FACULTY DESIGN

SESSION 2: INSERTIONS

Alteration of existing space by inserting a newly made object or form is the theme of this session. Making these insertions becomes a critical journey in itself, transferring meaning while transforming one's understanding of architectural space. Manipulations in scale, light and material may heighten one's physical and emotional awareness that the space has acquired a new meaning. This process can blur boundaries, both actual and virtual, thereby allowing one to see things differently.

SESSION MODERATOR: KIM TANZER
University of Florida

Mies in Michigan
GRETCHEN WILKINS
JOHN COMAZZI
University of Michigan
ANSELMO CANFORA
University of Virginia

The Heaving Floor: From Form and Function to the Felt-experience of Sentience
MITCHELL SQUIRE
Iowa State University

Urban Residence: Modernism Redux
GRACE E. LA
JAMES T. DALLMAN
University of Wisconsin-Milwaukee
La Dallman Architects

Mies in Michigan: Material Image Making

GRETCHEN WILKINS
JOHN COMAZZI
University of Michigan
ANSELMO CANFORA
University of Virginia

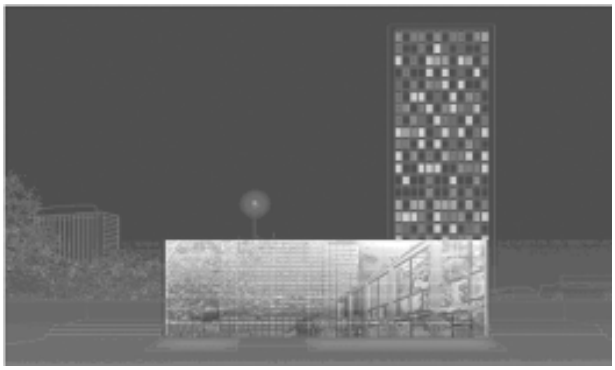
PROJECT OVERVIEW:

Mies in Michigan : Material Image Making was the title given to our submission for an architectural design competition in May 2004. The competition sought to recognize Mies van der Rohe and his design for Lafayette Park in Detroit as a great achievement of modern architecture, landscape and urban design. The competition brief called for a 'design-build' installation in the public plaza at Lafayette Park shopping area, Detroit.

Our ambition within this framework was to evoke the spatial and experiential sensibility of Mies through one of Mies' most prolific photographers, Balthazar Korab. Korab uses the production of images to transform our understanding and experience of architectural space. As Mies and Korab never actually met face to face, these images are, in many ways, the most significant connection, and a form of dialog, between them.

In this spirit, this proposal for Lafayette Park constructed a virtual dialog between Mies and Korab through the material quality of image. Various methods for translating a 2D image to 3D space guided the process of design. Translation was defined between methods of production (i.e. photography to fabrication), between material and immaterial formats (i.e. pixel to plastic), and in terms of authorship (i.e. Mies' architectural agenda, Korab's interpretive intentions, our design process).

The final project is comprised of an imaged Crystallite surface which re-frames the context of Lafayette Park. Formal manipulations of the image and experiential shifts on the site alter one's perception of the intervention within the space, and consequently, of Lafayette Park. A landscape design was integrated with this proposal to unite the three primary areas of the site (the park, the residential towers, and the shops).



Night elevation

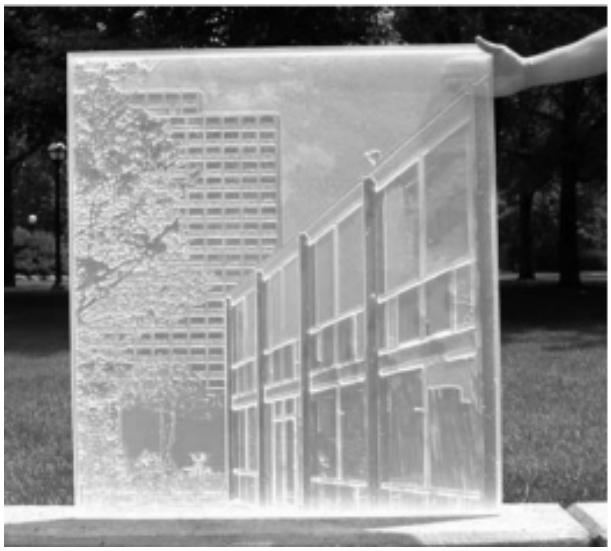
[IM] MATERIAL TRANSLATIONS: PROCESS

In establishing a virtual dialog between Mies and Korab for this installation at Lafayette Park, the materiality and immateriality of image was explored through a variety of formats. The first of these explorations focused on the structure of digital space, of the image and considered issues of contour, lineament, pixel, and resolution. A series of drawings moved between these 'structural' modes to better understand their limitations, opportunities, inherent properties, and efficiencies. The other series of studies focused on translations and limitations of material, and explored methods of photo-transfer, two and three dimensional printing, etching, laser cutting, and CNC routing.

LaFayette Park

The criteria that motivated the material and procedural explorations above related to efficiency of production, durability of material, cost, time, and significantly, what the performative or experiential aspects of the translated image could be. Set into an urban site the material image could take advantage of shifting environmental factors such as lighting conditions, season, scale, view, and movement. The process of experimentation with translations from Korab's photography to a material construct was ultimately assessed for how it would transform one's experience of this site, as well as for its capacity to produce new spatial relationships between Korab's photographic imagery and Mies's architectural space.

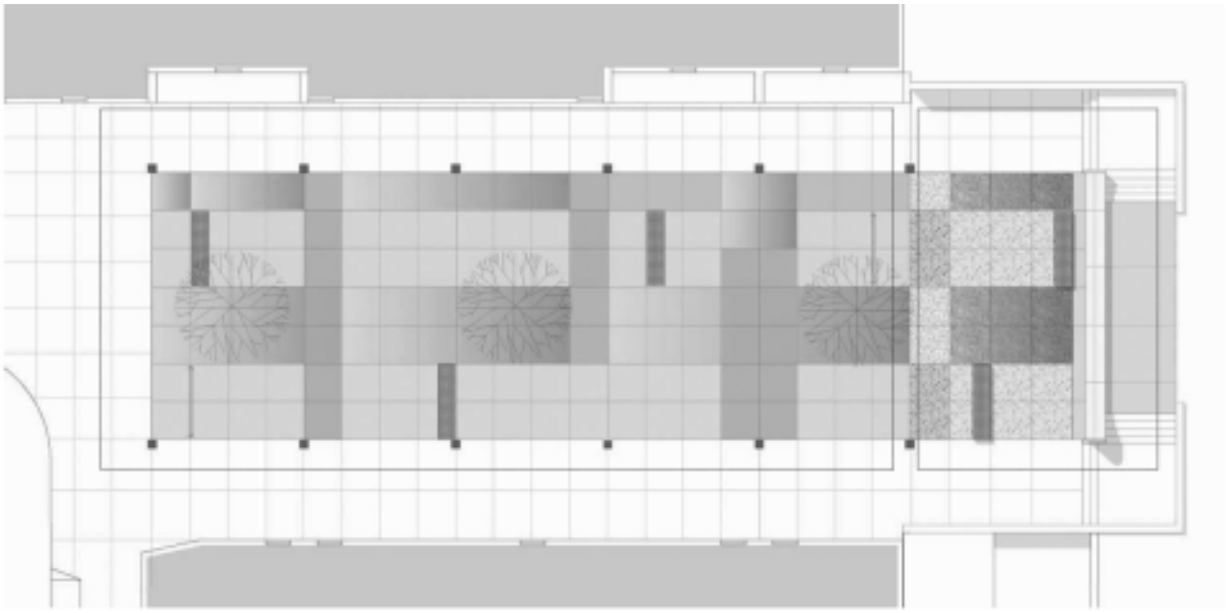
Crystallite, a product typically used for interior or exterior signage, ultimately proved the most versatile, durable, and having the most potential to manipulate for spatial, lighting and scalar effects. Beginning with a 36" by 28" panel, the Crystallite surface was manipulated through the process of digital fabrication using Korab's images as the required source of digital information (input). Rather than producing a drawing of the photographic images and sending the vector drawing to the digital output device as is conventionally done, our procedure identified the structure of the image itself as a construction document. Intensities of color were described and transferred to the CNC router for manipulation of the surface of p. No intermediary drawing was needed for this process – the translation occurred directly between the digital image and the mechanical router. Levels of contrast from the original photographic image were converted by the CNC router to deeper or shallower cuts into the surface of the panel. Saturated colors such as black became more intensely cut, and therefore thinner than less saturated areas of the image, which remained almost untouched by the machine.



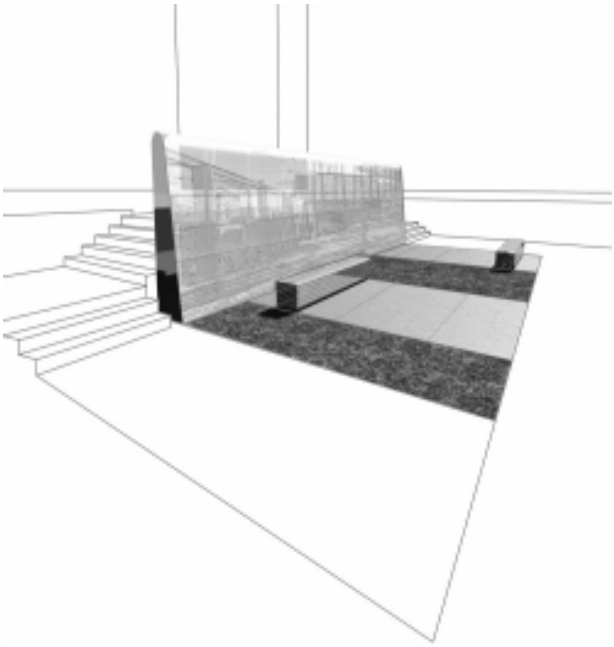
Full-scale mock-up of Crystallite panel

This process of manipulation and fabrication produced a material whose effects varied with one's orientation and proximity to it. Up close, the smooth Crystallite transformed into a rough and highly textured surface with as much detail as was contained in the original image. From a distance, however, the surface either renders a recognizable but ghosted photographic image, or an abstracted, glowing series of edges and forms.

The panelized, image-routed Crystallite formed a 35 foot by 12 foot high surface (42" from stair landing). As a continually-transforming screen this surface is intended to re-frame the Lafayette Towers viewed from the south and provides a spatial



Plan of LaFayette Park shoppping area



Perspective rendering of Crystallite surface in site

through the image of the towers at the towers themselves, drawing a connection between the architectural space (Mies) and the re-presented image of it (Korab). At the bottom of the stair the surface provides a backdrop to a sitting area apart from, but visually connected to, the circulation of the commercial plaza.

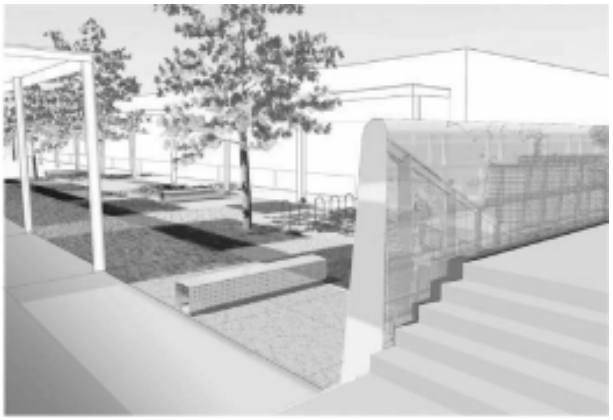
SURFACE : LANDSCAPE

At the scale of the larger plaza we identified the additional opportunity to mark a threshold between the three primary sections of Lafayette Park: the towers and residential units, the park, and the shopping plaza. This design incorporated two primary materials, concrete and vegetation, to create a series of smaller, mini-landscapes within the space.

The landscape strategy began with a series of five-foot by five-foot modules. An overt reference to the Miesian plaza, our strategy then manipulates this uniform surface through an exploration of the qualities inherent within, and added to, concrete paving. The intentions driving this aspect of the project were two-fold: to explore the elements within the chosen material (cement and aggregate) for new effects, techniques or installation procedures. And secondly, to use this exploration toward more efficient, low maintenance and

sustainable alternatives to the proposal already designed for the site.

In our work these two motivations coalesced through an exploration of recycled glass aggregate in concrete mixtures. By tapping into the waste-stream of recycled glass products, a variety of colors and types of glass could be harnessed and used as concrete aggregate. The recycled glass aggregate within the concrete mixture allows for a variety of color and texture to emerge subtly across the plaza, reflecting light across the surface of the pavement. Ground smooth, the resulting concrete surface is a sustainable alternative that defines individually-scaled spaces within the overall expanse of the plaza.



Perspective looking south to plaza

COLLABORATORS

Balthazar Korab, photographer

Cooper Melton, University of Michigan