

BUILDING GEOMETRY

MATHEMATICAL MODELS AND THE HISTORY OF SURFACE

The Harvard University Graduate School of Design announces two exhibitions that challenge the disciplinary boundaries between design and mathematics on view February 1 - February 28, 2012.

"Building Geometry: Mathematical Models and the History of Surface" suggests that the visualization of complex surface geometry has a history prior to its appearance as a product of contemporary digital design. Drawing on the collections of Harvard University, the exhibition displays historical mathematical models from the nineteenth century in the context of a contemporary design school. Archival photos and explanatory texts contextualize the models in the course of both mathematical and architectural thought. It proposes formal and historical parallels between the two, and suggests that the current digital moment in design has something to gain from its mathematical antecedents.

"Protosurfaces: Mathematical Experiments in Spatial Design" reviews contemporary work at the GSD that engages mathematical methods in design. The working models presented in this exhibition are products of an ongoing seminar at the GSD that confronts this productive tension between the freedom of design and the logic of geometry. They are prototype spaces, experiments out of which a mathematically synthetic approach to surface design might emerge. Like hyperbolic shells, these surfaces are mathematically defined for anticlastic curvature, with a remarkable structural rigidity as a natural consequence. Such experiments demonstrate the possibility of how multiple constraints of design might be synthesized in the context of mathematical frameworks with provocative spatial results.

The curators of Building Geometry invite the GSD community to a lunchtime gallery talk and roundtable discussion on the exhibition Monday, February 27, from 12PM-1PM in Loeb Library of the GSD.

Building Geometry and Protosurfaces are on display at Gund Hall, 48 Quincy Street, Cambridge, MA.