

IN PERSPECTIVE

SUMMER 2025

ARCHITECTURE IN THREE DIMENSIONS

In a virtual world, does the physical representation of objects increase in relative value?

Research¹ into a narrow aspect of this broad question suggests that the answer is yes, at least in the realm of architectural models. A key function of architectural design is the allocation of space in three-dimensions. And, while three-dimensional objects can be readily represented in two-dimensional media or virtually, physical models have the unique ability to actualize ideas in a tangible way, creating practical understandings of spatial relationships.

According to investigators, when information is presented as a solid model rather than a two-dimensional drawing or a virtual object, viewers are better able to comprehend the spatial relationships. Furthermore, in the case of buildings, it is easier to imagine what it would be like to physically inhabit the space.



A study of model and real columns.

The value of architectural models has been appreciated since ancient times. Prominent architect Sir John Soane (1753-1837) remarked “Large models, faithful to the originals in every respect...would produce sensations and impressions of the highest kind,...sensations and impressions which can only be surpassed by the contemplation of the buildings themselves.”



Adults and children alike enjoyed the challenge of a hands-on three dimensional puzzle.



This seems to have remained true in spite of radical technological changes in architectural drawing as a result of computerization and in model building as a result of 3D printing. Investigations of the effect of diminishing attention spans on three-dimensional perception do not seem to have conclusive results.

The underlying rationale for the Canadian Museum of Architecture's exhibition strategy is to base displays on scale models that show structures as realistically as possible. Our belief is that various aspects of the physical and aesthetic nature of architecture can be best appreciated when viewed as detailed three-dimensional objects and that this is not replicated by two dimensional images or even virtual reality.

AN EXHIBITION

With the support of the City of Toronto, the CMA hosted an exhibition in August and September, 2025 in Toronto at the Todmorden Mills Gallery and then Old City Hall. The thirteen displays, each including at least one model, were selected from the four exhibits that are in preparation for a comprehensive portrayal of architecture as a discipline.

The exhibition ran for 25 days welcoming 1300 visitors for an average of 52 per day. 96% rated their overall experience as excellent or good, indicating strong positive engagement with the exhibit material. The City of Toronto's Museum and Heritage Services evaluation of the exhibition found that the most popular displays were "A New Paradigm" (sustainability), "Impact" (on society) and "Aesthetics in Architecture". Hands-on activities consistently attracted high levels of interest. The exhibition performed well with "diligent visitors" who show high levels of involvement.

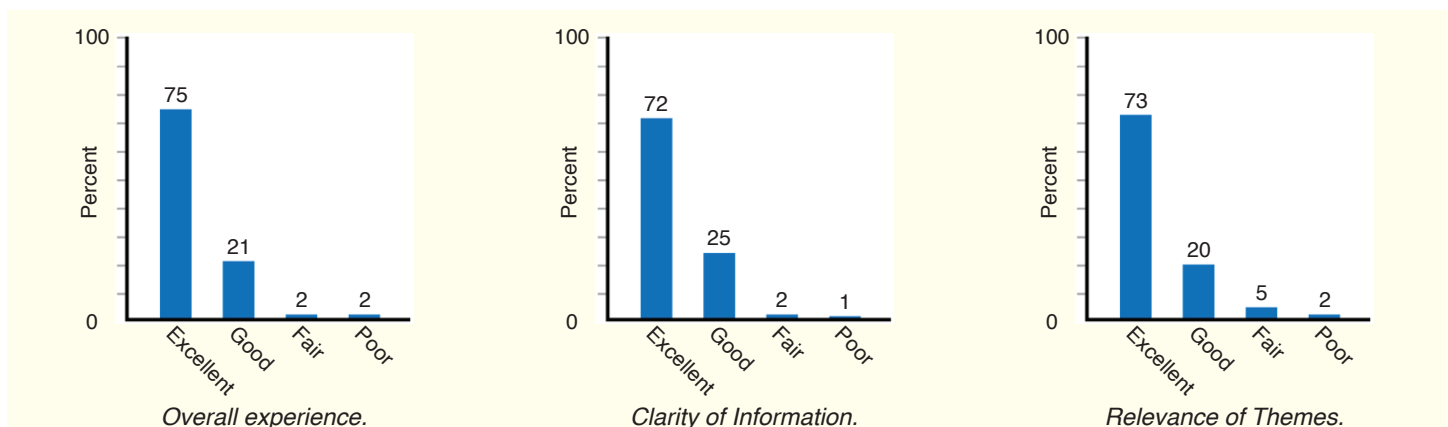
The CMA's exit survey to gauge exhibition performance returned 130 anonymous exit questionnaires, revealing the following ratings:



The exhibition at the Todmorden gallery.



Grade 7 and 8 students at Old City Hall.



Free form comments indicated that the models were a key aspect of the exhibition supporting the view that the physical representation of structures has specific value in an explanation and understanding of architecture.

Peter Brueckner

References

1. Matthew Mindrup, *The Architectural Model* (Cambridge, Massachusetts: The MIT Press, 2019), 1.

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