles, and places particular attention to the hierarchy of the plan within them.

The fragmentation criterion was usually inferred from the geometry in floorplan, by assigning to each of the project's different pieces a distinctive and recognizable footprint. The Miralles plan is thus structured upon the use of geometry as a

N1. MIRALLES, Enric. "Constricciones". Lecture in Sevilla, November 30th 1995. In: AA.W. Hacer vivienda. Acerca de la casa 2. Seminario '95. [Junta de Andalucía, Sevilla, 1998]. p. 117. N2. The terms "plan libre" and "free plan" specifically refer to a particular kind of floorplan in the history of architecture. The plural word, "plans", includes floorplans, sections and elevations. way of differentiating architectural pieces, the fragmentation of orthographic projections from the fragmentation of the floorplan, and a lack of compactness as a device of separative thinking.

The first three chapters of the thesis have been defined as a corollary of these categories, explaining, in chronological order through Miralles' projects, the evolution of his geometric types, the customization of the use of orthoaraphic projections in architectural design, and the impact of the lack of compactness on the built work. While these three chapters are global, for they refer to the overall evolution of this system, the fourth and last one is a case study of its application to a particular project, the Utrecht Town Hall, through Miralles' original drawings. Both in the global and particular explanations of this system, the thesis highlights its instrumentality in the process of thinking this architecture, arguing that it could not have been designed without its parallel development.

The relationship between thinking and representation is therefore a key issue to explain Miralles' oeuvre. However, to date, existing references to it in the available literature have not evolved from a collection of scattered opinions, unable to build for themselves a structured and coherent body of knowledge. Great emphasis has been put on the critical contextualization of the projects themselves, but little on the study of the design technique used to design and carry them out. Results have been prioritized over creative processes, existing therefore an inexplicable theoretical void on an issue of great importance. This void is the conceptual framework where the need for this thesis is inserted.

This research explains the origin and evolution of Enric Miralles' system of representation, from his time as a student at the Barcelona School of Architecture to the last projects he designed with Benedetta Tagliabue, as well as the study of its impact on the built work. It concludes that the development of this system runs parallel to that of the architecture it is used for, making it explicit its indissolubility and mutual interdependence.