



"It is within architecture that we experience the true sense of ourselves in the world, and therefore it is within the power of architecture to shape experience, and ultimately the culture in which we live."

Bruno Taut

Research Statement

Architecture and architects create spaces for human habitation. Thus architecture and its compilation as urban form is a manifestation of cultural and social values. My research and practice address both *processes of production or 'making'* as well as issues of *perception*. Through these interests, my research documents and analyzes our cultural production and the relationship between its underlying spatial, constructed, and material underpinnings.

I am actively engaged through my research and practice in processes of *'making'*. *Representations* are the vehicle through which the design idea is tested and developed. I believe each representation, whether a model, drawing, photograph, video, installation, or a built work of architecture, explores this 'idea' in different ways and at various scales. Architecture, as in all forms of representation, is not in itself the end product but a by-product of asking a larger question.

I am particularly interested in the dynamic process by which, an 'idea' is translated, into physical form. It is through various representations and media that experiential and intuitive meanings, are honed. In my work, representations operate on two distinct yet complementary levels. Firstly, they must address the viewer or inhabitant and the multiple scales of its contexts; and secondly, it carries another layer of meaning as a by-product of the distinct processes of making. In this way, any representation transcends the work, engaging and transforming inhabitants and context.

Perception underlies all of my research and practice projects. These projects are explored using the various representational vehicles of the design processes. Perception is dependent on the relationship of the 'work' to the viewer or inhabitant, and therefore there is a co-dependency between issues of habitation and context within and upon which an interpretation and design is formed.

My experiential approach of documentation and analysis forms the basis for my understanding of a particular problem or context, and is implicit to my design methodology. For example, embedded within the act of observing, documenting and 'making' a representation, is both the subjective act of interpretation and translation of the existing situation and the more universal cultural framework within which 'the work' is produced. Therefore, the social, economic and environmental responsibility of what and how something is made is omnipresent, transmitting beyond itself, beyond its own physicality, so that its effect resonates with the viewer or inhabitant and its surroundings long after the cessation of its conceived usefulness. As creators of inhabited spaces this cause and effect happens at various scales from our urban environment to the detail of a handrail. This relationship is also embedded in the intent of a drawing, or model and in the physical presence of our built, lived-in architectures, our city streets or public plazas.

To emphasize this point my research and practice portfolio illustrates these issues through a series of examples: **1. Theoretical Projects** and **2. Design Projects**. The **Theoretical Projects** are based on documentary and analytical representations of an existing set of conditions. These then structure *written texts* and *competitions*. These projects influence the preservation of existing structures, generation of specific processes of production, material selection and spatial and experiential ideas of design projects. The **Design Projects** further test or explore an idea in real materials, in the third dimension, and at the scale of habitation or the inhabitant. These take the form of informal mock ups, *installations, exhibitions or works of architecture*.

Theoretical Projects are collaborative projects undertaken in my personal Design Studio, *iip – international idea pool for architecture and urban design*. Each project uses representation as a means of working out theoretical and perceptual ideas, which then become the theoretical underpinnings of a competition or a written text.

From *Competitions: Urban/Landscape/Habitation*, I have selected two competition entries: *'Transporting Landscapes'* and *'Suburban Wild'* are examples of research collaborations completed within *ijp*. The first, *'Transporting Landscapes'*, was an invited competition undertaken in collaboration with Artist Rosemarie Trockel. The existing 'bahndeckel' or roof structure over a main North-South train line in Munchen, Germany was transformed through transporting 'distant landscapes' - using a 'mirage' or 'cloud' screen wall, a sand dune, or the vor-Alps - onto the 'bahndeckel' surface. This framework delineated a series of 'atmospheres' signified through the use of various materials, vegetation and activities and whose placement was set in relationship to the existing context and the larger landscape and urban networks.

'Suburban Wild', on the other hand, was a competition entry for the design of a prototypical 'sustainable' suburban house. A quote by Industrial Ecologist John R. Ehrenfield "Underlying cultural values will always trump technology and design in determining behavior" was used to ask how architecture and its relationships, set up through the spatial delineation of programmatic and social activities, can be used to integrate and reinforce the use of sustainable technologies and practices. As lead designer I directed a team that consisted of a Mechanical Engineer (Trevor Butler), a Landscape Architect (Juliette Patterson), Interior Designers (Naomi Frango and Etienne Lemay), and Dalhousie Students Jane Abbott, Jennifer Lau, and Mark Lee.

Both competitions, as with other projects, have led to further research activities, such as workshops, studio projects and students' thesis work. The project *'Suburban Wild'* became the seed for a multi-disciplinary lecture series and a discussion roundtable held this September (06) at Dalhousie University in conjunction with Mary Anne White from the Institute of Materials Research and Ray Cote from the Eco-Efficiency Center.

In the *Documentation & Writing* section of my work, relationships between the experiential and the spatial are examined. These texts supplement and connect documentation with various forms of analyses (videos, diagrams, photographs...). The article, '*The Dilemma of Historic Preservation / Denkmalschutz: Spatial intentions of W. Riphahn's Köln Opera*', documents and analyzes the urban and architectural work of Modernist Architect Wilhelm Riphahn. This article is the reworking of a segment of the book manuscript, which is to be finalized for publication in 2008. Another text, '*Re: framing the developing surface*', is a paper based on my photographic documentation and analysis of Rem Koolhaas's Rotterdam Kunsthal and Peter Zumthor's bath in Vals. Here each building's constructional and material assembly was analyzed in relationship to the perceived experiences of visitors to each building. .

Another, perhaps more general form of documentation explores relationships between processes of spatial production and the relationship between viewer to a view and its frame. This perceptual phenomenon was explored through the documentational form of DV video capture and editing, along with 3-D analytical models. This research investigation led to the development of a series of design principles for architectural façade components. From this, a series of façade segments and 'walk-throughs' were generated. This work was then presented as a paper, *Construction Processes: Digital Video & Façade Components*. '*Construction Processes: Digital Video & Façade Components*'.

Design Projects *Installations, Exhibitions and Design Projects* [Private Houses & various Housing, and Public Projects] undertaken either in collaboration or in conjunction with other firms or in my firm *cvdesign* or *iip*. Each design project develops ideas or themes from my Theoretical Projects, and extends these ideas in three dimensions. My design projects develop, what I call 'spatial plays' or play with the dynamics of spatial and perceptual phenomena. Some of these are found in the geometry or formal relationships, color combinations or material adjacencies of a space. These 'spatial plays' create extensions and compressions of space, the allusion of depth, an opening, or the collapse of space into two dimensions. This work is influenced by the work of perceptual artists, Brigit Riley, James Turrell, Mary Miss, Dan Graham, Joseph Albers and Moholy-Naggy and follows a tradition of architects such as Mies van Der Rohe, Adolf Loos, Walter Pichler, Enrich Miralles, Mary-Anne Ray, Sejima, Laurie Hawkinson Smith Miller.

Installations / Exhibitions are typically undertaken as a means of testing a spatial phenomenon or relationship in full scale. "*The Space of the Mirror*", a glass and mirror installation in a house in Venice California was one of my first 'architectural' pieces. It was undertaken as part of my Masters thesis. In this project ideas of threshold, entrance and program in relationship to perceptual and experiential connections of material, viewing and view were investigated. These ideas were developed further in various *Private Houses, Additions and Renovations* as well as *Housing Projects*. For example, *Matakus House*, an addition and renovation of a masonry house in Köln Germany, undertaken in the office of Molestina + Kraus Architekts was started in 1996 - 2001. The initial glass skin of the house sets the first enclosure. Additional materials or roof/ floor/ cabinets manipulations, screen from public view and/or extend the interior into the garden or the sky. These elements are used to either connect or protect the inhabitant to or from the outside.

In another *addition and renovation* project on *Birmingham Street* in Halifax, a more specific development of this occurs with the application of planar elements, such as mirror, glass, metal, wood, stone and paint, which visually extend the narrow space beyond the small footprint of the house and demarcate specific areas & activities and their relationships.

Throughout my design work, I often pair, perceptual - material and spatial - studies with an investigation of programmatic issues. Ideas of program stem from individual and social demarcation of space, and relationships between ones' path and rituals to the iconic 'objects' around which our daily life unfolds. These delineating relationships between private and public, inside and outside, are present in various forms and resolution in the other design projects illustrated in my **Research and Practice Portfolio**.

Summary

In each instance, my design practice, *iip*, is the research venue for collaborations, consultations, and programmatic / technical development. Thus the connection between documentation, analysis and reflective 'making' is conducted through the various studio projects. Each project critically explores an existing condition through the dynamics of its construction and composition, traces of its history and the presence of change.

Architects act as the 'makers' of our built environment reinforce and structure the relationship between ourselves as individuals to our community and to the built and natural world. How we interpret, draw from, and in turn project onto the world, therefore has social, cultural, environmental and human significance. It is only, through observing our environment, how we inhabit it, understand and celebrate it, that we can come to terms with our past and our potential futures.

"The Teaching of Space in architectural education has generally been explained to students as an external truth outside of context or history. Never the less, a genealogy exists for the teaching of space. A visual language of spatial relations was first promoted by nineteenth-century child educators as an alternative to overly conventionalized methods of reading and writing. Bauhaus masters Laszlo Moholy-Nagy and Josef Albers developed a coherent language to John Ruskin's ideal of the innocent eye. As later translated into architectural terms by Colin Rowe, Robert Slutzky, and others..."

Kazys Varnelis, *Journal of Architectural Education* May 1998, 51/4 pp. 212-223



Photograph and interview for *'Saltscapes'* magazine article on color by Jan Matthews, *Renovation Birmingham Street in Halifax NS Ca.*