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This competition awarded my entry an Honorable Mention design prize and inclusion in the ‘Raw Exhibit’ 2004 ICFF. The ‘Big Idea’ door-stop is intended as functional object that brings consciousness to human issues while raising money to fight AIDS non-profit organizations.

The intention was that the immediate reading of the object sends a clear message of “door-STOP AIDS”. The object’s fabrication process relied on flat, recycled red rubber being laser-cut as efficiently as possible for a sustainable existence.
Left: fabrication layout
Below: View of doorstop
Right: Assembly steps
Aluminium
Fabrication + Design

The design combines furniture design, digital fabrication techniques and aluminium sand casting design. The idea is to produce a minimal, ergonomic lounge chair and aluminium repeated leg.

The plywood seat utilized a digital foam cutter to produce a positive jig to bend the wood onto in a 6 foot vacuum bag. The aluminium legs were hand carved and then fabricated onto a plate for casting. The same leg had to be able to support the base of the chair as well as be aesthetically proportioned to work in the front. Legs are removal for ease of transportation.
Left: Aluminium leg
Below: connection detail
Right: fabrication diagram
Right: view of chair and leg assembly
Below: Seat cover material options
SUMI \{corner/edge/end\}

Muji International Design Competition

The theme is “SUMI”. The objective is not to design something that is placed in the middle of the room, but towards the edges, not at the centre and not directly around the centre; you should look for somewhere that evades the eye, send us an object designed for that place, and name it as you wish. The proposal celebrated the often overlooked switch plate that resides in the corner, edge or end of a room. Made of clear plexi-glass with opaque backing, its edges disappear further into the wall. At the same time catches light to highlight its edges.
Field of TOGS

Temporary Outdoor
Gallery Space Competition

The project conceptually begins with a parametric component that serves as a space of exhibition display for the artist. This individual space is distributed across a parametric form so that each individual space is seen as part of a collective, something like a unit in a beehive. Because this approach offers systematic variability, the TOGS can be adapted to any site in any city for any artist’s work. The exhibition space is defined by the flat platform that displays the TOGS™ which will bring color to the street and art fair. Curvature of the wall structure makes for a free-standing, efficient space frame. The form implies a gathering or space by its concavity, but can be used to display on its convex side as well.

The system that organizes the TOGS can be broken down into 3 unit types (A, B, C diagrams). CNC fabrication can be utilized to read data that determines each piece of the unit types. Again, because the design is set up parametrically, value engineering will allow for quick variation on sizing, materiality, and scheduling. Further development of the project would determine whether the proposal could be made from cardboard, aluminium or PVC tubing. The materiality of the defining platform might be a soft carpet with printed logo or sheets of plywood puzzle pieced together with image laminated to them. This proposal hopes that these areas of articulation and detail will be refined upon the opportunity to further the project.
Custom MASS

University of Texas at Austin
School of Architecture
Research Grant

This research and fabrication project highlights the dialectic between the prevailing paradigm (within mainstream architecture) of masonry standardization and the emerging practices of unique, non-standard masonry veneer. The case study proposes practical opportunities and theoretical implications through the use of standard parametric design and digital fabrication technologies - practices that could ultimately become standards in building tradition. The geometry of non-standard, stone building components suggests a reliance on conventional hand labor to form mass-customized patterns and give new meaning to the term “hands-on” masonry craft. How does the emerging fabrication technologies continue or further the idea of the architect as ‘maker’, as oppose to ‘manager’, in the context of mass-customization of the particular masonry construction.
Showdown! @
the Schindler House

Los Angeles, October 9, 2004

For the Fall 2004 season, the MAK Center and Sundown Salon presented a multi-phased performance, exhibition and benefit that used the provocative R.M. Schindler’s renowned house to produce creative thinking about design and the body. Participants included architects, artists, fashion designers and performers. Exploring contemporary currents and new frontiers in clothing and fashion, Showdown! spanned the complete garment life cycle, from design and production to display, fitting and daily use. The runway show event simultaneously served a double audience seated in gardens on either side of the Schindler House; using sculptural, two-story stair towers designed by COOP HIMMELB(L)AU. My group was a team of three woman architects known as Team Gizmo (Danelle Briscoe, Judith Mussell and Susan Benningfield who were all co-workers from Frank Gehry’s office). We questioned the extreme fluctuation of fashion by creating paper ‘one day flys’—made of actual paper waste we collected from the Gehry’s office. The idea came from the term “paperless office” which actually had the seemingly opposite effect, whereby we witnessed an increasing amount of paper output used to verify the “virtual”. In this process, we sided with the waste, and thus decided to celebrate the unwanted, the mistake, the wrong thing, the innocent paper, being abundantly produced and discarded. Methodologies for constructing the clothing included paper folding, manipulation and assemblage as down-home as the stapler and “Handy Stitch.”
Left: Hands on making process, “material” sample
Below: Dress detail
Right: Model on COOP Himmelblau stage
Right: Published articles of event
Below: Night of the Showdown, making in the Schindler House.
A ‘Showdown’ on the runway

The MAK Center’s Kimberli Meyer and Fritz Haeg of Sundown Salon present a design blowout as part of a nearly three-month fashion fest.

Photographs by Axel Kobayashi. For The Times
The Oct. 23 “Showdown” at Schindler House in West Hollywood included Designs by Giomo.

A model from Liz Larner takes to the catwalk.
Morganne Picard adds a kooky note to the show.

From Renee Petropoulos.
Whimsical design by Millie Wilson and Jessica Roth.
An Elena Manfredini.
Models sport designs by the “we are lucid dreaming” collection.

A model from Liz Larner takes to the catwalk.
Digital Craft

Objectspace Gallery
Auckland, New Zealand

This solo exhibition displayed an investigation of the aesthetic in the geometric capacity of digital fabrication technology. Small, model representations are indicative of printing full-scale building and its components. The act of “model-making” comes into question as it is no longer limited to representation of a project, but can now serve as a true simulation of actual built space.

Proponents of digital architecture claim that computer aided manufacturing (or CAM) does not differentiate in fabrication between a straight or curved line or surface. A complex architectural form might be as efficient to “construct” as an orthogonal shape. The stereolithography process involves building parts one layer at a time by tracing a laser beam on the surface of a vat of liquid photopolymer or powder-process that will one day automate the construction process.
Left: Exhibition window view
Right: Main model piece
Right: Main exhibition piece, 9 bricks 12" x 12"
Below: Body scan using LIDAR technology, 3D prints and CNC mill of parts exploring poche space, virtual model derivation
This exhibit documents findings from the inter-relationship of a single information model to 5-axis, water-jet cutting technology, with which limestone is milled to specific articulated surface properties. Material logic and variable design are incorporated in the process to create an optimized system of components. Using this methodology, varying fields of non-sequential scalar voids are applied to building material and thickness. The various patterns articulated are informed by void spaces required for a stone panel to have complexity and continuity of surface. The finished panel transitions from a rain screen (porous exterior cladding) to a solar screen that modulates light, as the voids formed by cutouts link environmental intentions with technological capabilities.
Left: Research Diagram
Right: Main 4’ x 8’ panel piece
Left: component controlled geometry
Right: View of 3D printed versions in exhibition
Left: Bitmap controls aperture
Right: Environmental and structural analysis
Below: Full scale fabrication
Barbados House I

Barbados, West Indies

This project demonstrates a shift from virtual experiments in continuous surfaces and complex biomorphic forms to a more pragmatic interest in integrating the digital and the analogue and the everyday and the fantastic. Essentially, the goal was to define and demonstrate the benefits of using a combination of selected digital processes and analogue techniques in use with the design of a single-family, prefabricated residence in Barbados, West Indies.

Site conditions being extreme sun, heat and humidity, the shade and wind forces are captured to allow for sustainability of natural airflow and outdoor living, open spaces. As well, a simple composition of rectilinear forms captures views to south and east of site.

Our overseas collaborator, Preconco, Ltd., has appropriated the use of digital production processes in conjunction with pre-cast, concrete construction methodology. The physical model becomes the most important design document because it is the information by which the client can “read” and (more importantly) that which verifies the design of the 3D BIM documents and solid stereo-lithography model. These files serve as database into Preconco’s BIM modeling package for full-scale fabrication.
Left: Study models
Below: Schematic Proposal
Right: Perspective looking toward Entry
Left: Upper and Lower Floor Plan
Right: 3D printed study model of service core
Auckland House Renovation

Auckland, New Zealand

This renovation project of a 1920’s bungalow on a north-facing, steep slope site in the Auckland village of Sandringham prompts decisions of how to maintain the integrity and yet update a character house.

The major changes were to add a bathroom where the existing entrance was located, landscape design and to open the existing verandah as the new entrance. A driveway and entrance was put in to meet the new verandah. The main living space was also opened up to allow flow of living/dining and kitchen. The existing bathroom was made into a laundry and existing laundry made into a guest bedroom.
Left: Site Vicinity Plan
Below: Existing Conditions
Right: New Living Space
Left: View into New Bathroom
Center: New window detail
Right: Floor Plan

1 new entry + veranda
2 new open living room/dining/kitchen
3 master bedroom
4 new bath
5 bedroom
6 new bedroom
7 new laundry
8 new garden
Austin House I Renovation

Austin, Texas

This renovation project of a 1960’s bungalow in the suburb of Allendale uses light to maximize space in a 1000 square foot house. The galley kitchen addition required functional efficiency while opening up as much wall space to a door and window. The addition of double French lite doors opens up the living space to the back yard and deck. The front yard also received an updated landscape design to allow for better accessibility of driveway to front door.
Left: Landscape Plan
Center: New window detail
Right: New kitchen
Left: Floor Plan
Right: Living Room View toward New Kitchen
Austin House II Renovation

Austin, Texas

This renovation project of a 2,200 square foot 1960’s bungalow prompts decisions of how to maintain the integrity and yet update a character house. The house was added onto in the 70's in such a way that a major tree was left intact and is now the central atrium space. The major changes were to open up the main living space to allow flow of living/dining and kitchen and vault that main space to give greater volume and light. Attention to ceiling conditions in other parts of the house encourages a flow of space between indoor and out in the family room and natural light to occur in bathroom 1. Phase two will develop the kitchen space and master bath.
Left: New Ceiling Conditions Diagram
Right: New Interior Vaulted space
1  living room
2  dining
3  bedroom 1
4  hall 1
5  bath 1
6  bedroom 2
7  hall 2
8  bath 2
9  family room
10  kitchen
11  hall 3
12  master bedroom
Left:  Floor Plan  
Center:  Vaulted Living Space  
Right:  New Bathroom Skylight and vanity
Left: View of Atrium into Family Room
Right: View of Family Room looking out to Porch
Ancient Wisdom Acupuncture
Clinic Renovation

Austin, Texas

This renovation project of a 1950’s bungalow turned commercial property in the suburb of Allendale on the busy street of Koenig Lane. The project uses light to maximize space for a new acupuncture clinic. The project was updated to ADA compliance, given a total new interior floor plan, and a future phase proposal for a biowall and stone facade elements on the south and west walls.
Left: Koenig Lane Commercial District
Right: New Koenig Elevation
Left: Floor Plan
Right: Typical Treatment Room
Left: Facade Proposals for Phase 2 Development
Center: ADA Ramp Detail
Right: New windows in areas that were previously boarded up
InterActive Corporation
Headquarters (IAC)

Frank Gehry, LLP - Project Designer
New York, New York

Frank Gehry’s design method for this project and every other is embedded in a technique of analogue modeling which allows numerous iterations to be studied quickly and effectively. For Barry Diller’s Interactive Corporation Headquarters (completed in 2006) in Chelsea Piers, the formal design was prompted as a “series of sails”, a set of twisting bottles as well as a “pleated petticoat”. I served as lead designer on all scale models which were used to guide the design of the full scale architecture. What makes this building remarkable for Gehry’s work at the time is the shift from titanium panels to an all glass form with fritted glass pattern-ing. The frit pattern had to maintain a certain amount of opaque coverage for HVAC efficiency while still allowing for views out.
Left: Section | Elevation Detail of Frit Package

Right: Westside Highway Perspective (photograph by Adam Freidberg)
Left: Ground floor plan
Right: Typical interior space
Left: Model as photographed from Highline view
Center: View from Highline (Photo by Will Sherman)
Right: Exploded systems axonometric