Diagram Works

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Abstract

This paper introduces the activity of diagram making, within a computational framework, in the conceptualization stage of the design process. It also suggests looking at this diagram-making process in a multi-dimensional environment, beyond the familiar two and three-dimensional space.

The scope of this paper is to investigate the relations between the main subject: diagram making, and two ancillary topics: computational data structure, and multidimensionality. Each subject area is studied to draw relevance to the other two. A hypothetical scenario, using a basis of computational data processing, is the context of this inquiry.

The inquiry begins with the subject on abstract variables assuming an n-dimensional existence in a diagram. This discussion extends to the diagrams in operation, where the variables in a diagram can take on active attributes and form informative relations with one another to result in a dynamic diagram. The subject of spatial dimensionality follows next to suggest that a diagram, with its variables and interaction modes, can assume a presence of higher dimensionality. This therefore opens up possibilities and speculations of the behavior of and in this space.

The reference to algorithmic data processing, problem-solving theories is to develop the generative potential of diagrams. The emergent form of the diagram is therefore a measure of the dialogue in the conceptualization phase in architectural design.