

## Modernism Redux: a study in light, surface, and volume

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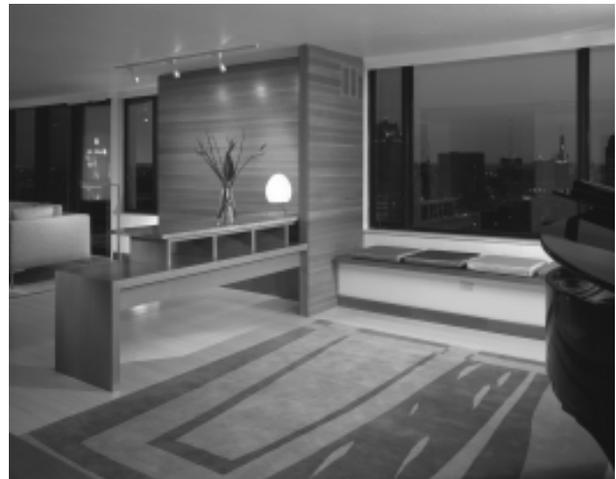
University of Wisconsin-Milwaukee & La Dallman Architects



The conference theme raises the opportunity to reflect on the relationship between ideological movements and the production of architecture, asking participants to “propose new ways of looking at, revealing, and practicing the art of architecture and the science of architecture” while bearing in mind the “recognition of enduring dilemmas, principals, and truths that have remained relevant throughout [architecture’s] existence.”<sup>1</sup> This design project demonstrates the transformation of a 1960’s multi-family high-rise, and a study of some of the fundamental principles within dwelling involving light, surface, and volume. The project confronts the doctrinaire modernism highly prevalent within this building type, with a more fluid and sensual approach—contrasting the mathematical rigidity of these buildings with an intentionally ambiguous and hybrid spatial sensibility.

The high-rise, located along Lake Michigan in Milwaukee, is a familiar and common example of many multi-family projects produced throughout the 1950s to 70s—a concrete-frame building characterized by banal conditions of low ceilings, rabbit-

warren units, undifferentiated apertures, expedient (often poor) material choices, and enclosed by a uniform façade of grid-structure and infill. And Milwaukee, like many typical Midwestern cities, has lost thousands of inhabitants to the draws of suburban sprawl—a movement which inherently critiques not only the cultural desires of Americans in a broad sense, but also the livability and availability of the poor housing stock comprising much of the urban fabric. In light of the rapid trend toward de-population, this project represents a commitment to urban dwelling, and provides a



venue to explore material options, lighting strategies, and formal devices that directly challenge the neutral and purely utilitarian spatial strategies of the many buildings produced during this period. The program of the project called for the consolidation of three small apartments. The southeastern unit, already in use by the owners as a kitchen, informal living space, and guest quarters, was to remain relatively unaltered. The remaining two



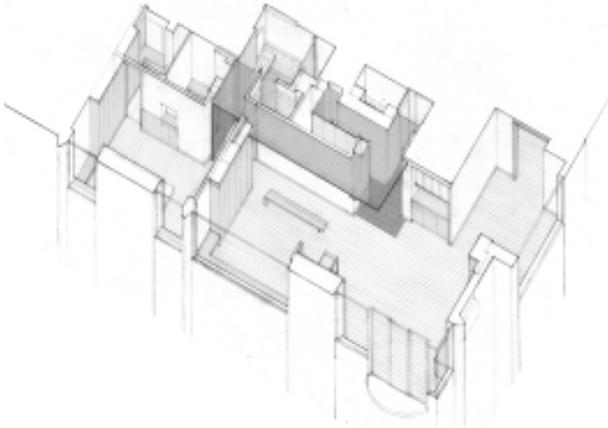
units, forming the southwestern corner of the building footprint, were to be completely renovated into a formal entry, entertaining spaces, and the owners' bedroom suite.

The fundamental need for light produced by the cellular nature of embedded rooms within the unit's existing plan, suggested the removal of eighteen walls to significantly alter the basic size and proportion of spaces and to accommodate the desire for a more open living space. While the concept of an open plan is not unusual in architecture discourse (dating back to the early movements of the 1920's modern era) and despite the façade's plethora of ribbon windows intimating a broad expanse of space beyond, the existing plan of the high-rise was instead comprised of a conventional arrangement of distinct, separate rooms. The initial removal of these eighteen walls provided not only the necessary *tabula rasa* condition to allow light and view to enter, but also the unique opportunity to examine and re-insert the program within an open-plan concept. Accordingly, one of the formal strategies for the unit's reconfiguration relied on the design of controlled elements of furniture, both fixed and movable, to more subtly divide the



space without compromise to the newfound luminosity. And the use of bamboo as the new floor surface, chosen for both its light value and sustainable properties, assisted in creating a reflective surface upon which light bounces deep into the interior. At the darkest zones, adjacent to the core, electrified light pockets were designed to wash light across wall surfaces, creating a lighting gradient which maximizes the use of these walls.

Because the footprint of the unit wraps three sides of the building, the residence commands spectacular views of Lake Michigan and the cityscape, including the Milwaukee Art Museum. Embracing these visual opportunities, the new plan unifies the segmented ribbon windows by placing a series of remnant skins in the foreground of the existing window wall's rigid structural order. These spatial foils are considered a new surface, taking the form, for example, of a combined wooden curtain / table. The newly layered surface allows the view to slip seamlessly beyond the foreground, elongating the landscape beyond into a single wrapping horizon encompassing the residence's perimeter. The new surface integrates the existing mechanical equipment, and coalesces the previously disjointed win-



dows into a unified aperture.

To accentuate the newfound continuity of the window wall, additional attenuated wooden surfaces—a tongue-and-groove soffit, walls of tall cabinet doors, and benches—create partial and complete volumes wrapping the living, bath, wardrobe, and bedroom. The wooden surfaces are multi-directional, comprising horizontal and vertical planes in order to accentuate the spatial volumes and their connection to one another. The joints between these wooden surfaces and the plaster *poche* articulate spatial thresholds, creating varying degrees of privacy while maintaining functional continuity. Doors slip into pockets within layered walls of millwork and conventional framing that reconcile the need for lighting, storage, and art display on both sides of the wall. This fluid play of surface and volume counteracts the constraining effects of the 8' floor-to-ceiling height by intensifying the long views, both within the porous depth of the functional interior and exploding out to the panoramic

exterior. The wooden soffit, alternately volumetric and planar, and folding from the horizontal to the vertical plane, suggests readings of space extending beyond the confines of the unit. This plasticity of surface at the volumes surrounding the building core infuse the plan with intimacy, warmth, and shadow that, by contrast, allow the luminous and expansive living spaces to extend and connect with the urban context beyond.

In a transformative critique of the gridded and cellular spatial composition of the existing building, this project attempts to weave together light, surface, and volume—to provide a sensual and phenomenological response which broadens and articulates the space all the while maximizing the potentially positive characteristics of this building type such as its relentless façade of disjointed windows. Within the dominant plan-driven design of this high-rise, the project proposes the insertion of sectional devices to challenge the “pancake” quality of space produced by the low and undifferentiated ceilings. In this way, the design offers opportunity to test a material palette of cork, bamboo, and other woods in a multi-directional fashion, as well as compose space contoured by immovable and fixed furniture rather than by conventional means through wall partitions alone. The transformation of this 1960s unit re-engages fundamental design principals such as light, volume, surface. Enlisting the found conditions of a doctrinaire modernism, the project creates a tactile translation of space not typically found within the predictable uniformity of this buildings spatial pattern, and provides an alternative reading of space and dwelling.