



Evolutive Means

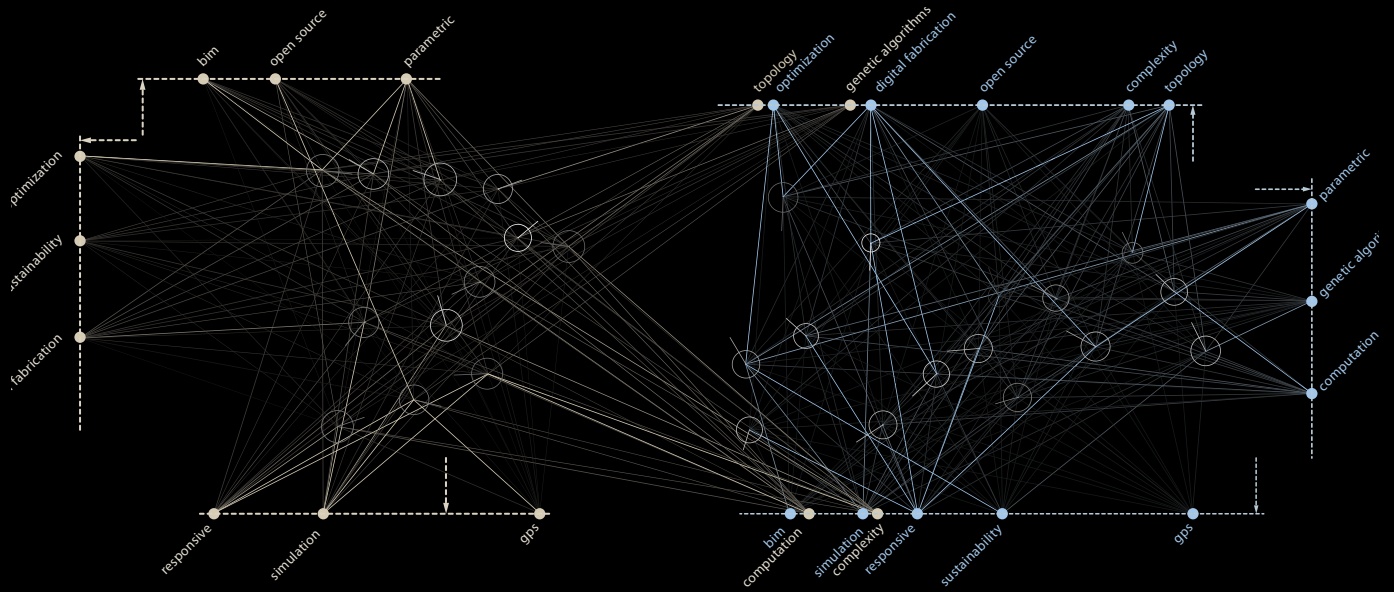
On Adaptation and Selection in Architectural Design

Inaugurated on the occasion of the conference ACADIA 2010 LIFE in:formation hosted by The Cooper Union in New York City, the exhibition Evolutive Means hosted by Pratt Institute in Brooklyn examines concepts, tools and technologies that implement responsive and generative aspects of information in the design process.

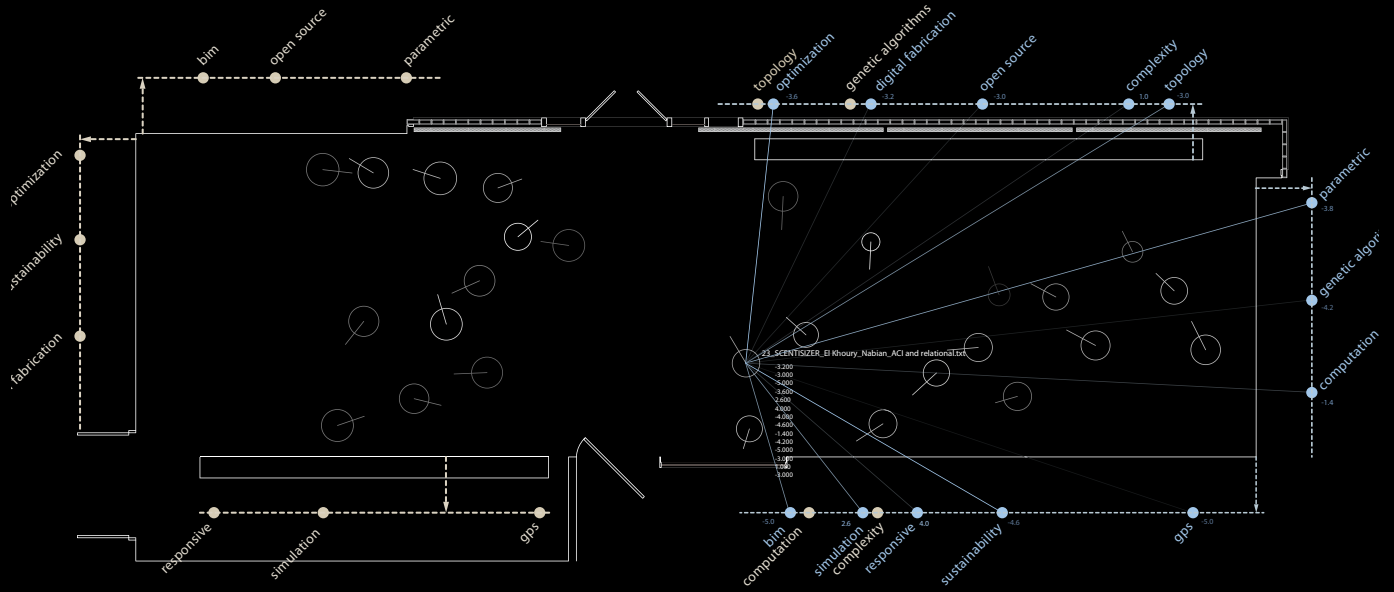
The exhibition design utilizes a computation procedure that crowdsources the ACADIA community to uncover patterns of information that can be used to generate knowledge about contemporary technological issues. The objective of this pioneering protocol is to index the position of contemporary architectural ideas and concepts in relation to peer-reviewed projects, guest projects and the larger ACADIA community. Given that the conference is an annual event, the discourse within the ACADIA community constantly shifts and evolves. Thus, one of the first goals relies on the assembly of a current body of work from the ACADIA community to create a database. The next step involves mining the database to uncover quantitative pattern formations. Analysis of those formations uncover relationships that generate key concepts that describe the discourse upon which individual projects in the exhibition can be compared. In addition, the curators established qualitative attributes of each project relative to the ideas of the overall conference.

In order to populate the exhibition layout, the compiled keyword list was anchored in the gallery space according to relationships specified by the curators. The intervention by the curator intentionally promotes curatorial critique through the exploration of possible relationships in a dynamic, fluid environment provided by the computational algorithm. Individual projects, however, are located based on their relationship to the keywords and other projects through a computational process of self-organization. The quantitative and qualitative keyword attributes provide the magnitude of the attraction and repulsion forces between the projects and the compiled keywords, determining the location of the individual projects in the gallery space as well as the attributes of the display volumes suspended from the ceiling.

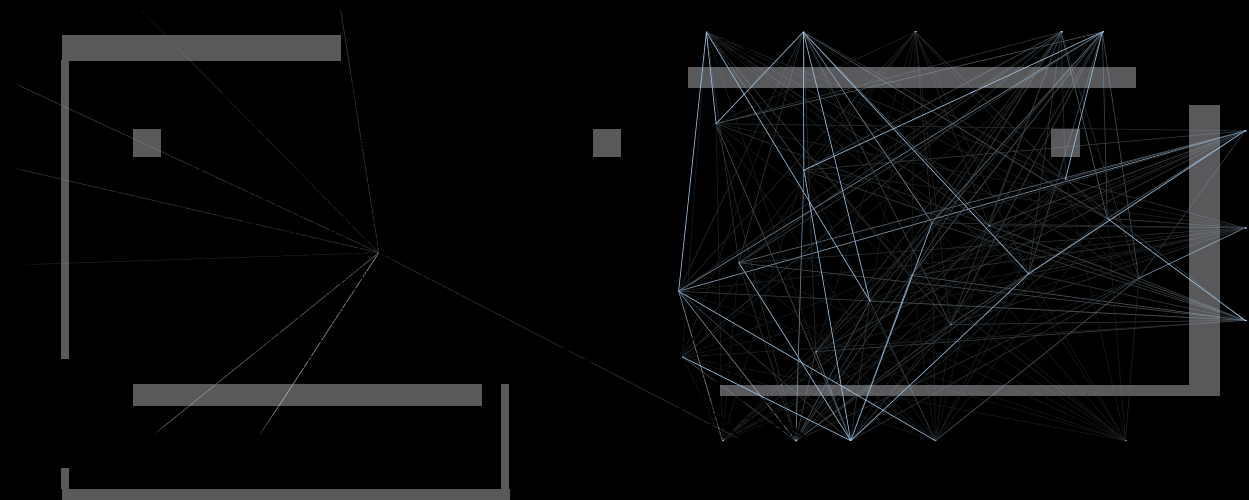
The development of this tool to assist in curatorial design and facilitate in the tri-phase transition from data to information to knowledge uncovers patterns of ideas that are current and relevant to the international ACADIA community. The process of collecting, data-mining, and critically filtering ideas Crowdsourced from a wide-area community through both computational methods and human intervention provide a multi-dimensional comparison of ideas that indicate and form the current discourse.

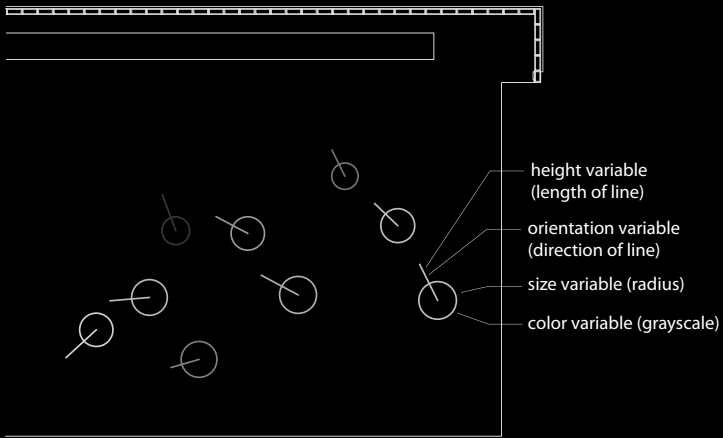


Floorplan from Processing applet

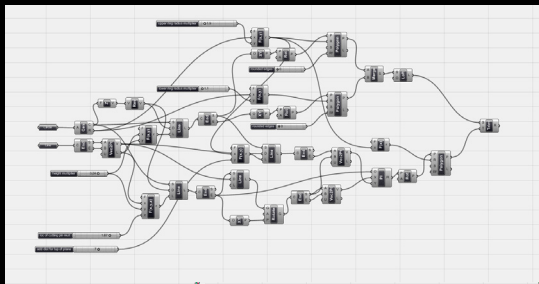


Floorplan of project data from Processing applet

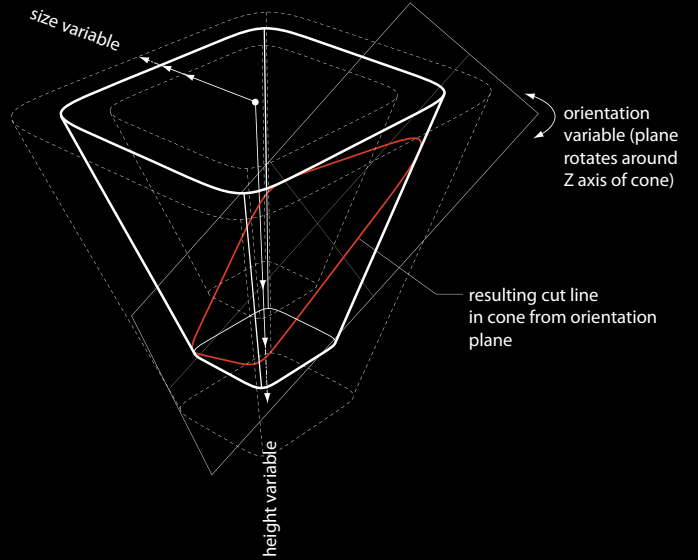




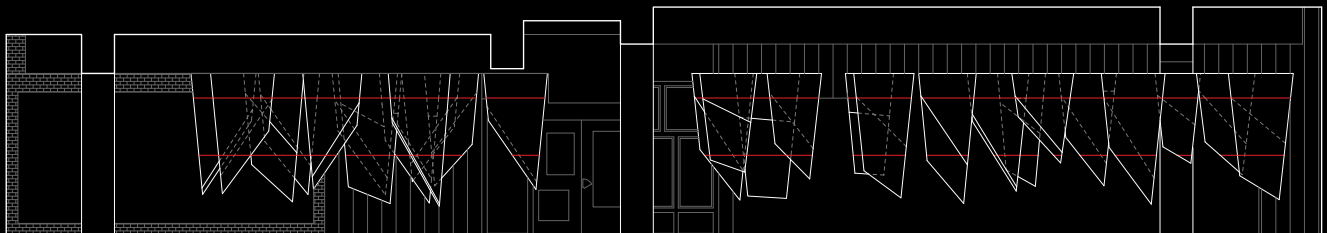
enlarged floor plan from Processing applet



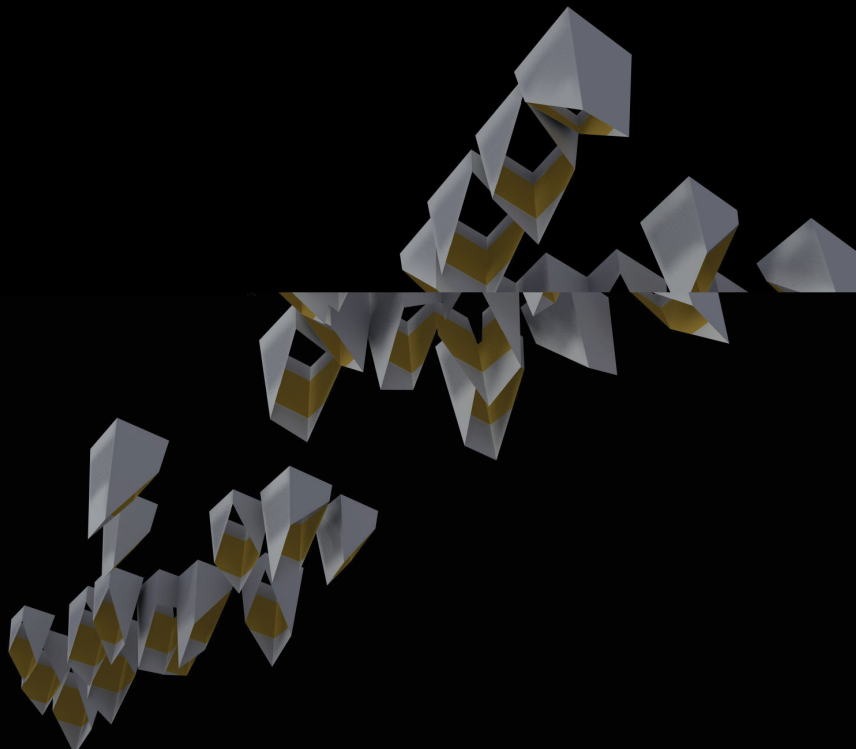
parametric algorithm



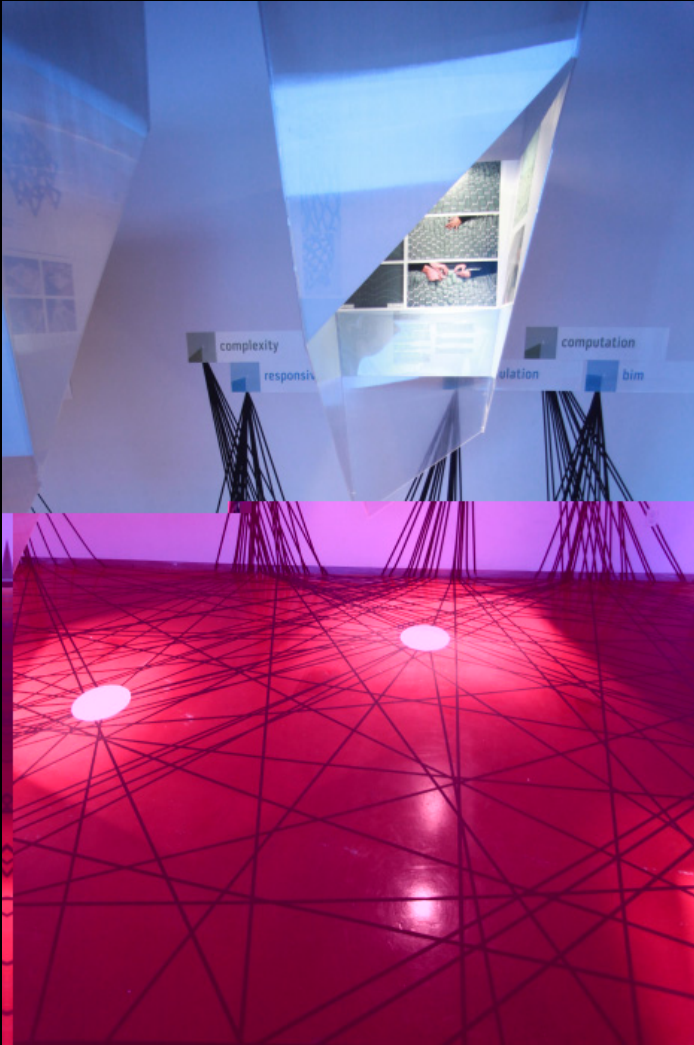
axonometric diagram of cone variables



elevation



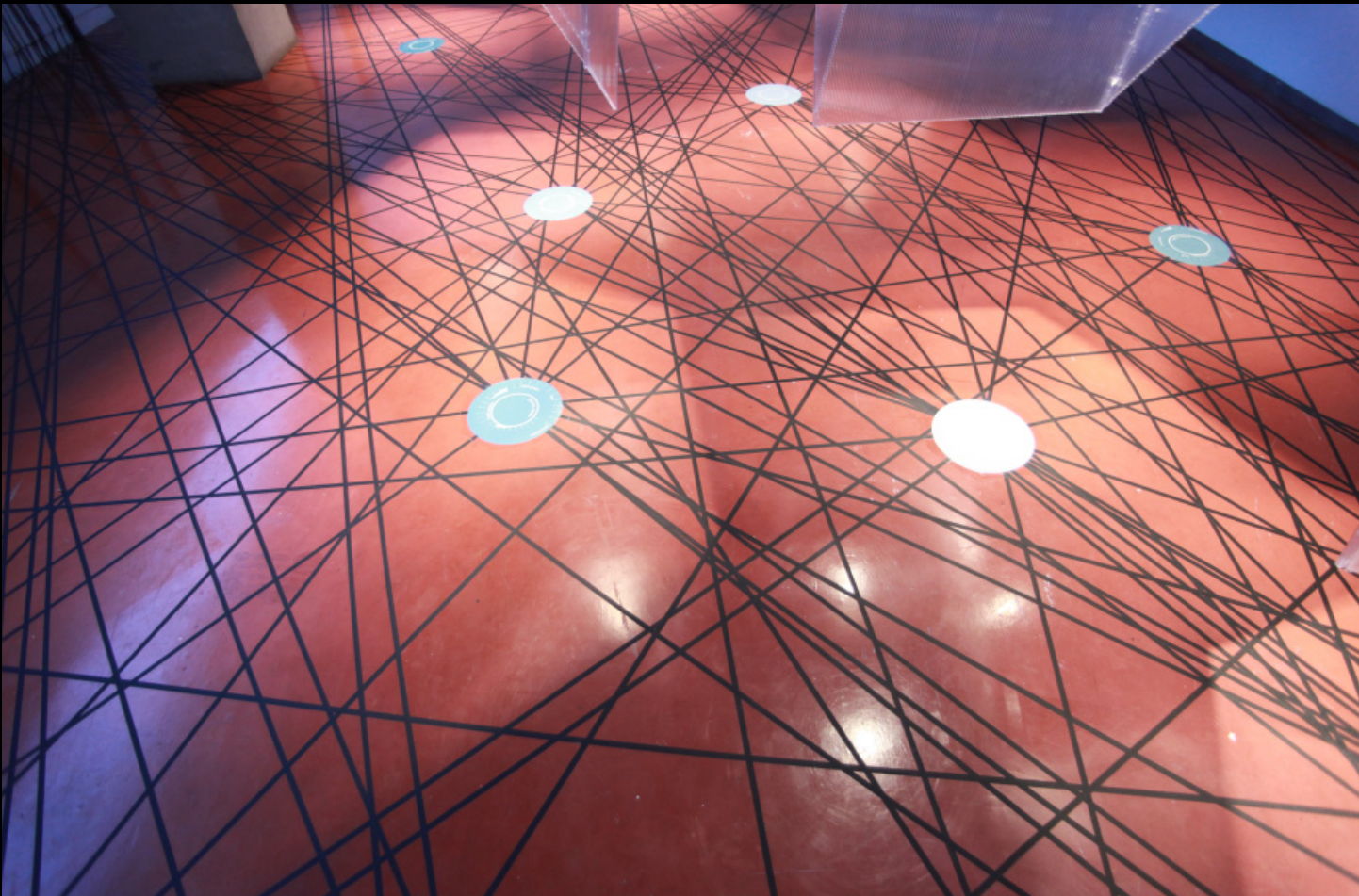
rendering from below



Individual project display volumes. Each volume has an attribute dial on the floor centered on the volume. Lines on the floor connect each project to the keywords on the walls.



Keywords: keywords determined from data-mining are located in the gallery, influencing the relationships between peer-reviewed projects, guest projects and ACADIA community.

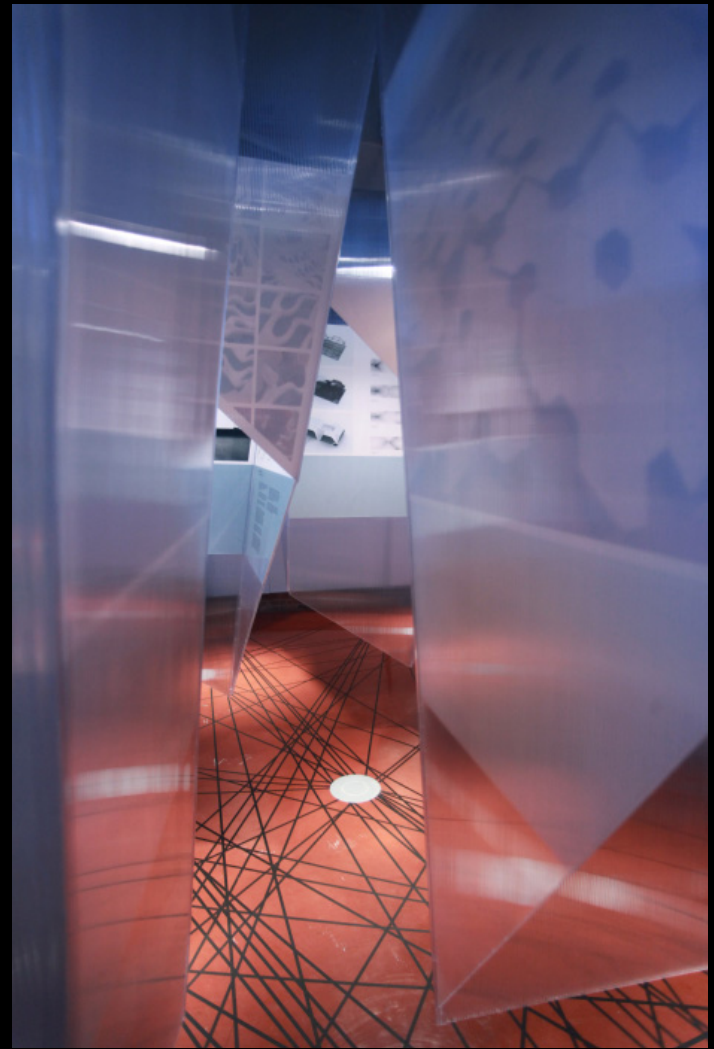


Attribute Dial: graphically notes project attributes relative to conference themes of Affluence, Influence and Confluence. The attributes also determine the size, height, color and orientation of the display volumes.









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Exhibition hosted by the Pratt Institute

Location:
Pratt Institute, Brooklyn, NY

Schedule:
October 22 – December 5, 2010

Exhibition Curators:
Chandler Ahrens, Axel Schmitzberger and Michael Wen Su

Exhibition Design:
Chandler Ahrens, John Carpenter, Axel Schmitzberger and Michael Wen Su

Exhibition Design Computation:
Chandler Ahrens and John Carpenter

Exhibition Team:
Mohammad Alam, Michael Archer, Xeudi Chen, Iris Fong, Stephen Fuchs, Sasha Grishina, Jay Ho, Jason Idjadi, Jin Jun, Damien Jusina, Kenny Lam, Richard Tufano, David Yuan, Noah Zerkin

Size:
2,200 sqf

Planning:
2009-2010

Construction:
2010

Conference:
ACADIA 2010 LIFE in:Formation
hosted at The Cooper Union, NY, NY

ACADIA 2010 Conference Chairs:
Pablo Lorenzo-Eiroa, Aaron Sprecher and Shai Yeshayahu

* High resolution images and/or extended text available upon request.