Crafting Knowledge: The Manifold Possibilities of Fragments-Models for Architectural Design Pedagogy

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ABSTRACT

Working with physical models involves craft as a form of ongoing research - through gestures, through both physical and intellectual acts. Among the tools of architectural design, models most vividly reveal time as fundamental to architectural quality. The haptic and reflective process of model-making fosters a unique, irreplaceable form of spatial knowledge.

This paper examines the performative and heuristic dimensions of model-making in the design studios the authors lead at the University of Naples Federico II. Methodologically, it draws on complementary case studies, such as design studios projects in undergraduate courses, and exhibition installations based on the reinterpretation of notable architectural examples. In each, the design process begins from fragments to construct imaginary reference points, thereby generating unforeseen spatial scenarios.

The pedagogical objective is to re-center manual practice amid a broader trend toward the dematerialization of digital processes. Through attentive 'care' in making, students acquire tacit knowledge of material potentials: they learn how fragments articulate possibilities and, in turn, how design

can remain open-ended rather than merely representational. This counters the challenge in contemporary pedagogy of privileging abstract workflows over embodied making. Working with physical models in design studios involves craft as ongoing research – through gestures, physical and intellectual acts. Among design tools, models best reveal time as the key to architectural quality. The haptic, reflective process of model making builds unique, irreplaceable spatial knowledge.

Composing fragments suggest a practice rejecting traditional completeness. Rather, it is understood as a process carried out through partial elements that generate perspectives and allow the viewer to contemplate shapes under light and the possible futures of the projected design idea.

By situating fragments at the heart of studio pedagogy, this work introduces a new perspective on architectural education: design proposals become non-rigid schemas, modifiable in response to emerging conditions. The architect and architecture student thus inscribe themselves within a transforming world, re-activating the generative power of formal configuration as a means to envision – and enact – alternative realities