

Modeling Urban Spaces: Digital Disciplinarity in Architecture and Geography
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This research is producing *digital cartographic models* of Chicago to examine how available data sources and digital modes of visualization enable or discourage particular understandings and everyday uses of urban space. Working between two software packages that are now ubiquitous in architecture (FormZ) and geography (ArcView), the project explores and critiques the spatial preconceptions built into CAD in architecture and GIS in geography. Rather than encouraging a deceptively smooth integration of what may be fundamentally incommensurable forms of knowledge, this project aims to reveal crucial differences in the two disciplines' normative conceptions of space by identifying specific instances of both compatibility *and* incommensurability.

The project compares the normative uses (and limits) of the two programs, but focuses on developing innovative applications for ArcView in architecture. The aim is to examine and to make manifest the problematic aspects of the theoretical frameworks that have emerged to explain the uses and value of GIS as a tool to not only document, analyze and represent, but also to navigate, inhabit and develop urban space

The very term 'modeling' raises distinct disciplinary issues. It is used in fundamentally different ways in architecture and geography. Those differences align with philosopher Max Black's classic distinction between "scale" models and "analog" models. A parallel also can be constructed between Black's theory and Graham Nerlich's discussion of "absolute" versus "relational" space. In distinction from the predominant Western tradition of spatial relationism (space as nothing but the relationships between things), architects tend toward spatial absolutism (space as "an entity in its own right"). Further, the use of CAD to produce what are basically digital scale models reinforces this absolutist tendency, while the logic of GIS is distinctly relational and its models are analog.