

Tangible to Intangible

Filiz Klassen, M.Arch., B.Arch., UIA, IDEC, ARIDO
Assistant Professor

Faculty of Communication and Design
School of Interior Design, Ryerson University
350 Victoria Street, Toronto, Ontario CANADA M5B 2K3

T 416.979.5000 ext 6937
F 416.979.5240
E fklassen@ryerson.ca

Filiz Klassen is currently working as assistant professor at Ryerson University, sharing her ideas in the design studio and workshop with interior design students. She is also an independent curator. Her most recent exhibition titled **Pro-fusion: A Cross-disciplinary Design Exhibition** presented a diverse body of work by various artists and designers that contribute to a more pluralistic, interactive understanding of design. (www.ryerson.ca/~fusion)

Specializing in exhibit design, museum re-structuring and multi-functional cultural spaces, her professional work since 1993 has focused on the interface of Architecture and Interior Design. **Strachan House**, a special needs housing project that she consulted on as part of the project team for Levitt Goodman Architects, won the **Governor General Award, Medal of Excellence in Canadian Architecture, in 1999.**

Her research interests lie in the social and cultural dimensions of built and un-built environments and in their material realization. Her research includes projects and work in urban issues involving transformability and sustainability in a hybrid practice of fashion, interiors, architecture and graphics. She recently presented a paper at the **Transportable Environments 2001 Conference, 2nd International Conference on Portable Architecture**, held in the National University of Singapore, School of Design Environment, Singapore, May 17&18, 2001.

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Abstract

This paper is focused on curriculum development through a series of design investigations in a second year interior design studio. The studio investigations consist of three related projects: a women's shelter, a personal shelter, and transformable furniture. The theoretical and practical design issues addressed in these projects were informed by a case study of a unique built project in Toronto - Strachan House: Special Needs Housing - that the author participated in as part of the design team for Levitt Goodman Architects.

The structure and implementation of these projects in a design studio setting demonstrate the fusion of specific curriculum goals and expectations with student needs and learning objectives as well as current design issues with diverse research topics. Specifically, these design investigations emphasize an individual programmatic response by each student to the generic design criteria presented within each project to encourage a less prescriptive and a more collaborative studio atmosphere.

Introduction

My approach to teaching and learning emphasizes design as a continuous creative/research process that does not simply culminate or finish with a specific project but continues as part of a larger scope of investigation into the current and future state of design. Within this design/research process I emphasize educational projects that encourage students to engage in a critical debate about the interaction of related (or distant) design disciplines as a direction for the future of built environments. This expanded outlook on design broadens students' imagination and helps them see the activity of building/making as a cultural construct that extends far beyond the perception of built spaces as merely the product of physical and commercial activity.

My personal input into the curriculum development process derives from my own research interests and projects as well as my professional experience. I continually integrate results of my research into the design studio. In turn, I also develop research or paper proposals associated with learning in design. Some of these projects include; 'Pro-fusion: A Cross-disciplinary Exhibit Design'; an article entitled 'Transformable Personal Space Within a Communal Setting' to be published in an upcoming book on Transportable Environments; and other design investigations related to transformability.

Stimulating critical thought, design debate, and inquiry in the studio teaching and learning environment constituted a guideline for me, as a design instructor, in redeveloping the second year design curriculum over the past two years at the School of Interior Design, Faculty of Communication and Design, Ryerson University.

A Design Exercise: The Project Brief

This paper argues that project briefs prepared for students in an educational context should go far beyond functional statements to present a sphere of cultural investigation. Presented with this goal in mind, the design projects in second year studio acknowledge that design projects cannot be created in a cultural vacuum and that student designed spaces or objects are not mere translations of bubble or block diagrams representing functional and economic requirements. Through the design project briefs, the context of our cultural, social and intellectual concerns should be addressed and open to discussion.

Within this approach I also encourage the development of a student inspired project brief, a complementary component to the generic project criteria presented by the instructor, as an alternative to the studio projects that are fully conceived by design instructors. I have found out that this approach requires direct involvement, responsibility and more rigor on students' behalf, demanding that they develop a personal design attitude by way of seeing, questioning and commenting on the situations and environments that they observe and experience. The result is more satisfaction and enjoyment of the design process, the final outcome, as well as the educational experience.

Research and design investigations centered around diverse issues, such as social and environmental responsibility in design, gender, private, public and transitory spaces, home and shelter, flexibility, adaptability and mobility, provide an opportunity in the studio environment to discuss and evaluate current as well as historical design developments. My emphasis on these issues challenges the conventional assumptions and approaches to spatial design as set within fixed professional boundaries, thus encouraging students to think outside the norm. In return, design studio and research projects that question or re-examine the traditional ideas of shelter, space and permanence all contribute to the debate about the future of interiors, industrial design, furniture making and architecture.

The Catalyst: Strachan House by Levitt Goodman Architects

Strachan House is a special needs housing project¹ in Toronto, Canada, where seventy chronically homeless men and women were actively involved in the planning and construction of their 'home' between 1993 to 1996. This project demonstrates the need to change traditional notions of what constitutes belonging to a community as a positive social attribute.

The design, while accommodating the basic programmatic requirements such as a reception, meeting areas, living spaces, bedrooms, kitchen and bathrooms, a community kitchen, a bank, staff areas, and health houses for short term care, also provides un-programmed transitional spaces as a means of meeting the alternative communal needs of a transient group of users.

Built within a former furniture factory, the spatial concept is based on the analogy of city streets, a townhall, courtyards, private houses and threshold spaces such as the porches and passages to encourage social interaction and also to create a sense of territory, social awareness, community, and feelings of comfort and security for the residents. Transitional and threshold spaces utilize raw and unfinished materials such as rough lumber and two by four studs to promote the idea of appropriation and

transformation of space for the changing individual or group needs of the residents (Klassen, 2001).



Figure 1: Strachan House: View towards the communal spaces of a ‘house’ unit

This built project has acted as a catalyst in the generation of several studio projects that help position the second year interior design curriculum in a culturally, environmentally and socially conscious design context. Through discussions of the issues around this built example, the concepts of sheltering and place making (as opposed to generating functional spaces) are emphasized as a way to develop a theoretical base for all interior design projects.

A Jig Saw Puzzle

Piece 1: Women’s Shelter Project² (Individual project, 5 weeks/60hrs)

The issues of homelessness and the transformation of personal and communal spaces, discussed in relation to Strachan House, are used as the basis of this hypothetical design studio project to initiate a reflection on the theoretical and practical issues of sheltering in downtown Toronto.

The **project context** is the east corner of Strachan House, designated by the Ministry of Health as a refuge and transitional place for homeless women. There are no standardized prototypes that address the specific needs of this group of homeless women. Therefore, the design resolutions to this project must sensitively respond to the highly experimental nature of its mandate; that is, to house a group of women who might have extreme emotional and psychological reaction to communal and/or confined spaces due to their past or present trauma.

The **design objective** is to develop an appropriate built form and communal environment as an alternative model that bridges the extremes of spatial experience defined by the fixed rooms and spaces of a house and the nomadic existence of street life. Students are encouraged to question and investigate the theoretical and pragmatic issues of what constitutes a home, private/public/transitory space as well as to provide practical design solutions and details for notions of sheltering, screening, blocking, veiling, shuttering and transforming a space within an existing environment.

As a facilitator for the project discussions and design debate in a studio setting, **my teaching philosophy** emphasizes my commitment to creating an active learning environment. Inquiry, critical thinking and creative problem solving are on-going

learning methods that involve students' consideration of multiple viewpoints and approaches. The objective of active learning is to stimulate lifetime habits of creative thinking and problem solving that involves imagination, analysis and synthesis of alternative design issues and/or solutions to interior design problems.

In collaboration with the Learning and Teaching Office at Ryerson, the active learning and inquiry methods are used to promote a way of asking questions that lead students to develop a concept and a thesis in a design project context. These methods help students to unravel the intangible design process and to take a more active role by way of methodical questioning from the most simple questions over observations to the most complex interpretative ones (Thorpe, 1997).

Due to the stressful nature of undertaking a creative process, student feelings of unrest and anxiety are common in the design studio environment. I have observed that these methods help reduce students' anxiety levels and the natural defensiveness they take regarding their projects. Within this learning context, the project reviews are perceived as an extension of the design questioning process rather than passing of favorable or unfavorable personal judgements. This approach to project reviews encourages an exchange of ideas about design attitudes that students develop as a response to specific project criteria and constraints.

The project **research objectives** are used as an opportunity to generate discussions about the topic of homelessness in both the global and the local perspective, focusing specifically on women's homelessness issues. Secondly, the issue of gender and space is used to encourage readings on the women's perception of space, design of confined spaces, as well as the psychology and fear of spaces. Finally, in an attempt to address the context of the large number of female students in the studio, students are encouraged to examine the history of female designers as part of the initial research phase to develop an understanding of the role of the design and feminism in the current debate.

The program information includes private sleeping arrangements for the residents of this facility with an emphasis on the need to address confinement and privacy. Students are asked to interpret the idea of sleeping nooks as a means of accommodating those residents who have a fear of confined spaces, and come up with the functions they want to incorporate into these open yet personal spaces. Further, they are asked to address the spatial arrangement of the personal areas within the context of the entire social group as a form of community. Shared facilities include an adequate number of barrier free bathrooms, wash areas, kitchen, cleaning and storage facilities, appropriate shared living spaces, as well as staff rooms. Other support facilities located in the main portion of Strachan House, such as the community kitchen, town hall, bank and the health unit, are also accessible for these residents.

The design process in the studio involves an introduction to the project, site and the Strachan House as a reference for students' work. Through lectures they are further introduced to the complexity of issues about homelessness in a global and local context. Then in teams, they are asked to research, brain storm and come up with a concise list of questions that would guide them through the development of a design thesis statement and a project concept. In their research and work they are asked to

address whether, through interior design, one could achieve a healthy and safe dwelling alternative for a group of homeless women, and to explain how.

Following the research and questioning process, a hybrid use of sketching, computer graphics, modelling, photography and collage techniques are used for the generation of ideas. A similar hybrid approach to visualization and representation is used through the design development and presentation phases to document student's observations, research and design growth.

Student projects at first resembled dormitories with small cubicles for personal living arrangements. Overtime this changed drastically as they started developing the communal spaces and articulated the connective transitional spaces from the most public to the most private. This resulted in an increasing degree of flexibility and adaptability for the private living arrangements that corresponded with the unique situation of the residents.

Quite a few examples of student projects such as the Force of Light, Apple Tree, Monarch Place³ and Life Capsule, named mostly after nature, concentrate on creating spaces that heal, nourish and provide spritual balance and harmony for the self and the community. Life Capsule's design concept, based on creating situations but no rooms, offers open personal space cabins that move on a track to address individual and group needs/desires to increase or decrease personal privacy and social contact. Translucent sliding panels give control over light and visibility to the individual in the capsule.



Figure 2: Life Capsule by Irene Marianne Tolvanen

Another personal nook design demonstrates a sensitivity to the design of small and confined spaces by addressing the need to sleep, stand, sit and socialize in one's private domain as part of the larger social space.



Figure 3: Personal Nook by Satomi Tabei

Another project, entitled Resurgence, contemplates achieving solitude in a social space through sculpting and carving small niches that is atypical of hostel, shelter or dormitory designs.



Figure 4: Resurgence by Jayson Irizawa

Puzzle Pieces 2, 3, 4 : Transformability and Design

Conceptually in line with the women's shelter project, I have initiated a number of other projects such as the Personal Shelter, Transformable Furniture and the Human Body in Design that deal with the issues of transformability, transportability and adaptability in a broader cultural context. These projects allow students to deal with a variety of conceptual and technical issues ranging in context from spatial design to body architecture, virtual environments, and furniture and product design. Involving research, design experimentation and the actual fabrication process, these projects provide an opportunity to discuss and present recent developments relevant to interior design and design learning to encourage greater social responsibility and environmental entrepreneurship. In order to provide a concise discussion I will concentrate primarily on the personal shelter project.

Puzzle Piece 2: Personal Shelter⁴ (Team project, 4 weeks/36 hours)

Students are given a challenge to design and build an ergonomic personal shelter that demonstrates sensitivity towards contemporary cultural, social and technical conditions. The personal shelter project fuses together spatial design, furniture making, clothing and product design by encouraging the exploration of interdisciplinary ideas and interests as a creative base.

In an **educational context**, the design of small environments or objects propose a more approachable and tactile quality for students than the design of large scale buildings, especially in the early years of their design education. Through the design and actual construction of life size objects or environments, students directly address the issues of human scale and multiplicity of functions in the process of experimenting with space and construction on a reduced scale. This type of a project further provides them with an opportunity to devote greater attention to detailing and innovative material usage.

The **research objectives** for this project are aimed at developing an understanding of the issue of transformability/transportability in architecture, interiors, furniture and fashion design through readings of the works of current and early modern designers. This research extends into unique examples of lightweight and portable furniture and industrial design with specific emphasis given to the research of sustainable materials and construction methods that are readily available to everyone.

The personal shelter project addresses the observed, experienced or inherited conditions of our urban and suburban cultural landscape as a rich context for student design investigations. Students are challenged to conceptualize, design and fabricate a working prototype for a shelter in a context of their choice. The generic project criteria emphasize the requirement for the design solution to be able to vary its size, shape and function in an attempt to address notions of flexibility, adaptability and portability.

Students are encouraged to think conceptually in order to develop a practical design solution that demonstrates competency in using structural principles and methods of assembly and deployability as found to be relevant to the shelter design. Students are also encouraged to experiment with soft, flexible and/or rigid materials, investigating the inherent capabilities of these materials in relation to the collapsibility, assembly, disassembly and changeability requirements. A maximum of two dominant materials are required to provide shelter and act as support for the final structure.

Prerequisite to the design investigation is the writing of a creative program brief that guides the student's research concept, design and construction of a personal space/shelter/structure. The fabrication method and material choices are required to be appropriate for the environmental and climactic conditions that the students set forth in their program brief.

Following the introduction of generic project criteria and research topics, students are asked to individually articulate the relevance of their proposed formal investigations within the project context. After producing individual scale models of their ideas, students are asked to brain storm in groups and come up with a collective project brief that clearly identifies their research direction, project concept and goals, intended

functions, applications, site and environmental requirements, and also the proposed materials and structural choices.

The students then proceed to develop ergonomic charts for the intended uses and activities. The final concept and design development sketches, modelling, material and joinery investigations, and fabrication drawings or patterns are documented in a design process book that guides the production of the final, finished prototype and its presentation.

The proposed design resolutions range in context from wearable, carryable shelters for diverse uses such as the students' own need to sleep in the design studio or at an unexpected place, protection from the sun or other weather hazards or pollution, protection from the invasion of the media to homeless or emergency shelters. The Water Bottle and Tarp project proposes building a personal homeless shelter with recycled materials collected by the individual such as commonly found water bottles and sheet materials (tarp or industrial grade bubble wrap) salvaged from construction sites.



Figure 5: Water Bottle & Tarp Project by Michael Steele, Connor Molloy & Gianni Toto

Design Student's Sleeping Shelter proposes a knapsack that unfolds into a sleeping bag providing a comfortable personal space to sit, read and sleep in.



Figure 6: Design Student's Sleeping Shelter by Hyun Ju Lee, Jeung-Min Hong & Hyun Jung Park

Conclusion

The studio projects presented in this paper demonstrate that the student learning experience can be greatly enhanced when practical and conceptual aspects of design are taught together within the framework of a design/research investigation.

Non-prescriptive design investigations (set by instructors), where students take the initiative to define and write a project brief or participate in the proposed program of study, allow students to be engaged with and more inquisitive about the social and cultural context of built environments. The result is an abundant display of creativity in design studio investigations that is brought about by a background sense of social and cultural urgency and wit and humor in the development of a design concept in response to an underlying research question.

This approach to the studio teaching/learning environment celebrates collaboration between instructors and students around the thought processes that frame studio projects as well as the multitude and diversity of design contexts and resolutions that students may envision. This approach aims for student empowerment, providing numerous opportunities for them to actively take part in their design education.

(Word Count. 3166)

Endnotes

¹ Strachan House, designed by Levitt Goodman Architects has won the prestigious Governor General Award of Excellence in Architecture in 1999 and was published in the following design magazines and books:

Baniassad, Essy (ed.): 2000, *Architecture Canada 1999: The Governor General Medals for Architecture*, The Royal Architectural Institute of Canada & TUNS Press, pp. 48-59

Vansittart, Katherine: 1997, 'No place like home', *Azure*, March & April 1997, pp. 20-22.

Jonson, Lotta: 1997, 'En fraga om vardighet: Streetcity project, Toronto', *Form 5* (Sweden) Fall 1997, pp. 46-49.

Kapusta, Beth: 1996, 'Street City, Strachan House', *Canadian Architect*, August 1996, pp. 26-27

² This project was taught with Barbara Clewly-Gagnon and Caroline Robbie-Montgomery in spring 2001; Arlene Dougall and Viz Saraby in fall 2001. Generous contributions in lecture format was received from John Thorpe, Center for Student Development and Counselling on Active Learning Methodology, Dr. Joseph Springer, School of Urban and Regional Planning and Angela Robertson, Executive Director of Sistering on homelessness, David Warne and Brock James, Levitt Goodman Architects on various shelter projects in Toronto.

³ Student Projects: Force of Light by Mirella Iurescu, Apple Tree br Starlyn Cag, and Monarch Place by Adam Crabe.

⁴ This project was taught with David Johnston and Paul Mezei in Spring, 2002. Dr. Kathryn Woodcock from the School of Occupational and Public Health at Ryerson University also made invaluable contributions on the topic of ergonomics that enhanced students' sensitivity and understanding of dynamic human dimensions and needs.

References

Klassen, Filiz: 2001, 'Transformable Space Within a Communal Space' in Lim, Joseph (eds.): 2001, *Transportable Environments 2001, Proceedings of the 2nd Conference on Portable Architecture*, 17-18 May, Singapore. Center for Advanced Studies in Architecture, Singapore, pp. 81-90.

Thorpe, John: c1997, *Method of Inquiry Book for Students and Faculty*, Ryerson University, Student Development and Counselling, Toronto.