

The Working Model: A cross-disciplinary collaborative tool

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Abstract

In the broad field of design, and in the context of physical representation, the working model is essential. Working with or through a physical model is still common practice as it is a highly effective and engaging way of developing conceptual ideas and achieving design objectives. Better collaboration is needed to produce good building design that can only be achieved through open dialogue, yet the working model remains an exclusive experiment within each discipline, where only the resulting decisions are shared within the design space (the void between profession boundaries). The working model is a powerful decision-making tool to progress design process and it is used in different ways to inform specific aspects of the design, depending on which single discipline has worked with it. For example, architectural scale models offer architects an understandable way to develop their concepts by placing, displacing, rotating or modifying them on a modelled site within fixed surrounding buildings, allowing for playful and explorative interaction, used to aid or even guide the design process to achieve a desired goal. On the other hand, working models in the form of 1:1 mock-ups aid engineers to understand structural behavior by load-testing them to destruction, for example. The main hypothesis is that although the working model takes different forms according to design intentions and specification, it can offer an important interdisciplinary collaboration platform, where different disciplines can engage, learn and establish more informed decisions.

This paper will start by defining the working model within each design discipline (architecture, structural, industrial design, etc.) providing an understanding of how it is used as a decision-making tool. Through reviewing past and present built project examples and interviewing several representatives from a variety of building disciplines, this paper will identify the forms of working model (a cross-disciplinary entity within practice), with the objective of comparing and interlinking disciplines through this shared entity: the working model's design space. Through the creation of a table of results, this paper will offer an insight of the existing and possible working models, revealing the differences that may be lost in translation to inform a better understanding of the working model as a term and its power in design development. This may offer opportunity to bridge an interdisciplinary network between participants of a design project for better integration and thus collaboration.

References

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