"Turns in the Field of Design"

Remarks from Hashim Sarkis, Dean of the MIT School of Architecture and Planning, to open the 2017 ACADIA Conference at MIT.

November 2, 2017

Contact: sap-info@mit.edu

ACADIA, welcome to MIT. All 340 guests and speakers of you.

At MIT, we feel at home during conferences of this nature, of this scale, because their energy strongly resembles the daily buzz of MIT. MIT also thrives on learning from a diversity of points of view, and judging by the published proceedings, we can confidently say there are 70 presenters and 70 points of view. But we also look forward to such events because they carry with them the promise that the broad survey of the state of the field will inevitably lead to changing it. This convention carries this promise in its title, Disciplines Disruption.

Indeed, one of the pernicious problems we face in academia is that we tend to teach our students old tricks to deal with new challenges. In other words, we tend to perpetuate structures of disciplinary knowledge that had been shaped around earlier problems but that no longer correspond to the problems at hand. The fields that constitute urban studies today, (development, design, community, and environment) do not effectively reflect the complexity of the urban problems of today. Neither do those that constitute architecture (design, building technology, computation, and culture studies). Problems such as coastal flooding, transportation, material scarcity, and efficiency straddle across scales and disciplines and demand new tools, new tricks.

The polemic of this conference, as I understand it, is that computation, as a tool but also as mode of operation and inquiry, has been contributing to updating our fields of knowledge in order to cope with the new problems at hand, weaving across disciplines and sub-disciplines, introducing speed, flexibility, legibility and interconnectivity among the different aspects of the building and urban design fields. Computation is not only updating the disciplines of architecture and urbanism to more effectively deal with new questions of resilience, sustainability, and efficiency. It is also contributing to making our fields more flexible in order to change and adapt to the new sets problems as they emerge.

The proceedings also promise several changes, turns, taking place in the field of design. I note three main turns:

The scalar turn:

Several of the papers and projects demonstrate how computation has been able to take tools from one scale of design and apply them to another and how it has helped smoothen the transitions and shifts of scale. Design as a field has always operated across scales from the tea cup to the city, but this range has expanded, taking us now from the nano to the planetary. Computation facilitates sharing of tables and tools across scales.

Neil Gershenfeld's Fabrication Labs and the way he and Skylar [Tibbits] are taking it from fabrication to design

Neri [Oxman] and Meejin's [Yoon] Design Across Scales.

The value turn:

The proceedings demonstrate a growing interest in the open sourcing of production and in the increasing ability of end users in architecture to design, produce, and assemble themselves spaces and consumer products. The position of the designer is therefore changing, from being the holder of talent and source of values at the beginning of the production cycle to having to diffuse them across the different stages of production and to share the values and judgments about what is good design and what is bad design with the manufacturers, the producers, and most importantly the end users. This promises to radically change the role of the designer and the valuation of design in the long turn.

SDM at MIT [System Design and Management at MIT]

The contingency turn:

The design process has been based on the idea that in order to be in control, the designer has to allow certain attributes of the building to the design table and to exclude others. Over the years, we have come to consider form, composition, and program essential but to leave out technical issues and performance as contingent or unpredictable. The computational process now allows us for more contingency to enter into the design process. It helps us organize data, and to coordinate between the different spheres early on during the design process. This is one of the promises of BIM and indeed it is beginning to reflect on design as well. This is also one of the promises of Big data as it informs the field of urbanism as well.

Computation
Urban Science.

And yet what ultimately stands out in what is promised over the next two days is how much design, with the help of computation, can elevate sophistication and complexity into aesthetics, into beautiful experiences that we can participate

in and that can allow us better access and appreciation of the complexity of the world in front of us. Everything matters and we need to be able to absorb as much of the complexity of the world if we are to effectively change it.

This comes across in the projects on display and in the work of the designers like Thomas Heatherwick and Iwamoto Scott that you are honoring today.

Thank you Takehiko [Nagakura], Skylar [Tibbits] and all the organizers of ACADIA for bringing us all together.