



Today poetic design is based on a plethora of complex criteria: human experience, social behaviors, global, economic and political issues, physical and mental interaction, form, vision, and a rigorous understanding and desire for contemporary culture. Manufacturing is based on another collective group of criteria: capital investment, market share, production ease, dissemination, growth, distribution, maintenance, service, performance, quality, ecological issues and sustainability. The combination of these factors shape our objects, inform our forms, our physical space, visual culture and our contemporary human experience.

- Karim Rashid Manifesto

TOPIC this seminar will critically investigate relationships formed between culture and artifact, technology and innovation, perception and experience, by evaluating existing architectural paradigms and using that as catalyst to strategize new potential ways of thinking and making. operating through a series of lectures, discussions, and workshops, students will develop 5 group projects, each with a specific agenda that question how we cover, materialize, and experience our physical environment. a set of readings will frame the discourse, which students will respond by creating 1:1 scale constructs that articulate clear positions on the issues defined in the seminar.

operations

01 SURFACE

2wks

in this operation groups will digitally develop a performative surface from a set of specified geometric parameters where two lengths must correlate to an adjoining surface created by another author. employing methods of rapid prototyping, we will test combinations of the various typologies. following analysis, each group will construct their surface at 1:1 scale testing a variety of tool and cut procedures.

02 MATERIAL

2wks

each group will be assigned a common building material and asked to investigate its potential of moving beyond predetermined assemblies and redefine its potential through unorthodox methods of deployment, configuration, and scale. successful operations will liberate the materials taxonomy by newly formed attributes that advance its known physical limitations.

03 CONFIGURATION

2wks

groups will create a single unit from a folded system with planar faces that can be manufactured using sheet material. then develop an order between surface, depth, and material allowing the module to take on multiple formations. finally array, rotate, and tessellate the unit to create a self supporting adaptive screen configuration.

04 FIXTURE

2wks

in-order to produce modules and units beyond the realm of sheet material it requires developing a fixture which secures a part in position while being machined. in this final operation each group will develop their unit into a 3D part and design a fixture that will reconfigure the stock so each unit can be machined from multiple positions.

05 ASSEMBLY

6wks

the design and construction of a 1:1 scale site-specific installation

READING LIST

provided

Understanding Media: The Extensions of Man - Marshall McLuhan

Tools for Conviviality - Ivan Illich

The System of Objects - Jean Baudrillard

The Craftsman - Richard Sennett

Surface Architecture - David Leatherbarrow, Moshen Mostafavi

The Function of Ornament - Farshid Moussavi Michael Kubo

Versatility and Vicissitude: Performance in Morpho-Ecological Design - Michael Hensel

Pamphlet Architecture 27: Tooling - Benjamin Aranda, Chris Lasch

Immaterial/Ultramaterial: Architecture, Design, and Materials - Toshiko Mori

Transmaterial: A Catalog of Materials That Redefine Our Physical Environment - Blaine Brownell

Refabricating Architecture - Stephen Kieran, James Timberlake